Appendix F

OEHHA Synthetic Turf Study

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Appendix F. Exposure Analyses, Studies, Concentrations, and Doses

F.1. Assessing Human Time-Activity Exposure Patterns Occurring on Synthetic Turf Fields – by The University of California, Berkeley

Draft Report: Assessing Human Time-Activity Exposure Patterns Occurring on Synthetic Turf Fields

Agreement #16-E0019

Principal Investigator: Asa Bradman, PhD, MS
Center for Environmental Research and Children's Health
University of California – Berkeley

Prepared for the California Office of Environmental Health Hazard Assessment
California Environmental Protection Agency

Report Authors

Asa Bradman, PhD

Carly Hyland, MS

Rosemary Castorina, PhD

Center for Environmental Research and Children's Health
University of California - Berkeley
1995 University Avenue, Suite 265
Berkeley, CA 94704

Disclaimer

The statements and conclusions in this Report are those of the contractor and not necessarily those of the California Office of Environmental Health Hazard Assessment.

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Abbreviations

COPC	Contaminants of Potential Concern
CPHS	Committee for the Protection of Human Subjects
NBI	Norwegian Building Institute
OEHHA	Office of Environmental Health Hazard Assessment
PAH	Polycyclic Aromatic Hydrocarbon
STFCR	Synthetic Turf Field with Crumb Rubber
UA	University of Arizona
VOC	Volatile Organic Compound

Overview

Due to their low water and maintenance requirements, the use of synthetic turf fields has become popular in California in recent years; however, concerns have emerged that playing soccer and other sports on synthetic turf fields with crumb rubber (STFCR) may result in exposure to chemicals present in recycled tires that pose risks to human health.[1] For example, crumb rubber infill made from recycled tires contains various toxicants such as PAHs and other organic contaminants.[2] Athletes and bystanders that spend time on or near synthetic turf fields may be exposed to these chemicals through oral, dermal, and inhalation routes.[2]

Exposure to chemicals from synthetic turf fields are of particular concern among soccer players in California. In addition to being the most popular sport among high school students in California, there is an abundance of recreational and competitive soccer leagues throughout the state that attract diverse participants of varying ages.[3]

While some health risk assessments have not found significantly increased risk from activity on synthetic turf fields,[1 2, 4] the majority of studies to date have focused on short-term exposures. This study aims to provide information necessary to assess potential risks resulting from lifetime exposures to synthetic turf fields among California soccer players.[3]

This project includes three main components: i) administration of an online survey to obtain statewide information regarding players' soccer history and exposure-related behaviors; ii) videotaping players at soccer practices and games on synthetic turf fields containing crumb rubber in the San Francisco Bay Area and Sacramento area; and iii) administration of in-person questionnaires to players or parents of players participating in the videotaping. For the online survey, we recruited male and female recreational and competitive soccer players over the age of 18 and invited parents/guardians to complete the survey for soccer players under 18. For the videotaping and in-person questionnaires, we recruited male and female soccer players aged 7 to 25 years old.

Using publicly available datasets, we acquired email addresses for coaches, managers, club presidents, and other affiliates of youth, high school, collegiate, and adult recreational and competitive soccer teams throughout California. Between December, 2017 and April, 2018 we sent emails to soccer coaches and managers i) throughout California to recruit participants for the online survey, and ii) in the San Francisco Bay Area and Sacramento area to recruit participants for the videotaping and in-person questionnaires.

A total of 1,069 participants completed the online or in-person surveys and 40 soccer players were videotaped during five practices and five games on STFCRs. Information from these studies will inform the California Environmental Protection Agency's Office of Environmental Health Hazard Assessment (OEHHA) efforts to assess potential chemical exposures health risks resulting from use of synthetic turf fields.

F.1.1. Introduction

Concerns have been raised about the safety of using recycled tire crumb rubber as infill in synthetic turf playing fields due to the potential for exposure of athletes and bystanders to harmful chemicals, including known and suspected carcinogens, neurotoxins, and potential endocrine disruptors.[5, 6] Numerous laboratory and field studies have found that volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), metals, particulates, and other substances may be released from recycled tires and tire crumb under various conditions.[7]

While some risk assessments have concluded that the use of tire crumb rubber in synthetic turf playing fields presents minimal risk to athletes and bystanders, there is limited information from quantitative exposure assessments characterizing exposure to compounds released from crumb rubber via oral, inhalation, and dermal routes of exposure. Current risk assessments have also largely focused on short-term exposures and there are data gaps regarding exposures and risks associated with synthetic turf field use over a lifetime.[6]

Although no epidemiological studies have been published that have shown associations between use of synthetic turf fields with crumb rubber (STFCRs) and adverse health outcomes, there have been case reports of cancer among soccer players, particularly for goalies, who may have greater contact with synthetic turf.[8]

In this report, we describe time-activity data collected from Californians that play soccer on STFCRs. This information about players' histories and exposure-related behaviors will inform the development of exposure scenarios and modeling by OEHHA that will be used to evaluate potential health risks associated resulting from use of synthetic turf fields with crumb rubber.

F.1.1.1. Routes of Exposure

Soccer players, coaches, referees, bystanders, and others spending time on or near STFCRs may be exposed to chemicals present in the crumb rubber via inhalation, ingestion, and dermal contact.

Inhalation

Inhalation exposures occur when soccer players or bystanders inhale gases emitted from crumb rubber granules or suspended particles generally ≤10 microns. The greatest exposures are expected among athletes, particularly while they are engaged in high intensity activities that increase breathing rates. The resuspension of small crumb rubber particles into air from activities such as running, falling, or sliding can also result in higher inhalation exposures among players, coaches, referees, and other personnel located on the field. Bystanders near the field are likely to be engaged in sedentary activities, such as sitting or standing, and may have lower exposures via inhalation.

Ingestion

Non-dietary Ingestion

- Can be intentional (i.e., infant/toddler mouthing, pica behavior) or inadvertent (non-dietary ingestion);
- May occur during activities where hands, fingers, or other objects come in contact with the turf surface and then touch the face or mouth of an individual (i.e., when eating, scratching, etc.);
- May also occur when large dust particles are trapped in the upper respiratory system before entering the lungs and are then transported to the throat and swallowed.

Ingestion of crumb rubber may be inadvertent or intentional. Inadvertent ingestion may occur when a player or bystander's hands contact the crumb rubber or field surface and then their mouth. For example, soccer players may fall or dive during games or practice, touch the field surface and then touch their mouth with their hands, transferring chemicals into the oral cavity. Soccer players and bystanders may also be exposed via indirect hand-to-mouth activity when their hands contact an object that has contacted the field or other contaminated surface, such as a water bottle or toy, which ultimately comes into contact with their mouth. Inadvertent ingestion can also occur if crumb rubber granules directly enter the mouth when diving, slipping, tackling, or other strenuous contact with the field surface.[9] Among soccer players, goalkeepers are expected to have higher ingestion exposures than other positions because they repeatedly dive and make contact with the field in practices and games.

Young bystanders, including infants and children, may crawl on the sidelines and then put their fingers in their mouth, also resulting in inadvertent ingestion. Young children may also be more likely to have a snack or play with toys on the field, which could result in indirect ingestion of crumb rubber particles, particularly if they do not wash their hands.

Intentional ingestion, in which crumb rubber is directly consumed, may be an important exposure pathway for infants and young children who crawl on the field sidelines and put crumb rubber directly in their mouth and eat it.

Dermal Absorption

Dermal exposure occurs when chemicals on skin are absorbed into the body. Soccer players routinely come in contact with the field during games and practices when diving, sliding, or slipping. Players may also push off the field with their hands to maintain balance during warm-up activities or to get themselves up after falling. Kicking the turf, running, and diving may temporarily dislodge crumb rubber from the field surface and suspend it into the air where it may contact skin. Falling or making contact with the turf can also cause crumb rubber to adhere to clothing or exposed skin, potentially resulting in more prolonged exposure if players do not remove their clothes and take a shower immediately following a practice or game. Anecdotal reports from parents often describe extensive crumb rubber dust on children's skin or granules and dust in shoes, clothing,

or hair. Bystanders may also be exposed by dermal contact with field surfaces, as adults may sit on the turf to watch practices or games and young children may play on or crawl around the turf.

Dermal exposure may also occur when gases emitted from crumb rubber granules are directly absorbed through the skin.

F.1.1.2. Relevant Research

Several laboratory studies, exposure assessments, and risk assessments conducted in the United States and Europe have aimed to assess exposure to chemicals released from recycled tires and crumb rubber and their potential health risks among users of STFCRs. Key studies include:

- The State of Connecticut collected personal air samples from 3-4 volunteers playing soccer for a 2-hour sampling event at one indoor and four outdoor STFCRs.[10-12] Investigators identified 22 potentially field-related chemicals of potential concern (COPC) that were elevated at the synthetic turf fields compared to background samples, including 10 VOCs, 11 PAHs, and the SVOC benzothiazole.[10-12]
- In a 2009 study in New York, investigators compared contaminants in the air above synthetic turf fields in the breathing zone of children collected under simulated playing conditions with background samples collected from grass fields and upwind locations.[13] The investigators did not identify an increased risk for human health effects resulting from ingestion, dermal, or inhalation exposure to crumb rubber COPCs.[13]
- The Norwegian Building Institute (NBI) conducted two studies in which they measured VOCs in air samples from indoor artificial turf fields[14] and analyzed PAHs in rubber granule and turf fiber samples from different distributors of artificial turf sytems.[15]
- A French study measured the concentrations of VOCs emitted from crumb rubber under laboratory conditions.[16] The data were used by the French National Institute for Industrial Environment and Risks to evaluate possible health risks from inhaling VOCs released from synthetic turf.[16] The study authors concluded that the concentrations of organic compounds emitted did not pose a health concern for athletes, officials or spectators.[16]

Previous exposure assessment studies of synthetic turf with crumb rubber have not adequately addressed multiple scenarios of exposure frequency/duration and routes of exposure. Despite significant research on the topic, questions still remain about the safety of long-term exposure to crumb rubber in synthetic turf fields.

F.1.1.3. Research Objectives

Objective 1: Exposure Scenario Development - Estimate Nature, Duration, and Frequency of Exposures

a. Use available databases to characterize the number and age of soccer players in California.

b. Develop and administer online and in-person questionnaires to soccer players (and their parents, for players under 18) throughout California to characterize time-activity patterns of soccer participants.
c. Videotape soccer players at practices and games taking place on synthetic turf fields containing crumb rubber in the San Francisco Bay Area and Sacramento area to capture information needed to identify exposure-related sport and non-sport activities that occur on synthetic turf fields.

F.1.2. Materials and Methods

F.1.2.1. Approach

This project focused on youth and adult competitive and recreational soccer players using STFCRs throughout California. The project included three primary components: i) administration of an online survey to collect statewide information about players' soccer history and behaviors while playing soccer; ii) videotaping soccer players during scheduled practices and games in the San Francisco Bay Area and Sacramento area to characterize activity patterns while playing soccer and characterize exposure-related behaviors among soccer players using STFCRs; and, iii) administration of an in-person questionnaire to players participating in the videotaping to collect information on their soccer history and behaviors while using STFCRs.

Our goal was to recruit 1,000 participants of various ages throughout California to participate in the online survey. For the in-person videotaping and questionnaire, our goal was to videotape four soccer players at up to 10 practices or games taking place on a STFCR, for a maximum of 40 participants. At each event, we attempted to videotape one soccer player for each player position on the team (i.e., forward, midfielder, defender, and goalkeeper). In order to capture exposure-related behaviors among a range of soccer players, we aimed to enroll one male and one female soccer team in each of the following age categories: under 9 years, 9-12 years, 12-15 years, 15-18 years, and 18-25 years.

Video data were sent to the University of Arizona (UA) for analysis. Investigators at UA transcribed the video data and coded the exposure-related time-activity behaviors using VirtualTimingDevice™. VirtualTimingDevice™ is a software program developed by UA to track the duration of contact of a body part (e.g., hands, legs) with surfaces (e.g., artificial turf) and other objects, such as a water bottle, food, or a mouth guard.

Data from the online surveys, videotaping and in-person questionnaires will be used by OEHHA to develop exposure scenarios for soccer players using STFCRs.

F.1.2.2. Human Subjects Review and Approval

Human subjects approval for this project was received from the UC Berkeley Committee for the Protection of Human Subjects (CPHS) on November 13, 2017 and from the State of California CPHS on December 4, 2017. The UA CPHS relied on the UC Berkeley CPHS for this project.

F.1.2.3. Online Survey

F.1.2.3.1. Survey Development

The online survey was developed by study staff and OEHHA after review of instruments developed by U.S. EPA[17] and consultation with soccer players and their parents. Additional input was provided by OEHHA management. An independent soccer coach also reviewed the questionnaire. The survey focused solely on use of STFCRs and included questions about general demographic information, frequency of use, frequency of contact with the field during games and practices, usual activity levels during games and practices, potential dermal and non-dietary ingestion exposures during games and practices, hygiene practices, and take-home of crumb rubber particles and dust (i.e., on shoes or clothing) after playing soccer on STFCRs. The online survey also included a detailed player history section. For the parents/guardians completing the survey for their child under the age of 18, the player history section addressed the use of STFCRs for soccer when their child was between the ages of 4-8, 9-12, and 13-17 years old. For soccer players over the age of 18 completing the survey themselves, the player history section addressed the use of STFCRs during college, high school, and youth soccer. The online survey is provided in Supplemental Material Section S1.1.

F.1.2.3.2. Recruitment

We primarily used email to recruit participants for the online survey. We obtained publicly available email addresses for coaches, managers, and other soccer club affiliates in California from websites for youth/club recreational and competitive soccer, high school soccer, adult recreational soccer, and collegiate competitive and intramural soccer. We obtained email addresses for collegiate competitive and recreational soccer teams by manually searching for coaches and managers associated with teams from all colleges and universities in California.

NorCal Premier, Cal North Soccer, and Cal South Soccer were the primary organizations that were used to obtain email addresses for youth and adult recreational and competitive soccer teams. Together, these organizations have over 600 member clubs and their websites were used to obtain the email addresses for coaches, mangers, and other contacts associated with youth and adult soccer throughout California.

In December 2017 and January 2018, we sent a recruitment email for the online survey to over 10,000 email addresses for coaches and managers associated with youth, high school, collegiate, and adult recreational and competitive soccer teams throughout California. The email briefly outlined the study and asked coaches/managers to forward the link to the online survey to parents and players on the team. Links to the email in English and in Spanish were included in the email. The recruitment email also asked the coach/manager to complete the survey if they currently play soccer or had played soccer in the past. Parents of soccer players under the age of 18 were invited to complete the survey for their child.

Between February and April 2018, we sent follow-up emails asking soccer coaches and managers to forward the link to the survey to the parents and players on their team if they had not done so already. Staff also conducted follow up calls to key clubs and organizations in different regions of the state to encourage participation.

In addition to sending emails to soccer coaches and clubs in California, study staff distributed recruitment flyers with a link to the online survey to bystanders and parents at the in-person videotaping fieldwork events. The flyer also included a link to the Facebook page that we maintained that allowed potential participants to obtain more information about the study and contact study investigators.

F.1.2.3.3. Data Collection

The UC Berkeley version of Qualtrics was used to administer the online surveys.

F.1.2.3.4. Data Management and Analysis

Data from the English and Spanish surveys were downloaded from Qualtrics in an Excel file and transferred to STATA statistical software Version 14, which was used for all data analysis.

F.1.2.4. In-Person Survey and Videotaping Time-Activity Assessment

F.1.2.4.1. Questionnaire Development

A questionnaire nearly identical to the online survey addressing exposure-related behaviors was administered to each of the players 14 years or older being videotaped. A parent/guardian was asked to complete the questionnaire for participants younger than 14 years. The questionnaire focused on use of STFCRS and included questions about demographics, use frequency of STFCRs, frequency of contact with the fields during games and practices, activity levels during games and practices, potential dermal and non-dietary ingestion exposures during games and practices, hygiene practices, and take-home of crumb rubber particles and dust (i.e., on shoes or clothing) after playing soccer on STFCRs. Information was also collected about the soccer history and the use of STFCRs at younger ages (4-8, 9-12, 13-17, and 18-25 years old, depending on the age of the participant). The in-person questionnaire is provided in Supplemental Material Section S1.1.

F.1.2.4.2. Recruitment

Beginning in December 2017, we sent a recruitment email to managers and coaches of recreational and competitive soccer teams in the San Francisco Bay Area and Sacramento area with players ages 7-25 years. The email detailed the goals of the study, what potential participation would involve for the team, and asked the coach and/or manger to respond to study staff via phone or email if they were potentially interested in participating. Study staff communicated with coaches and managers that demonstrated interest in the study and provided more details about the study. Most coaches were able and willing to reach out to players and parents and help with forwarding study recruitment and consent information. Study staff then interacted with

parents and players to obtain consent and assent (from players <18 years).

F.1.2.4.3. Data Collection

Videotape: Teams of two study staff were assigned a player to videotape from the time the participant stepped on the field until the time the participant left the field, including breaks. Study staff completed an "Object Palette Log Sheet" and "Taper's Log Time Sheet" to record additional behaviors of the player they were videotaping. The purpose of the Object Palette Log Sheet was to record objects the participant touched to provide more detail for the staff transcribing the video footage. Examples of details study staff recorded on the Object Palette Log Sheet include "clear plastic water bottle" or "yellow polyester jersey". Field staff also recorded other events that caused them to turn off or move the camera, such as during half-time or a camera malfunction. The videotape observation forms (Object Palette Log Sheet and Taper's Log Time Sheet) are provided in Supplemental Material Section S1.1.

If enough staff were available, 1-2 high definition wide-angle cameras were set up on the edge of the field in order to capture the entire field to provide back-up footage in case participants were not in view for a segment of the primary video recording.

Questionnaire: Study staff administered the questionnaire to the soccer player, or a parent/guardian of the participant, as described above. A parent/guardian was asked to complete the questionnaire if the soccer player was younger than 14 years and the soccer player was asked to complete the questionnaire if they were 14 years or older. The UC Berkeley version of Qualtrics was used to administer the in-person questionnaires on electronic tablets.

F.1.2.4.4. Data Management and Analysis

Questionnaire Data

Data from the questionnaires collected on the Qualtrics offline application were uploaded to the Qualtrics server in the field or upon returning to the office.

Video Data

Video footage recorded on SD cards were transferred to i) an external hard drive device, and ii) Box file sharing service. A link to the password-protected and encrypted video files on Box was shared with collaborators at UA so they could download and analyze the data.

Video translation was completed using VirtualTimingDevice™ software, as described in previous studies.[18-20] Briefly, study staff from CERCH, OEHHA, and UA collaborated to tailor a video palette for this project containing potential locations of soccer players (e.g., field, sideline), time (e.g., before practice/game, during practice/game), activities (e.g., diving), and object surface categories (e.g., artificial turf, water bottle). Translators at UA would transcribe the videos in 30-minute segments and activate cells in each of the location, time, activity, and object categories that correlated with the activity and contact occurring in the video. Once a cell was activated, a timer started that recorded

the length of each activity and contact. If a new cell was activated, a new timer began. Through this process, data is collected that translates to the types of contacts being made and the contact frequencies and durations. This process was repeated for the left hand, right hand, left foot, and right foot to gather data for various body parts of interest.

Additionally, existing video footage from 56 children collected in 1998-2000 by Stanford's Exposure Research Group was reviewed and translated to gather micro-level data regarding the frequency of hand-to-mouth activity of young children playing outdoors.[21] These data were used to develop exposure parameters for bystanders who may play on the sidelines of synthetic turf fields during practices and games.

F.1.3. Results and Discussion

F.1.3.1. Number and Age of Soccer Players in California *(Objective 1a)*

Soccer is often a lifelong sport and has been increasing in popularity in California in recent years. The abundance of recreational and competitive soccer leagues in California attracts diverse participants of varying ages. Soccer is also popular among both boys and girls in elementary, middle, and high school. While data are not readily available regarding how often soccer practices and games take place on STFCRs, factors such as minimal water requirements have resulted in increased installation of STFCRs across the United States and California.[17] In 2016, California had over 900 STFCRs that were located primarily in the San Francisco Bay Area and Los Angeles County.[22]

According to the US Youth Soccer Organization, over 320,000 boys and girls ages 18 and under were involved in recreational or competitive soccer in California between 2013 and 2014.[23] Among the sports most often played on STFCRs, soccer has one of the highest number of high school participants in California. The California Interscholastic Federation reported that nearly 100,000 males and females participated on high school soccer teams in 2016, representing nearly 13% of California's population of high school student athletes and over 5% of the total high school population in the state.[3, 24] While participation in competitive soccer teams decreases at the collegiate, semi-professional, and professional levels, college intramural and adult recreational soccer leagues are also common in California.

In addition to being a favorite sport for recreational and competitive players of all ages, the Latino population has grown significantly in recent years and soccer has long been an important part of Latino culture in California. Data from the March 2016 Census Bureau Current Population Survey indicate that Hispanic/Latinos made up 38% of California's population in 2015.[25, 26] In 2014, the estimated Latino population in California was nearly 15 million, compared to 7.7 million in 1990 and 2.4 million in 1970.[27] An online blog titled "Hispanic Media" described soccer as an "outlet of cultural pride for Hispanics"[28] and a study on the impact of soccer in the Latin American community in Richmond, CA indicated that the sport plays a "central role" within the Latino community and creates "social networks through the community's relationship

with teams and clubs centered in Richmond".[29] While data are not currently available regarding soccer enrollment among different ethnic groups, there are indications that soccer continues to grow in popularity in California due various factors, including the increasing Latino population in the state.

Factors such as increasing participation at the high school level, the widespread availability of recreational and competitive leagues for adults, and popularity among groups of diverse demographic backgrounds make soccer one of the most popular sports in California. We estimate that there are approximately 440,000 individuals involved with some form of recreational or competitive soccer in California that may have contact with synthetic turf fields containing crumb rubber (Table F-1).

Table F-1. Overview of Soccer Participation in California (Total=440,721)

Competitive Level	Age Range (Years)	Gender	Estimated Players (n)	Year
Youth Recreational and Competitive	4-18	Both	162,297[a,b]	2013-2014 seasonal year (Northern CA)
Youth Recreational and Competitive	4-18	Both	159,278[a,b]	2013-2014 seasonal year (Southern CA)
High School Competitive	14-18	Boys	52,266[b,c]	2016
High School Competitive	14-18	Girls	46,778[b,c]	2016
College Competitive (Divisions I-III)	18-22	Men	1,614[d]	2016-2017
College Competitive (Divisions I-III)	18-22	Women	1,681[d]	2016-2017
College Recreational (Intramural)	18-22	Both	5,000[e]	2017
Adult Recreational	18+	Both	11,000[f]	2017
Professional and Semi-Professional Competitive	18+	Men	566[g]	2016-2017
Professional and Semi-Professional Competitive	18+	Women	241[g]	2016-2017

[a]Retrieved from US Youth Soccer Association at http://www.usyouthsoccer.org/media_kit/keystatistics/.
[b]High school players may participate in US Youth Soccer club teams and high school teams
[c]Retrieved from California Interscholastic Federation at http://www.cifstate.org/coaches-admin/census/2016_CIF_Participation_Census.pdf.
[d]Calculated by tallying rosters of all NCAA and NAIA collegiate teams in CA for 2016-2017 season
[e]Estimate based on number of universities and colleges in CA, assuming two intramural teams per school and 15 players per team
[f]Estimate based on number of teams affiliated with California Soccer Association-North (Cal North), California Soccer Association-South (Cal South), and other adult soccer leagues I California. Estimated

15 members per team for teams that did not provide number of participants.
[g]Calculated by tallying rosters of all semi-professional and professional teams in Men's Major League Soccer, United Women's Soccer, and Premier Leagues in CA

F.1.3.2. Online Survey Overview *(Objective 1b)*

A total of 1,028 individuals completed the online survey (1,019 in English and nine in Spanish). Responses were collected from 763 parents/guardians who completed the questionnaire for their child and 265 soccer players 18 years or older completing the questionnaire for themselves. One individual completed an in-person questionnaire (virtually identical to the online survey) but was not videotaped, for a total of 1,029 questionnaire-only respondents.

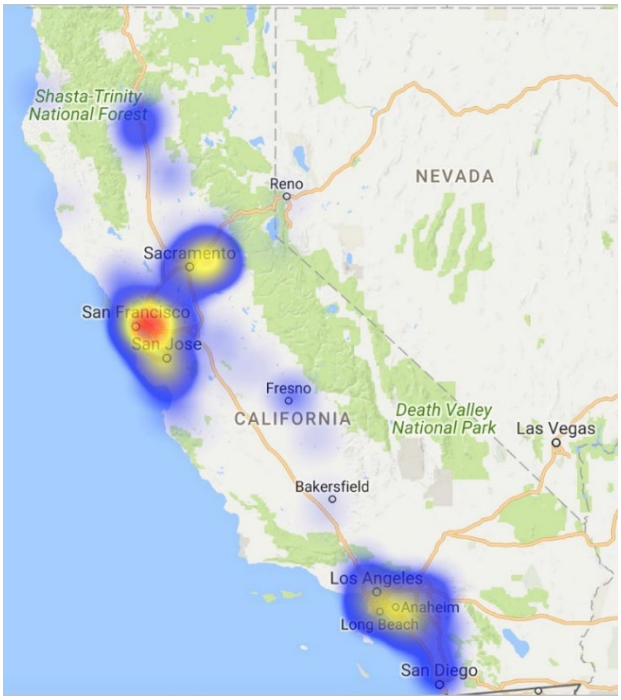

Figure F-1. Heat Map of Zip Code Reported by Online Survey Participants

Figure F-1 is a heat map of the residential zip code reported in the online survey. While the majority of the survey respondents were located in the San Francisco, Sacramento, Los Angeles, and San Diego metropolitan areas, it is important to note that these are the California regions with the greatest population. Furthermore, California's STFCRs are located primarily in the San Francisco Bay Area and the Greater Los Angeles Area.[22]

F.1.3.3. In-Person Questionnaire and Videotaping Time-Activity Assessment Overview *(Objective 1c)*

Forty individuals participated in the videotaping and completed the in-person questionnaire. Events were evenly split by gender (i.e., five events with males and five events with females) and event type (i.e., five games and five practices) (Table F-2). We also enrolled players with a range of ages and positions (Table F-2).

Table F-2. Videotaping Player and Event Summary (Total Players=40)

Event Type	Gender	Age (Years)	Positions Videotaped	Number Videotaped
Game	Male	9	Defender,Goalie, Variable (2)	4
Game	Female	9	Defender/Goalie, Midfielder (2)	3
Practice	Female	11-12	Defender, Defender/Goalie, Forward, Midfielder	4
Practice	Male	11-12	Forward, Goalie, Midfielder	4
Practice	Female	14	Defender/Midfielder, Forward, Forward/Goalie, Forward/Midfielder	4
Game	Male	14-15	Defender, Forward, Goalie (2), Midfielder	5
Game	Female	16-17	Defender (2), Defender/Forward/Goalie, Forward	4
Game	Male	16-18	Defender (2), Goalie, Midfielder	4
Practice	Male	19-22	Defender, Defender/Midfielder, Goalie, Midfielder	4
Practice	Female	19-21	Defender, Goalie, Midfielder (2)	4

F.1.3.4. Questionnaire Analysis

In the sections below, we provide overall population summaries of key variables collected using the online survey and in-person questionnaires. To support population-specific exposure modeling (for example, girls playing competitive soccer through age 25), we have prepared extensive tables stratifying player information by gender, participation in recreational or competitive soccer, player position, and age for all variables (see Supplemental Material Section S1.2). This stratification results in hundreds of tables. For exposure scenario building, key parameters can be extracted to identify specific parameters for model building.

F.1.3.4.1. Demographic Information

Table F-3 presents demographic information of the online and in-person survey respondents combined (n=1,069). The median age of soccer players whose parent/guardian completed the survey was 14 years (n=763) and the median age of soccer players completing the questionnaire themselves was 38 years (n=264). Approximately 60% of online survey respondents were Caucasian and 15% of respondents were Hispanic/Latino. Seventy-eight of the participants were between 9 and 25 years old and the respondents were almost evenly balanced on gender (50% male versus 49% female).

Table F-4 shows soccer characteristics reported by the survey respondents, including soccer position and percent of soccer practices and games that take place on a synthetic turf field with crumb rubber. Approximately 11% of the survey population

mainly played goalie, 11% mainly played forward, 24% mainly played midfielder, and 25% mainly played defender. The majority (>75%) of the survey population only played competitive soccer, with approximately 11% playing recreational soccer and approximately 13% playing both recreational and competitive soccer.

Table F-3. Demographic Characteristics of Online and In-Person Survey Respondents (n=1,069)[a]

Characteristic	Group	No. of Respondent, n (%)
Age of player	0 - <2	1 (0.1)
Age of player	2 - <9	11 (1.0)
Age of player	9 - <16	546 (51.1)
Age of player	16 - <25	296 (27.7)
Age of player	25 - <30	28 (2.6)
Age of player	30 - <40	64 (6.0)
Age of player	40 - <50	82 (7.7)
Age of player	≥ 50	30 (2.8)
Age of player	Prefer not to answer	11 (1.0)
Gender	Male	539 (50.4)
Gender	Female	522 (48.8)
Gender	Prefer not to answer	8 (0.8)
Ethnicity	Asian/Pacific Islander	55 (5.1)
Ethnicity	Black/African American	19 (1.8)
Ethnicity	Caucasian	640 (59.9)
Ethnicity	Hispanic/Latino	158 (14.8)
Ethnicity	Native American	5 (0.5)
Ethnicity	Mixed	139 (13.0)
Ethnicity	Other	17 (1.6)
Ethnicity	Prefer not to identify	36 (3.4)
Survey Language	English	1,060 (99.2)
Survey Language	Spanish	9 (0.8)

[a]Online survey completed by parent/guardian of soccer player (n=763) and players 18 years or older (n=265)

Table F-4. Soccer Player Characteristics (n=1,069)

Characteristic	Group	No. of Respondent, n (%)
Soccer Position	Goalie	120 (11.2)
Soccer Position	Forward	117 (10.9)
Soccer Position	Midfielder	258 (24.1)
Soccer Position	Defender	263 (24.6)
Soccer Position	Multiple Positions	300 (28.1)
Soccer Position	DK	11 (1.0)
Recreational/Competitive Soccer Player	Recreational	115 (10.8)
Recreational/Competitive Soccer Player	Competitive	815 (76.2)
Recreational/Competitive Soccer Player	Both	134 (12.5)
Recreational/Competitive Soccer Player	DK	5 (0.5)
Plays Soccer Year-Round	No	118 (11.0)
Plays Soccer Year-Round	Yes	946 (88.5)
Plays Soccer Year-Round	DK	5 (0.5)
Percent practices on synthetic turf with crumb rubber	0%	132 (12.4)
Percent practices on synthetic turf with crumb rubber	> 0 – 25%	175 (16.4)
Percent practices on synthetic turf with crumb rubber	> 25 – 50%	155 (14.5)
Percent practices on synthetic turf with crumb rubber	> 50 – 75%	157 (14.7)
Percent practices on synthetic turf with crumb rubber	>75%	443 (41.4)
Percent practices on synthetic turf with crumb rubber	DK	7 (0.7)
Percent games on synthetic turf with crumb rubber	0%	19 (1.8)
Percent practices on synthetic turf with crumb rubber	> 0 – 25%	168 (15.7)
Percent practices on synthetic turf with crumb rubber	> 25 – 50%	216 (20.2)

Characteristic	Group	No. of Respondent, n (%)
Percent practices on synthetic turf with crumb rubber	> 50 – 75%	243 (22.7)
Percent practices on synthetic turf with crumb rubber	>75%	418 (39.1)
Percent practices on synthetic turf with crumb rubber	DK	5 (0.5)

DK: Don't Know/Prefer not to answer

F.1.3.4.2. Player History

Information on player history collected in the questionnaires was categorized by pre-determined age groups (4-8; 9-12; 13-17; and 18-25 years, respectively). All other stratified information in this report and in Supplemental Material Section S1.2 is reported according to OEHHA risk assessment age categories (0-<2; 2-<9; 9-<16; 16+ years, respectively).

Table F-5 to Table F-8 present overall player history results for study participants. Table F-5 and Table F-6 show the number of weeks per year and hours per week for players with more detailed age-specific history (i.e., for online subjects under age 18 and players who participated in the in-person questionnaire and videotaping). Note: because adults, many in middle age, completing the online survey may not have been able to recall detailed player history at younger ages, we asked participants 18 years and older detailed information about youth, high school, and college soccer (Table F-7 and Table F-8).

Table F-5 to Table F-8 show that with increasing age, soccer players play more weeks and more hours on STFCRs. Within each of the age groups in Table F-5, we did not find significant differences in the number of weeks participants reported playing soccer on STFCRs by gender (Kruskal-Wallis: p=0.14 for 4-8 age group; p=0.36 for 9-12 age group; p=0.65 for 13-17 age group; p=0.64 for 18-25 age group). Among adults who completed the online questionnaire, represented in Table F-7, females tended to report playing soccer on STFCRs more weeks per year than males (p=0.10 for youth soccer; p=0.05 for high school soccer; p=0.06 for college soccer).

Note: The number of players in each group in Table F-5 to Table F-10 do not equal the total number of surveys completed because many participants reported information for multiple age groups over their lifetime.

Table F-5. Player History – Weeks Per Year Child Played on Synthetic Turf Field with Crumb Rubber between the Ages of 4-8, 9-12, 13-17 and 18-25

Age Range (years)	n[a]	p25[b]	p50	p75	p95	Mean	SD	Range[b]
4-8	705[c]	0[b]	2	12	40	9.3	13.4	0-52

9-12	692[d]	4	18	36	48	20.5	16.7	0-52
13-17	402[e]	15	30	45	52	29.5	16.4	0-52
18-25	7[f]	20	36	52	52	34.3	17.8	6-52

[a]Total responses by age range > 785 because many children played in multiple age groups
[b]"0" represent participants who played soccer but not on synthetic turf
[c]Number of responses from parent/guardian whose child played soccer between ages of 4 and 8 years
[d]Number of responses from parent/guardian whose child played soccer between ages of 9 and 12 years
[e]Number of responses from parent/guardian whose child played soccer between ages of 13 and 17 years
[f]Number of responses from in-person questionnaire and videotaping who played soccer between the ages of 18 and 25 years
SD: standard deviation

Table F-6. Player History – Hours Per Week Child Played on Synthetic Turf Field with Crumb Rubber between the Ages of 4-8, 9-12, 13-17 and 18-25

Age Range (years)	n[a]	p25[b]	p50	p75	p95	Mean	SD	Range[b]
4-8	705[c]	0	1	2	6	1.8	4.6	0-104
9-12	692[d]	1.5	3	4.5	10	3.6	4.1	0-52
13-17	402[e]	3	5	7	14	6.1	6.9	0-100
18-25	7[f]	7	9	10	10	8.6	1.6	0-10

[a]Total responses by age range > 785 because many children played in multiple age groups
[b]"0" represent participants who played soccer but not on synthetic turf
[c]Number of responses from parent/guardian whose child played soccer between ages of 4 and 8 years
[d]Number of responses from parent/guardian whose child played soccer between ages of 9 and 12 years
[e]Number of responses from parent/guardian whose child played soccer between ages of 13 and 17 years
[f]Number of responses from in-person questionnaire and videotaping who played soccer between the ages of 18 and 25 years
SD: standard deviation

Table F-7. Player History Reported by Older Adults – Weeks Per Year Played on Synthetic Turf Field with Crumb Rubber During Youth, High School, and College Soccer

Period	n[a]	p25[b]	p50[b]	p75	p95	Mean	SD	Range[b]
Youth	223[c]	0	0	8	40	6.9	13.0	0-52
High School	230[d]	0	0	12	40	7.5	12.5	0-52
College	189[e]	0	2	20	42	10.0	13.8	0-52

[a]Total responses by age range > 284 because many children played in multiple age groups
[b]"0" represent participants who played soccer but not on synthetic turf
[c]Number of responses from participants who played youth soccer
[d]Number of responses from participants who played high school soccer
[e]Number of responses from participants who played college soccer
SD: standard deviation

Table F-8. Player History Reported by Older Adults – Hours Per Week Played on Synthetic Turf Field with Crumb Rubber During Youth, High School, and College Soccer

Period	n[a]	p25[b]	p50[b]	p75	p95	Mean	SD	Range[b]
Youth	223[c]	0	0	3	9	2.0	4.1	0-25
High School	230[d]	0	0	6	15	3.3	5.6	0-35
College	189[e]	0	2	6	18	4.3	6.4	0-42

[a]Total responses by age range > 284 because many children played in multiple age groups
[b]"0" represent participants who played soccer but not on synthetic turf
[c]Number of responses from participants who played youth soccer
[d]Number of responses from participants who played high school soccer
[e]Number of responses from participants who played college soccer
SD: standard deviation

Table F-9. Days Per Year Practiced on Synthetic Turf Field

Age Range (Years)	n	Mean	SD	p25	p50	p75	p95	p99	Max
0 - <2	1	32.5	-	32.5	32.5	32.5	32.5	32.5	32.5
2 - <9	8	71.5	54.7	26.0	45.5	123.5	156.0	156.0	156.0
9 - <16	470	91.6	51.1	52.0	91.0	117.0	182.0	221.0	273.0
16+	404	128.1	69.7	78.0	117.0	169.0	247.0	325.0	351.0

Table F-10. Days Per Year Played Games on Synthetic Turf Field

Age Range (Years)	n	Mean	SD	p25	p50	p75	p95	p99	Max
0 - <2	1	39.0	-	39.0	39.0	39.0	39.0	39.0	39.0
2 - <9	8	65.0	10.8	52.0	71.5	78.0	91.0	91.0	91.0
9 - <16	490	57.1	38.8	26.0	52.0	78.0	130.0	195.0	273.0
16+	460	80.3	44.0	52.0	65.0	104.0	156.0	221.0	286.0

F.1.3.4.3. Longest Amount of Time Spent on Synthetic Turf Field in Past Year

Table F-11 and Table F-12 summarize overall population information on the longest amount of time spent practicing and playing games on STFCRs in the past year.

There was a slight increase in the longest amount of time players reported practicing or playing soccer games on STFCRs as the age of the player increased, however, across all age groups, the most common responses were 1-2 or 2-4 hours. Among all ages combined, we did not observe differences in the longest amount of time reported spent practicing or playing games on STFCRs by gender (Chi-squared test: p=0.87 for practices; p=0.46 for games). We also did not find gender differences after stratifying by

age for practices (Chi-squared test: p=0.23 for participants <9 years; p=0.81 for 9-<16 age group; p=0.91 for ≥ 16 age group; p=0.44 for those who prefer not to answer age) or games (Chi-squared test: p=0.39 for participants <9; p=0.09 for 9-<16 age group; p=0.80 for ≥ 16 age group; p=0.44 for those who prefer not to answer age).

Table F-11. Number of Players, n (percent), with the Corresponding Longest Amount of Time (Hours) Practiced on a Single Day On Synthetic Turf Field with Crumb Rubber in Past Year

Age Range (Years)[a]	<1	>1-2	>2-4	>4-5	>5	DK
0 - <2	0 (0)	0 (0)	1 (100.0)	0 (0)	0 (0)	0 (0)
2 - <9	0 (0)	4 (50.0)	3 (37.5)	0 (0)	1 (12.5)	0 (0)
9 - <16	11 (2.2)	215 (43.7)	204 (41.5)	35 (7.1)	27 (5.5)	0 (0)
≥ 16	6 (1.4)	137 (32.2)	194 (45.7)	43 (10.1)	39 (9.2)	6 (1.4)
Prefer not to answer	0 (0)	5 (45.5)	4 (36.4)	2 (18.2)	0 (0)	0 (0)

[a]Responses collected from 1 player 0-<2 years, 8 players 2-<9 years, 492 players 9-<16 years, 425 players ≥ 16 years, and 11 players who preferred not to answer age or entered birth year incorrectly.
Values in table are player in an age group with the corresponding longest amount of time (hours) practiced on a single day on synthetic turf field, n. Values in parathenesis are percent of players in an age group, percent.
DK: don't know/prefer not to answer

Table F-12. Number of Players, n (percent), with the Corresponding Longest Amount of Time (Hours) on a Single Day Players Played Games on Synthetic Turf Field with Crumb Rubber in Past Year

Age Range (Years)[a]	<1	>1-2	>2-4	>4-5	>5	DK
0 - <2	0 (0)	1 (100.0)	0 (0)	0 (0)	0 (0)	0 (0)
2 - <9	0 (0)	8 (88.9)	0 (0)	1 (11.1)	0 (0)	0 (0)
9 - <16	21 (3.9)	176 (32.8)	231 (43.1)	75 (14.0)	31 (5.8)	2 (0.4)
≥ 16	10 (2.0)	138 (28.0)	209 (42.4)	80 (16.2)	51 (10.3)	5 (1.0)
Prefer not to answer	0 (0)	4 (36.4)	5 (45.6)	2 (18.2)	0 (0)	0 (0)

[a]Responses collected from 1 player 0-<2 years, 9 players 2-<9 years, 536 players 9-<16 years, 493 players > 16 years, and 11 players who preferred not to answer age or entered birth year incorrectly.
Values in table are player in an age group with the corresponding longest amount of time (hours) of games on a single day on synthetic turf field, n. Values in parathenesis are percent of players in an age group, percent.
DK: don't know/prefer not to answer

F.1.3.4.4. Reported Exertion During Practices and Games

Table F-13 and Table F-14 illustrate the overall population activity levels players reported during practices and games. Participants reported the proportion of the time they typically are: a) resting; b) lightly active; c) moderately active; and d) highly active during practices and games. Table F-13 and Table F-14 only include the results from participants whose responses totaled 100% across the four activity levels (n=774 for practices and 886 for games).

Overall, survey respondents reported a high level of activity. The median percent time participants reported being moderately or highly active during practices and games was 65% and 70%, respectively.

Males reported being lightly active slightly more percent of the time during practices than females (mean=17.6 vs. 16.2; Kruskal-Wallis test: p=0.04). We did not observe any differences in reported exertion levels during games by gender.

Table F-13. Reported Percent of Time at Varying Activity Levels During Practice (n=774)

Activity Level	Median (IQR)	Max
Highly Active	35 (25, 50)	100
Moderately Active	30 (25, 45)	80
Lightly Active	15 (10, 20)	80
Resting	10 (5, 15)	55

IQR: interquartile range (25th, 75th percentiles)

Table F-14. Reported Percent of Time at Varying Activity Levels During Games (n=886)

Activity Level	Median (IQR)	Max
Highly Active	40 (25, 55)	100
Moderately Active	30 (20, 40)	80
Lightly Active	10 (10, 20)	60
Resting	10 (5, 20)	90

IQR: interquartile range (25th, 75th percentiles)

F.1.3.4.5. Contact with Crumb Rubber During Practices and Games

Figure F-2 to Figure F-7 illustrate the frequency survey respondents reported diving, sliding/tackling, and slipping/falling at practices and games taking place on STFCRs, stratified by the percent of respondents per soccer position.

Goalies reported diving, sliding/tackling, and slipping/sliding on field during practices and games significantly more frequently than forwards, midfielders, and defenders

combined (Chi-squared test: $p<0.01$). For example, 50.8% and 58.7% of goalies reported diving more than 10 times at practices and games, respectively, whereas less than 5% of forwards, midfielders, or defenders reported diving more than 10 times at practices or games. Additionally, males reported diving and sliding/tackling more frequently than females during practices and games (Chi-squared test: $p<0.01$).

Figure F-8 and Figure F-9 illustrate the frequency that players reported crumb rubber in their mouth and eyes and played with crumb rubber during practices and games. The majority of soccer players reported "Rarely" getting crumb rubber in their mouths or eyes. There were no large differences in the frequency of these contacts with crumb rubber during practices and games (Chi-squared test: $p<0.01$).

Figure F-10 to Figure F-13 illustrate the frequency players reported crumb rubber in their mouths and eyes during practices and games, stratified by player position (goalie vs. midfielder, forwards, and defenders combined). Goalies reported getting crumb rubber in their mouths and eyes during practices and games more frequently than players of other positions (Chi-squared test: $p<0.01$). For example, almost 43% of goalies reported getting crumb rubber in their mouth "sometimes", "often", or "always", compared with 16% of midfielders, forwards, and defenders.

Figure F-14 illustrates the frequency players and parents/guardians of players reported observing crumb rubber on their body or personal objects after playing soccer on a synthetic turf field with crumb rubber. Only 8% of participants reported observing crumb rubber on their water bottles >25% of the time after playing soccer on a synthetic turf field. However, 51% and 36% of participants reported observing crumb rubber on their clothes and body >25% of the time after playing soccer on a synthetic turf field, respectively.

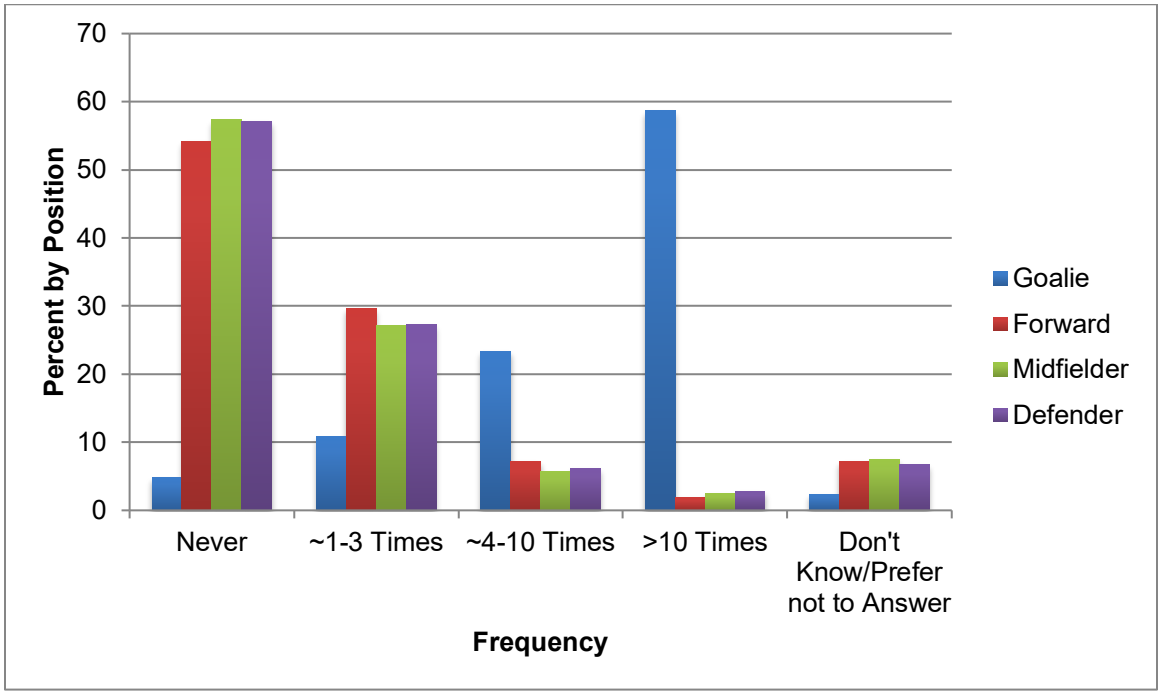

Figure F-1. Dive Frequency at Practices on Synthetic Turf Fields

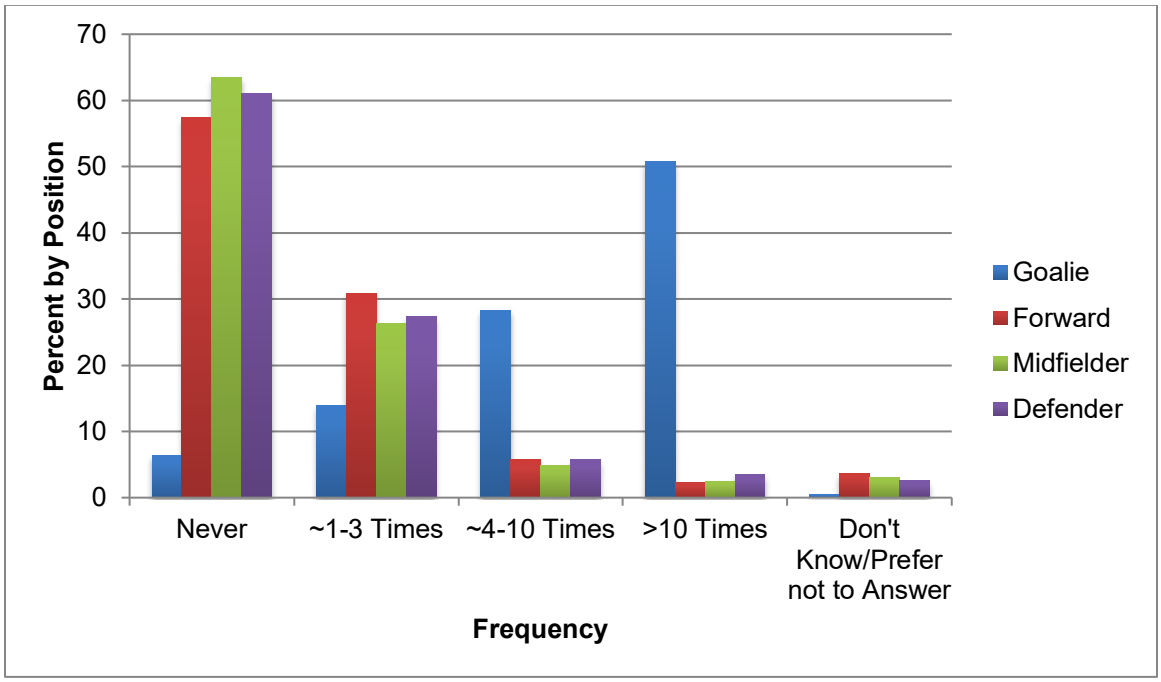

Figure F-2. Dive Frequency at Games on Synthetic Turf Fields

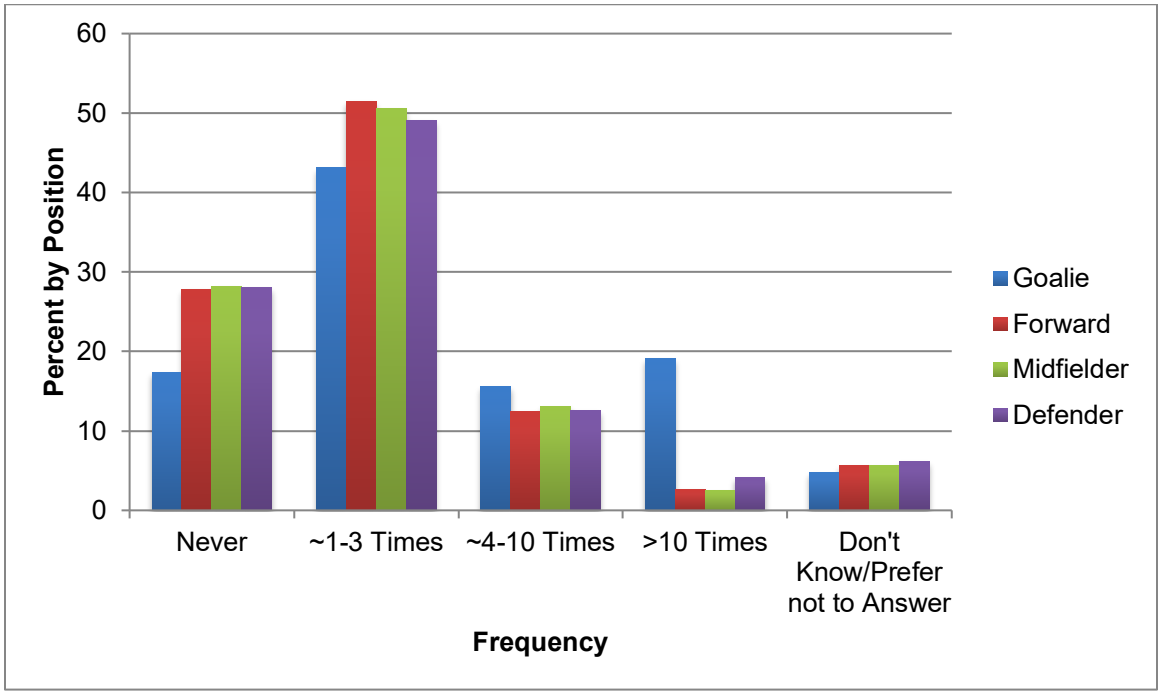

Figure F-3. Slide/Tackle Frequency at Practices on Synthetic Turf Fields

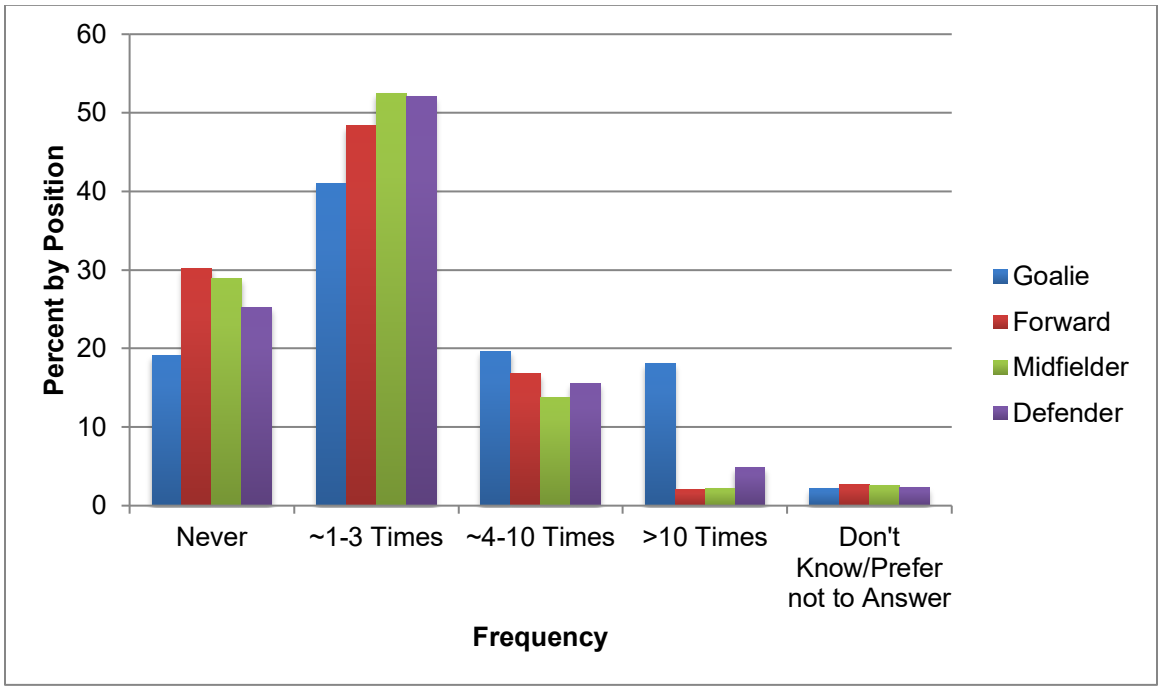

Figure F-4. Slide/Tackle Frequency at Games on Synthetic Turf Fields

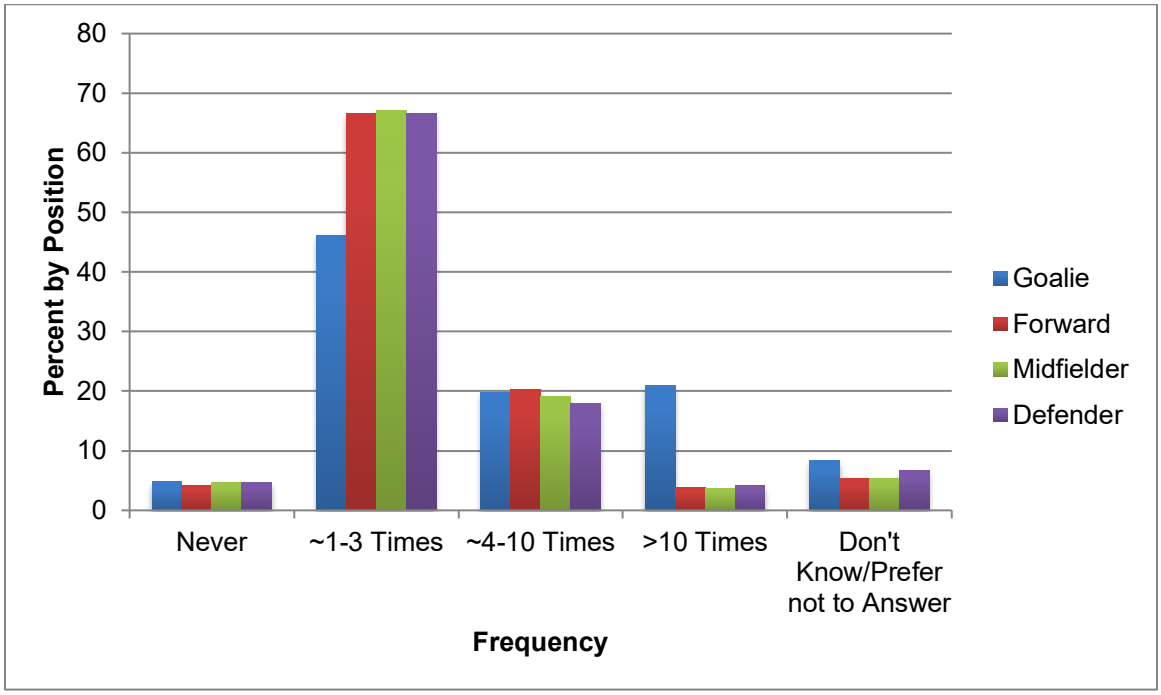

Figure F-5. Slip/Fall Frequency at Practices on Synthetic Turf Fields

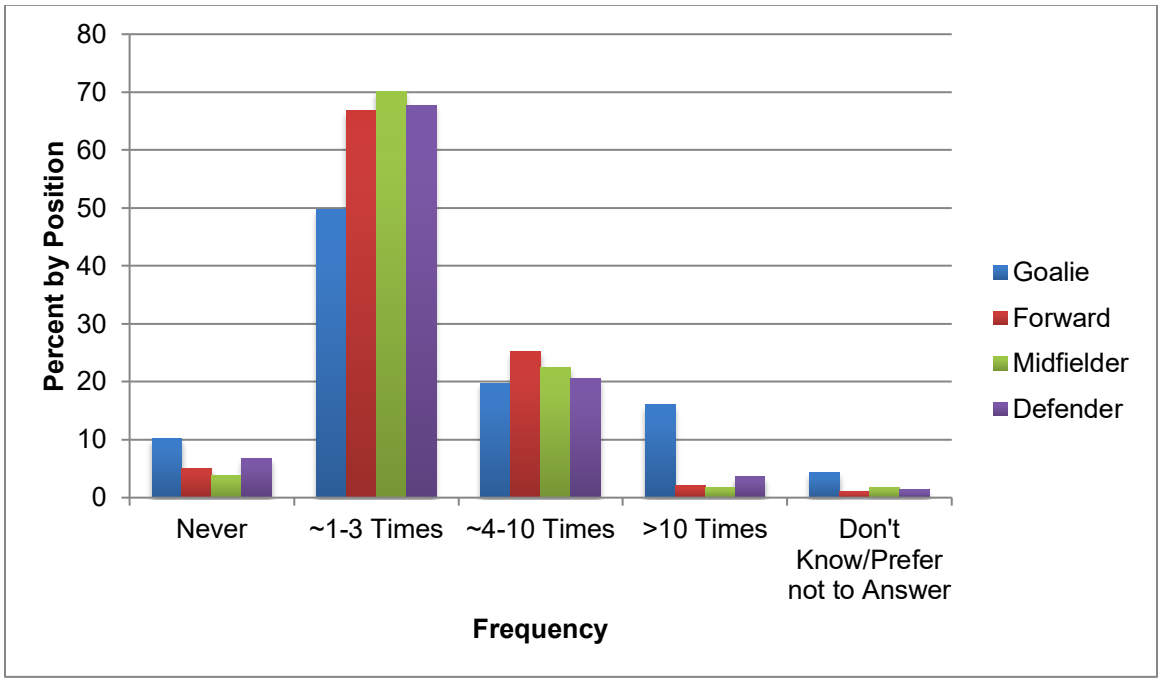

Figure F-6. Slip/Slide Frequency at Games on Synthetic Turf Fields

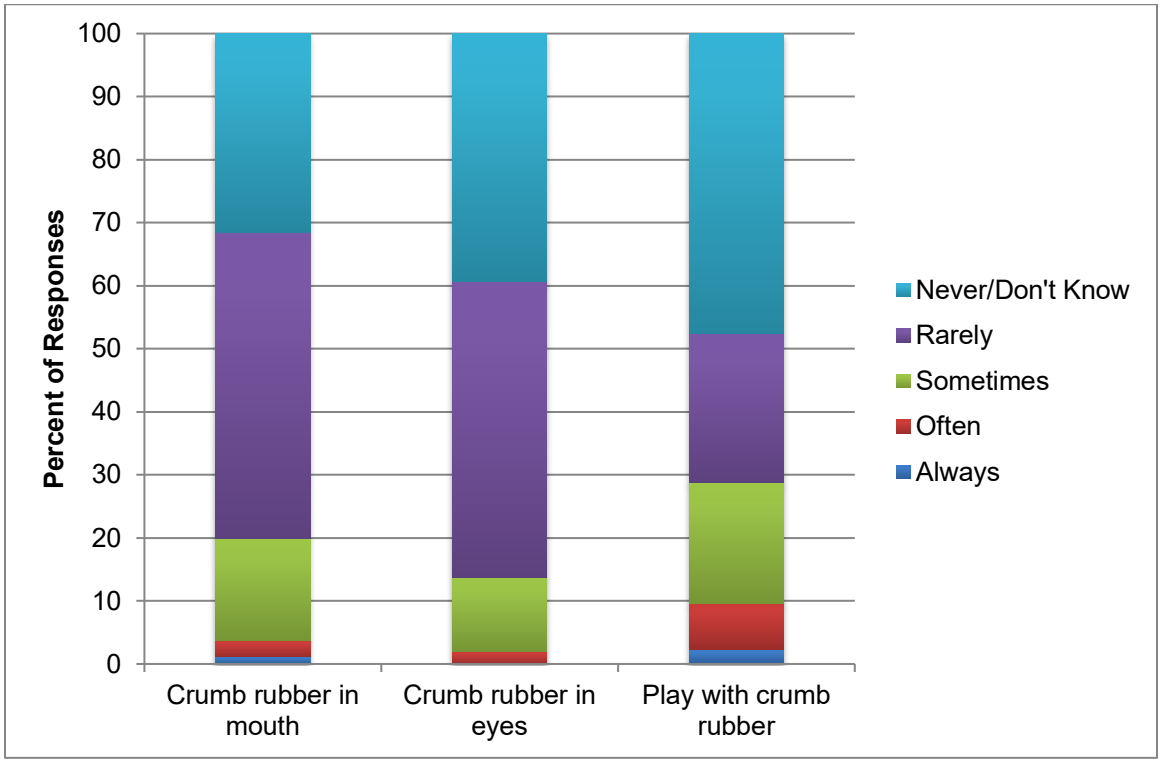

Figure F-7. Frequency of Contact with Crumb Rubber During Practice

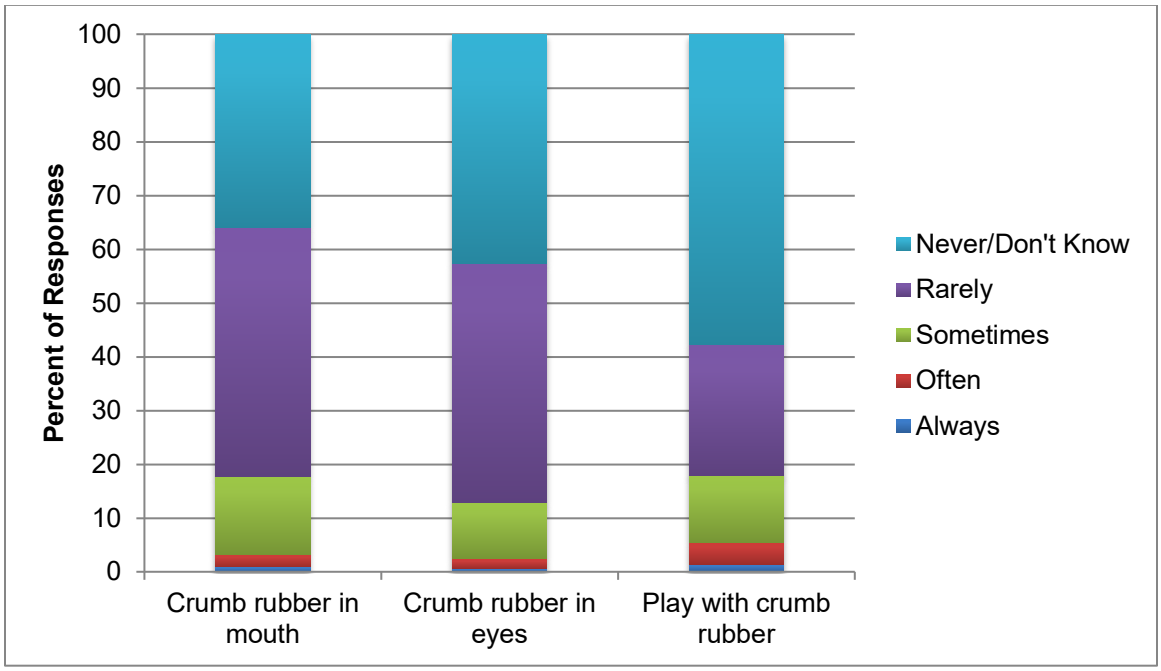

Figure F-8 Frequency of Contact with Crumb Rubber During Game

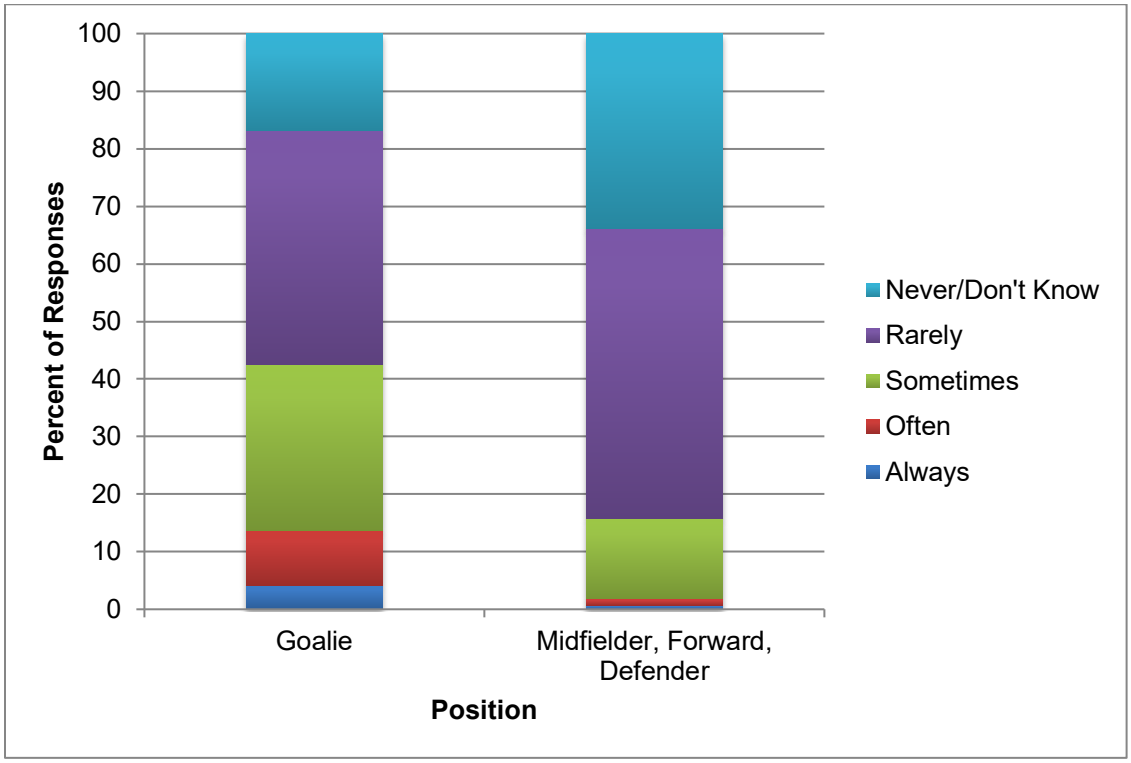

Figure F-9. Frequency of Crumb Rubber in Mouth During Practice - Goalies vs Other Positions

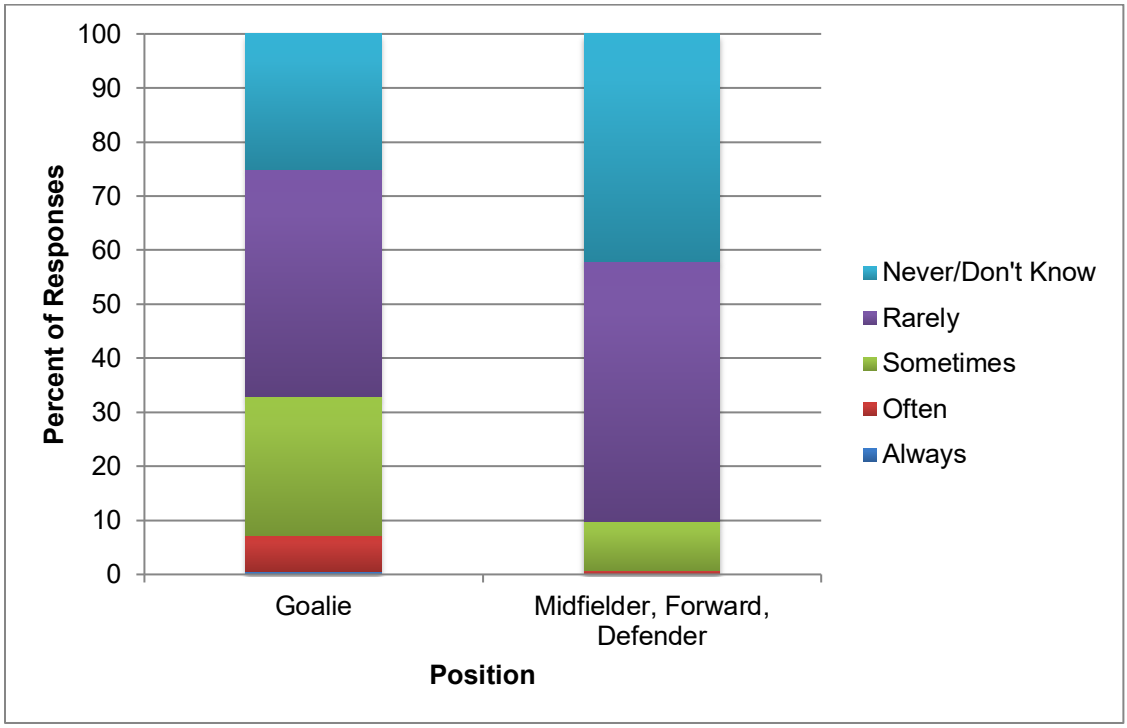

Figure F-10. Frequency of Crumb Rubber in Eyes During Practice - Goalies vs Other Positions

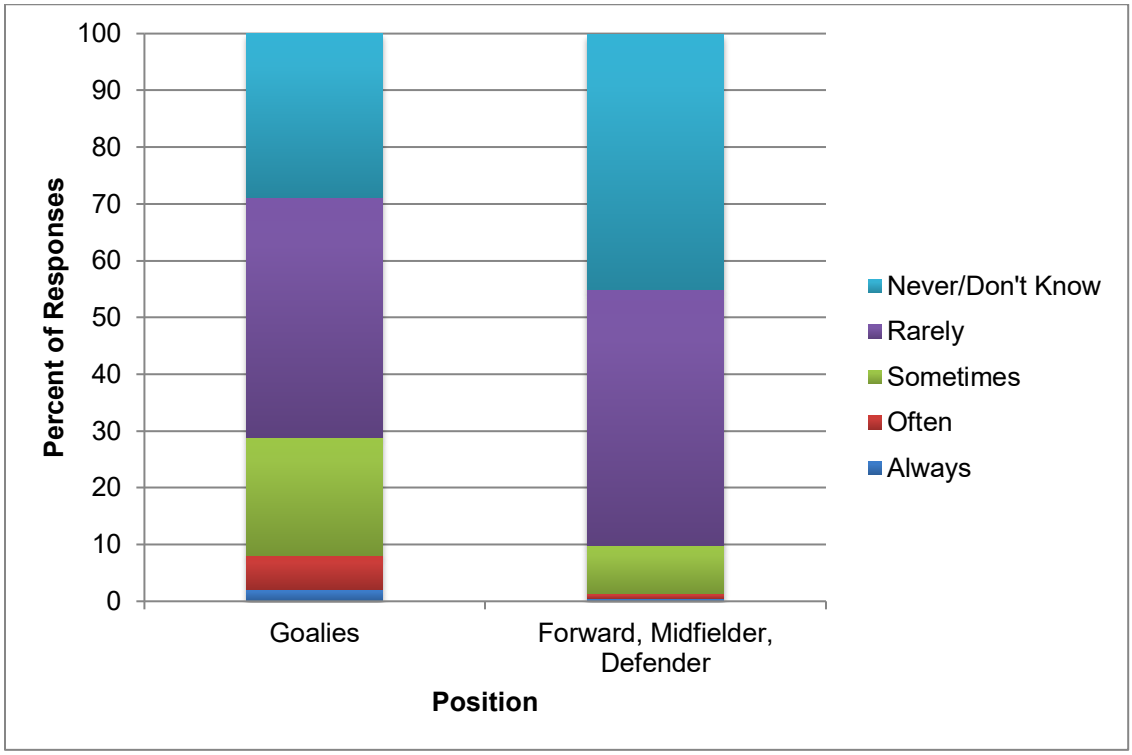

Figure F-11. Frequency of Crumb Rubber in Mouth During Games - Goalies vs Other Positions

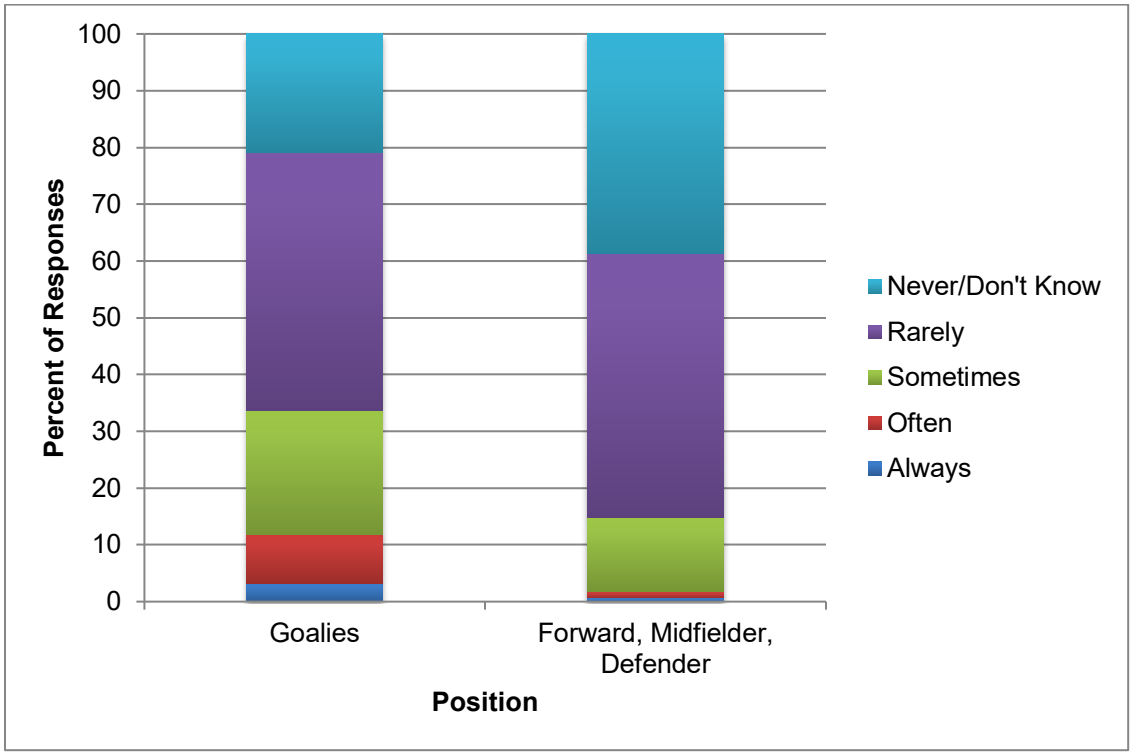

Figure F-12. Frequency of Crumb Rubber in Eyes During Games - Goalies vs Other Positions

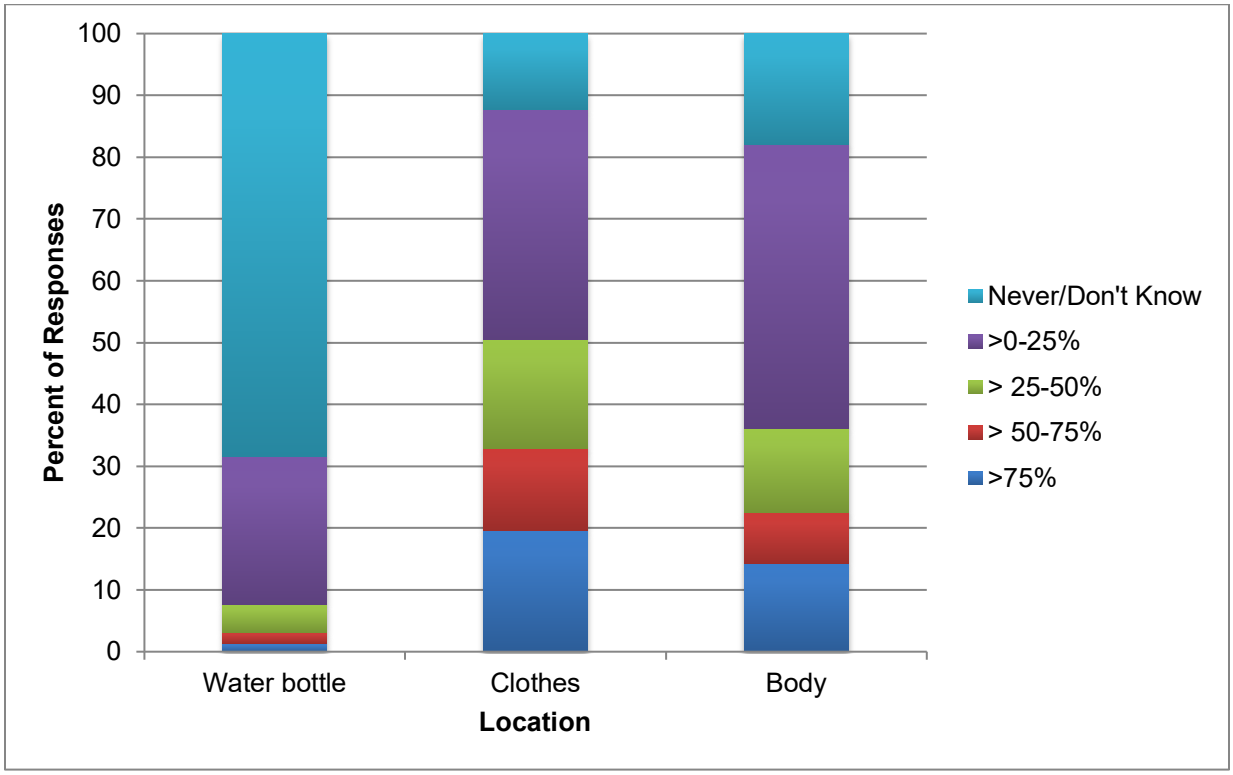

Figure F-13. Frequency Crumb Rubber Observed on Player or Personal Objects After Game or Practice

F.1.3.4.6. Food and Water Consumption Before and During Practices and Games

Table F-15 summarizes the amount of time before practices and games participants reported eating or having a snack/meal. While the most common response was 1-3 hours, more participants reported having eaten <1 hour before practices than before games (31.3% vs. 19.0%, respectively).

Table F-16 summarizes how often participants reported having a snack during practices and games. The majority of participants indicated they never had a snack during practices or games. Less than 25% of participants reported consuming one or more snacks during practices or games (Table F-16).

The majority of participants reported consuming between 16 and 32 ounces of water during practices and games (Table F-17). Only 4.6% and 2.3% of players reported drinking more than 64 ounces of water during practices and games, respectively.

Table F-15. Number of Participants, n (Percent), Reported Eating or Having a Snack Before Practices and Games

Time Eating or Having a Snack Before an Event (Hour)	Practice	Game
<1	333 (35.5)	204 (19.4)
> 1 -3	537 (57.3)	777 (74.0)
> 3	41 (4.4)	50 (4.8)
DK	26 (2.8)	19 (1.8)

DK: don't know/prefer not to answer

Table F-16. Number of Participants, n (Percent), Reported Consumption of Snack During Practices and Games

Frequency of Snack Consumption (unitless)	Practice	Game
Never	789 (84.2)	735 (70.0)
1	90 (9.6)	260 (24.8)
2	14 (1.5)	31 (3.0)
>2	6 (0.6)	6 (0.6)
DK	38 (4.0)	18 (1.7)

DK: don't know/prefer not to answer

Table F-17. Number of Participants, n (Percent), Reported Consumption of Water During Practices and Games

Amount of Water Consumed (Ounce)	Practice	Game
8	43 (4.6)	24 (2.3)
16	251 (26.8)	218 (20.8)
24	352 (37.8)	370 (25.2)
32	230 (24.6)	210 (29.5)
48	25 (2.7)	60 (5.7)
64	20 (2.1)	44 (4.2)
> 64	7 (0.8)	13 (1.3)
DK	9 (1.0)	10 (1.0)

DK: Don't Know/Prefer not to answer

F.1.3.4.7. Observation of Crumb Rubber in Home

Figure F-15 illustrates the frequency players and parents/guardians reported observing crumb rubber in various locations around the home after playing soccer on a synthetic turf field with crumb rubber. Nearly 46% of participants reported "always" observing crumb rubber in the garage/mudroom/entrance to their home after playing soccer, and 73% reported observing crumb rubber at least "sometimes" (i.e., "sometimes", "often", or "always"). While participants reported observing crumb rubber in other locations of the home less frequently, 59% reported finding crumb rubber in the laundry room at least "sometimes" and 43% reported finding crumb rubber in their bedrooms and bathrooms at least "sometimes". Only 21% and 32% of participants reported wiping, cleaning, or removing socks, shoes, shin guards, or other equipment more than 75% of the time before entering their car and their house, respectively (data not shown).

When asked about the quantity of crumb rubber participants observed in their home each time after playing soccer on a synthetic turf field with crumb rubber, the majority of participants said they find some crumb rubber, but less than one tablespoon (Figure F-16).

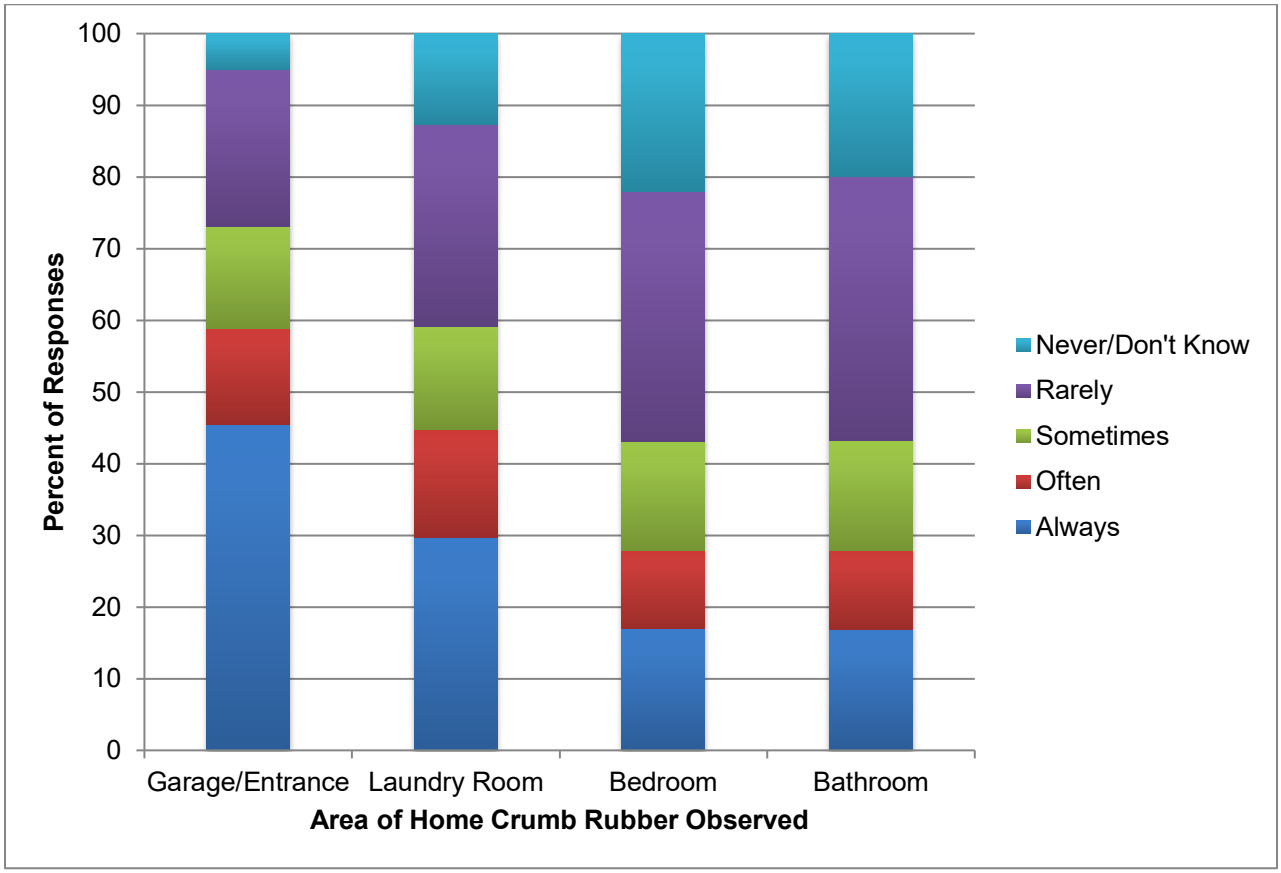

Figure F-1. Frequency of Crumb Rubber Observed in Home After Playing Soccer

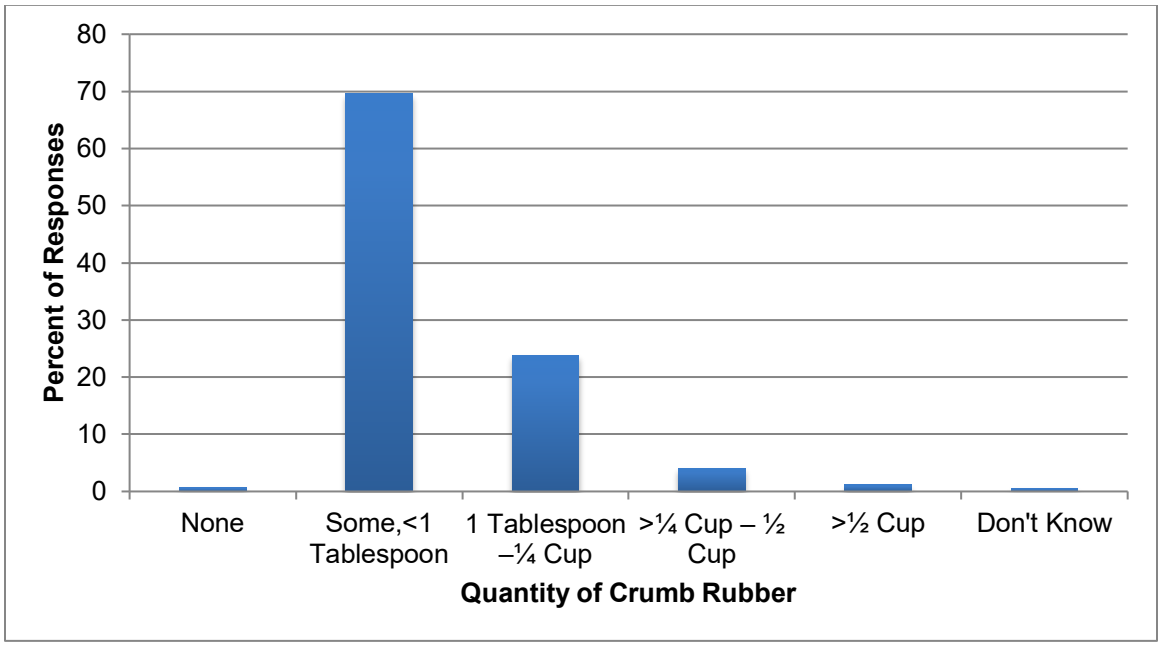

Figure F-2. Quantity of Crumb Rubber Observed in Home After Playing Soccer

F.1.3.5. Comparisons Between Survey Responses and Videotaping Data

For the 40 individuals that participated in the in-person questionnaire and videotaping, we compared the frequency of diving, sliding/tackling, and slipping/falling during the event that was videotaped with the average number of times they reported doing these activities during a typical practice or game in the questionnaire. We also compared the percent of time participants were resting, lightly active, moderately active, and highly active in the event videotaped with the percent of time they reported these exertion levels at a typical practice or game. We only compared the responses from the questionnaire with the type of event videotaped (i.e., if a participant was videotaped at a practice, we used responses to questions regarding practices).

To evaluate the frequency of diving, sliding/tackling and slipping/falling during a typical practice or game, we observed these activities in the event videotaped for that participant. We first categorized the frequency of these events into four categories corresponding to the options provided to participants in the questionnaire, where 0 refers to never, 1 refers to 1-3 times per event, 2 refers to 4-10 times per event, and 3 refers to >10 times per event. For 19 of the 40 (48%) participants, there was no difference between the frequency of diving reported in the questionnaires versus observed in videotaping, however participants tended to report more frequent diving in the questionnaire versus during a typical practice or game (Chi-squared test: p=0.01). There was concurrence between the questionnaire responses and videotape information for only 25% and 30% of the participants for slipping/falling and sliding/tackling, respectively. These differences were not statistically significant, although given relatively low p-values (0.10 and 0.12, respectively), the overall findings suggest that the self-reported information is directly aligned with the videotaped observations.

Figure F-17 presents the mean percent of time all 40 participants reported being highly active, moderately active, lightly active, and resting during a typical practice or game in the questionnaire compared with the mean percent of time we observed at these activity levels in the videotapes. We found that there were significant differences between the questionnaire responses and videotape (p-value <0.01 for each activity level). For example, compared to the event we videotaped, we found that participants reported being more highly and moderately active in the questionnaires, and conversely, we observed more moderate and resting activity they reported for a typical practice or game.

It is important to note that we only videotaped one practice or one game for each participant, and in the questionnaire we asked participants to report the average frequency of various activities and exertion levels in a typical practice or game. It is likely that their behaviors and exertion levels during the event videotaped are not representative of all practices or games. Our findings suggest that players may overestimate exertion levels, but further research is needed to appropriately compare self-report exertion against videotaping during the same time period.

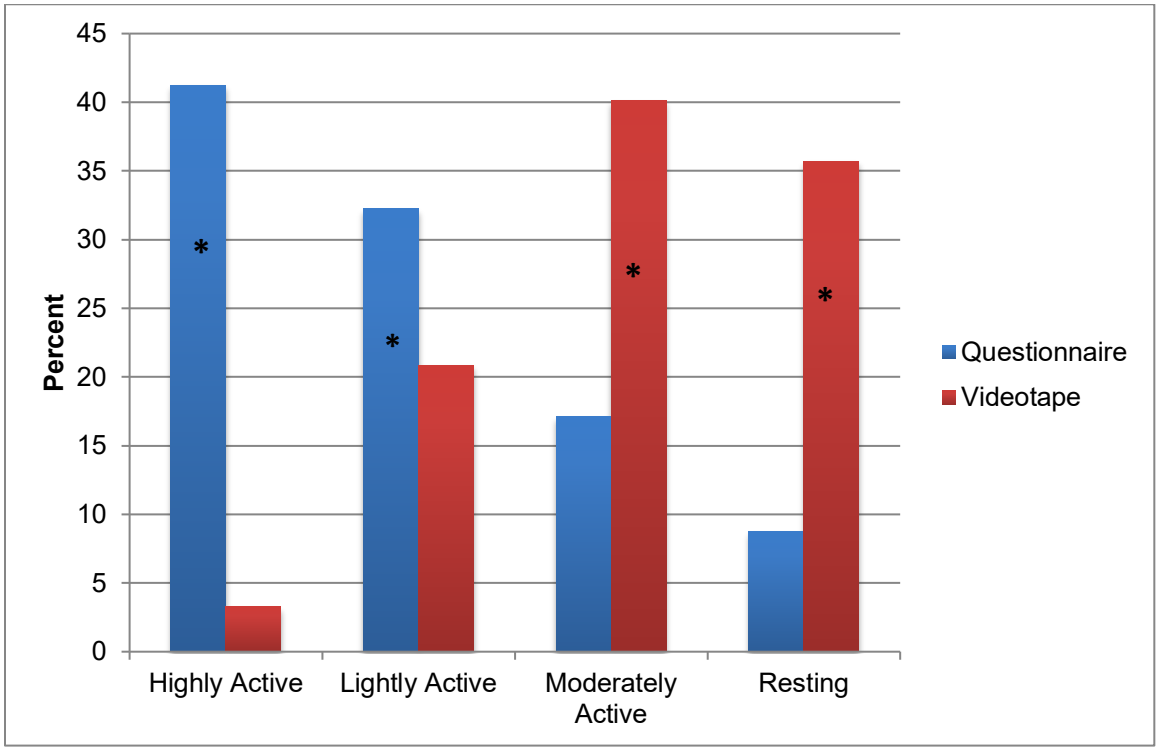

Figure F-1. Mean Percent of Time Activity Levels Reported in Questionnaire and Observed in Videotaping

F.1.3.6. Population-Specific Exposure Parameter Estimates

This report presents an overview of population characteristics and key variables that determine short and long-term exposures resulting from use of STFCRs (e.g., player history, practice and game frequency and duration, exertion, contact with fields, etc). To estimate exposures to specific sub-groups, it is necessary to stratify the information and identify parameters unique to each population. For example, young adult women playing competitive soccer through age 25. In this case, information on player history specific to girls and young women combined with practice and game frequency, exertion, and contact with crumb rubber can be used to develop a lifetime exposure scenario and model exposures. Given the number of variables collected by the questionnaire (90+), and the key factors requiring stratification (gender, participation in recreational or competitive soccer, player position, and age), hundreds of tables are required to identify specific parameters for developing scenarios and building exposure models, resulting in several thousand pages of output.

To create a manageable process to identify key parameters for exposure modeling, we stratified responses from the online and in-person surveys by age (i.e., 0-<2 years, 2-<9 years, 9-<16 years, 16 years and over), gender (i.e., female, male, prefer not to identify), player level (i.e., recreational, competitive, both), and player position (i.e., goalie, forward, midfielder, defender, multiple) and produced output in a text format. Using Python, we replaced code with a descriptor for each stratification, and then produced HTML format files with a linked table of contents for each question (for

example, "*Approximately what percent of [your/your child's] soccer PRACTICES take place on synthetic turf fields? (Questions 12 and 99)*". We also produced an overall table of contents (index file) that automatically links to the appropriate HTML files with question-specific information. These files are provided in Supplemental Material Section S1.2. This procedure simplifies access to the stratified information, eliminates the potential for data entry errors, and can be used for each question from the questionnaire, thereby providing a mechanism to extract key parameters from the output to inform exposure modeling when specific exposure scenarios are developed.

F.1.4. Strengths and Limitations

This study combines the results of a large online survey with player interviews and video data obtained through direct observation. One of the primary strengths of this study is that we were able to recruit diverse soccer players of both genders and of various ages and competitive levels living throughout the state of California for the online survey. With over 1000 survey participants and videotaping of 40 soccer players in the San Francisco Bay Area and greater Sacramento, this study is the most extensive to date examining exposure-related activity of individuals using STFCRs and it is unique to California. Combined with extensive environmental sampling testing by the Lawrence Berkeley National Laboratory (LBNL), these data will support OEHHA's efforts to assess chemical exposures and potential health risks resulting from use of STFCRs.

As with all surveys, it is possible that recall bias may have affected the accuracy of participants' responses to the in-person and online questionnaires. To comply with the UC Berkeley CPHS and State of California CPHS human subjects guidelines, parents or guardians rather than the soccer players themselves were required to complete the online survey for all players under the age of 18. Because some parents or guardians are not familiar with their child's activities, some responses may not represent actual practices. To the extent possible for this report, we have presented comparisons of the time activity video data from the 40 participating soccer players and their corresponding questionnaire data. It is important to note that the timeframe of the in-person questionnaires covered a longer timeframe (e.g., weeks, months) and did not match the timeframe of the particular game or practice that was videotaped for this study. In addition, we have presented information on key variables stratified by player age, gender, field position and level of play (i.e., competitive vs. recreational). For some of these stratifications, there are few or no observations in many cells, making it impossible in these cases to interpret the distributions or make statistical comparisons. For example, there was only one player 0-<2 years of age.

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F.2. Quantification of Micro-level Activities from a Pre-existing Dataset of Children Playing on Turf/Playgrounds – by The University of Arizona

Part I: Final Report on the Quantification of Micro-level Activities from a Pre-existing Dataset of Children Playing on Turf/Playgrounds

Prepared for the California Office of Environmental Health Hazard Assessment
California Environmental Protection Agency

Principal Investigator: Paloma Beamer

Prepared by: Nicolas Lopez-Galvez

University of Arizona, College of Public Health

August 4, 2018

Table of Contents

F.2.1. Introduction

Non-dietary ingestion and dermal routes of exposure are important to consider when evaluating children's aggregate exposure to artificial turf or other tire-derived surfaces like playground mats. The objective of this study was to quantify dermal and mouthing contact behaviors of children playing on turf and playground structures. While these children were playing on natural turf, this data could be used to represent potential exposures of children bystanders at sporting events on artificial turf. Similarly, while most of the children were playing on playgrounds that were not above playground mats made from recycled tires or from chopped up recycled tires, we quantified contacts with floor surfaces to provide data that could be used in estimating these potential exposures. This task consisted of analyzing a pre-existing micro-level activity time series (MLATS) dataset originally collected by Stanford's Exposure Research Group. The dataset was derived by transcribing video footage of children playing outdoors by using a video-translation software (Virtual Timing Device). The activity patterns were quantified and analyzed to understand differences in behavior by age and gender of the children playing outdoors on turf and playground structures.

F.2.2. Methods

F.2.2.1. Data Collection

Children MLATS data and videotapes were utilized from two previous studies, the Outdoor Residential Exposure Task Force (ORETF) project and the EPA study from the years 1998-2000. The videotaped activities have already been transcribed into computer text files using Virtual Timing Device by the Stanford's Exposure Research Group. For ORETF and EPA, the Virtual Timing Device palette presented in Figure F-18 was used for translation of microlevel activity data. This palette allows the translator to record the child's location, contact type and object/surface. Details on ORTEF and EPA methods have been previously described (AuYeung et al., 2004; AuYeung et al., 2006; Ferguson et al., 2006; Beamer et al., 2012).

For the ORTEF project, MLATS data was collected for 15 body parts including hands and mouth by videotaping 36 children, aged 1-12 years of age while they were playing outdoors. Meanwhile, for the EPA study, MLATS data was collected for mouth and hands by videotaping 20 children, aged 1-6 years of age while they were playing outdoors. For both studies, children were videotaped for 2 hours each. We combined these data to quantify the mouthing and dermal contact behavior of 56 children while playing on turf and playground.

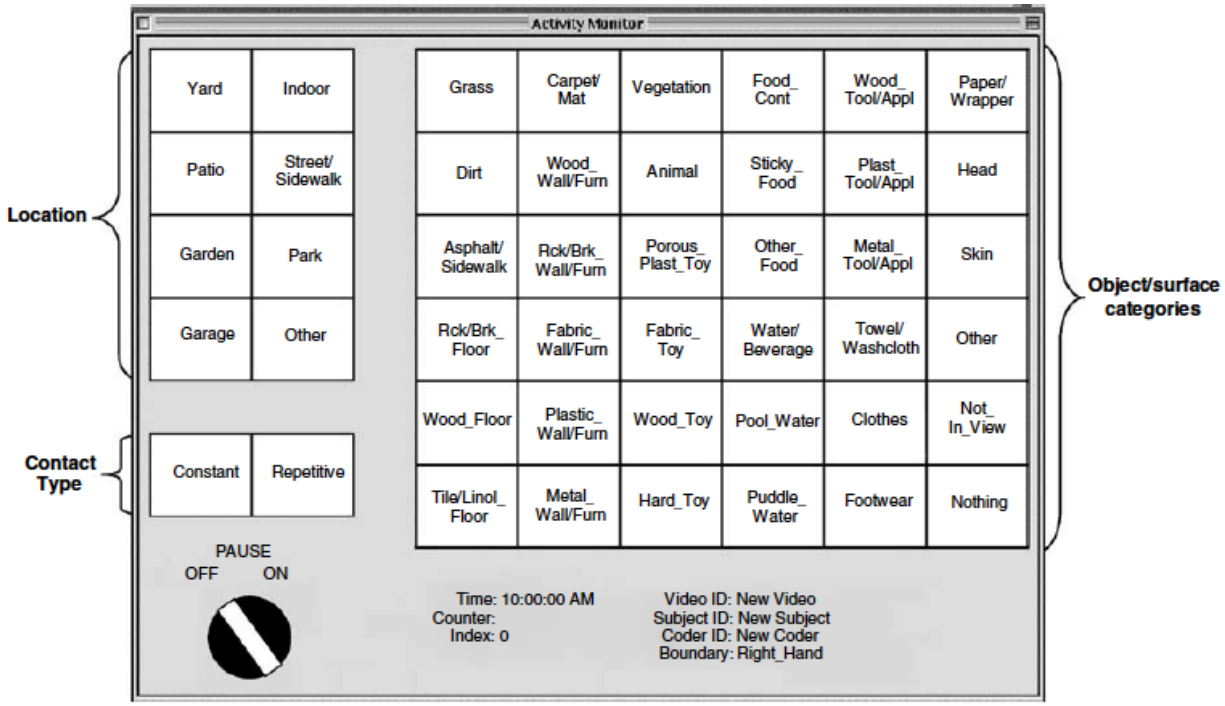

Figure F-1. Virtual Timing Device palette used by Stanford's Exposure Research Group for translation.

F.2.2.2. Data Processing

F.2.2.2.1. Children Playing on Turf

The translated plain text files, obtained from ORETF and EPA, for all 56 children for right hand, left hand, and mouthing activities were used for the analysis. The object/surfaces were selected as presented in Table F-18. Participants' contacts while playing in the location categories of yard, garden, and park were extracted and grouped as one turf-like location by using RStudio V1.1 (RStudio Team, 2016). Videotapes were reviewed to confirm turf like locations.

F.2.2.2.2. Children Playing on Playgrounds

Since playground was not categorized in the previous studies, all of the existing videotapes (n=56) were re-watched to only select footage where a playground structure was observed. The exact footage time and duration when children played on or near playground structures was recorded and then a specific "playground" location was added to each corresponding data file. The objects/surfaces selected for analysis are presented in Table F-19. All floor surfaces were grouped in one category for the playground locations (Table F-19) because we are assuming that playgrounds are on rubber mats made of tire or of chopped up tire.

Table F-18. Selected Categories for Object/Surfaces on Turf

Super Categories	Virtual Timing Device Palette Categories (Figure F-18)
Location: Turf	Yard, park, garden
Object/Surface: Grass	Grass
Object/Surface: Dietary objects	Water/beverage, sticky food, other food, food container
Object/Surface: Non-dietary objects	Everything, but dietary objects
Object/Surface: Hands*	Hands
Object/Surface: All objects/surfaces	Wood wall, wood tools, wood toy, vegetation, hard toys, porous plastic toys, fabric toys, plastic tool, plastic wall, paper, pool water, puddle water, metal wall, metal tool, footwear, carpet, wood floor, tile floor, rock floor, sidewalk, dirt

* Only analyzed for mouth contact files

Table F-19. Selected Categories for Object/Surfaces on Playgrounds

Super Categories	*Virtual Timing Device Palette Categories* (Figure F-18)
Location: Playground	Child near playground in the following locations: Yard, Park, Garden, Patio, Street, Garage
Object/Surface: Floors	Dirt, Asphalt, Rock floor, wood floor, tile, carpet/mat
Object/Surface: Dietary objects	Water/beverage, sticky food, other food, food container
Object/Surface: Non-dietary objects	Everything, but dietary objects
Object/Surface: Hands*	Hands
Object/Surface: All objects/surfaces	Wood wall, wood tools, wood toy, vegetation, hard toys, porous plastic toys, fabric toys, plastic tool, plastic wall, paper, pool water, puddle water, metal wall, metal tool, footwear, carpet, wood floor, tile floor, rock floor, sidewalk, dirt

* Only analyzed for mouth contact files

F.2.2.3. Data Analysis

Using RStudio V1.1 , right hand, left hand, and mouth contact frequency, hourly contact duration and median contact duration with the selected object/surface categories (Table F-18 and Table F-19) were calculated for each child while playing on turf and playground structures, respectively.

Contact frequency (events/hour) was calculated by summing the total number of contact

events by hands or mouth with a specific object category divided by the total time that the child was in view.

Hourly duration (minutes/hour) was calculated by summing the total time in minutes that hands or mouth were in contact with the specific object category divided by the total time in view (hours).

Median duration (seconds) was obtained from the contact duration for the hand or mouth contact events with a specific object/category during the time in view for each child. It is the median value of all contacts of the body part (mouth/hand) with the object. Only children who contacted the object were included in these calculations.

Since Wilcoxon signed rank is for paired data on the same person (dependent data), we used it to compare to assess differences in the activity variables (contact frequency, hourly duration and median duration) between right and left hand. If no differences were observed, then data for the hands were combined and reported as “both hands.”

The data was then summarized based on age and gender. The activity variables (contact frequency, hourly duration and median duration) were evaluated for significant differences between genders and by age groups using non-parametric tests. To determine differences between male and female participants, we used the two tailed Wilcoxon-rank sum test (non-parametric test, similar to a t-test, for independent data).

To determine if contact activities correlated with age, Spearman’s rank correlation coefficient was computed using STATA Version 12.0. (College Station, TX: StataCorp). The data for each contact activity was summarized into three age groups: 0 <2 years, 2 <9 years, and 9 <16 years. The Kruskal-Wallis test (non-parametric test similar to ANOVA) was used to assess if there are differences across the three age groups. Also, as presented in Supplemental Material Sections S2.1 and S2.2, the data was summarized into additional age groups by following the US EPA guidance (U.S. EPA, 2005). Differences between the activities of the 1-6 year old children and the 7-12 year old children was assessed using the two tailed Wilcoxon-rank sum test (see Supplemental Material Sections S2.1 and S2.2).

F.2.3. Results

A total of 43 hours (2548 minutes) of footage was collected from 56 children with a median footage time per child of 112 min (range: 60 – 133 min). This was the total amount of footage that was available for the retrospective analysis.

F.2.3.1. Children Playing on Turf:

F.2.3.1.1. Amount of Footage with Turf and Demographics of Children Who Played on Turf

All 56 children played on turf at some point during their footage, with a median time on turf of 84 min (Table F-20). Of the footage of children playing on turf, 3.9% of the time hands and/or mouth was not in view and excluded from analysis.

There were comparable numbers of male (n=27) and female (n=29) participants (Table F-21). While among both male and females there were more children within the 2 <9 years of age than the other two age groups. As presented in Supplemental Material Section S2.1, for the EPA age groups, the male children had an even distribution among the age groups, while female children were disproportionally distributed between the ages of 3 and <11 years old. However, there are similar proportions of female children below and above the age of 6.

Table F-20. Time Spent on Turf (N=56)

Time on turf	Hand and/or mouth in view	Hand and/or mouth not in view
Total turf time (min)	1812.0	99.5
Median turf time (min per child)	84.0	2.5
Percentage of time spent on turf (%)	71.1*	3.9*

* Calculated from total footage time of 2,548 minutes

Table F-21. Number of Children Playing on Turf Grouped by Age Groups and Gender

Gender	0 <2 years	2 <9 years	9 <16 years	Total
Male	5	15	7	27
Female	3	21	5	29
Total	8	36	12	56

F.2.3.1.2. Hand Contact Activity While Playing on Turf

There were no significant differences in the contact frequency with object/surfaces between right hand and left hand (Table F-22 and Table F-23). Therefore, both hands were combined and summarized (Table F-24). This means that contact frequency for the left and right hands were summed, however it does not mean that both hands were in contact with the object at the same time. The median grass contact frequency for both hands combined was 4.14 events/hour. Although the median contact frequency with “grass” was relatively low (less than once every 10 minutes), the child with the greatest potential exposure was contacting the “grass” very frequently (over 4 times per minute).

Table F-22. Right Hand Contact Frequency (Event/Hour) While Playing on the Turf (n=56)

Distribution	Grass	Dietary	Non-Dietary	All objects
Mean	7.20	3.10	129.40	132.50
SD	17.50	5.40	54.60	54.30
Min	0.00	0.00	57.30	57.30

Distribution	Grass	Dietary	Non-Dietary	All objects
p25	1.51	0.00	93.92	96.00
Median	3.73	0.14	112.50	115.68
p75	10.00	3.28	151.30	155.68
p95	26.50	15.34	221.12	221.12
p99	89.65	20.68	297.78	298.40
Max	122.33	20.72	371.99	373.36

Table F-23. Left Hand Contact Frequency (Event/Hour) While Playing on the Turf (n=56)

Distribution	Grass	Dietary	Non-Dietary	All objects
Mean	7.00	3.10	134.20	137.30
SD	18.20	5.20	68.10	67.40
Min	0.00	0.00	9.60	9.60
p25	1.22	0.00	101.04	103.84
Median	3.55	0.15	118.70	127.17
p75	8.03	4.80	145.58	149.58
p95	30.91	14.92	242.44	242.72
p99	90.08	19.62	376.70	377.20
Max	129.54	19.64	393.85	394.96

Table F-24. Both Hands Object/Surface Contact Frequency (Event/Hour) (n=56)

Distribution	Grass	Dietary	Non-Dietary	All objects
Mean	14.50	6.10	276.80	282.90
SD	35.50	10.30	126.70	125.30
Min	0.00	0.00	107.70	109.70
p25	0.78	0.00	192.78	205.57
Median	4.14	0.71	236.31	246.32
p75	14.93	8.82	308.21	324.38
p95	48.57	27.03	503.25	504.34
p99	151.84	40.30	718.79	719.90

Distribution	Grass	Dietary	Non-Dietary	All objects
Max	251.87	40.33	765.84	768.32
p-value*	0.7249	0.935	0.535	0.546

*Wilcoxon Signed Rank test comparison of left- and right-hand contact frequency

There were no significant differences in hourly contact duration with object/surfaces between right hand and left hand (Table F-25 and Table F-26). Therefore, both hands were combined and summarized (Table F-27). This means that contact hourly duration for the left and right hands were summed, however it does not mean that both hands were in contact with the object at the same time. If both hands were in contact with object for the entire time, the maximum value would be 120 min/hour. The median hourly contact duration for both hands with grass was 0.24 min/hour. However, one child was in contact with grass 12 min/hour.

Table F-25. Right Hand Hourly Contact Duration (Min/Hour) While Playing on the Turf (n=56)

Distribution	Grass	Dietary	Non-Dietary	All Objects
Mean	0.44	1.75	33.19	34.94
SD	0.97	3.08	9.61	9.04
Min	0.00	0.00	11.88	11.88
p25	0.00	0.00	26.33	29.04
Median	0.09	0.01	32.21	34.22
p75	0.36	2.41	39.14	40.28
p95	2.40	8.62	48.93	50.22
p99	5.87	11.99	53.06	55.06
Max	5.87	11.99	55.06	55.06

Table F-26. Left Hand Hourly Contact Duration (Min/Hour) While Playing on the Turf (n=56)

Distribution	Grass	Dietary	Non-Dietary	All objects
Mean	0.45	1.61	31.94	33.55
SD	0.97	2.77	10.19	9.90
Min	0.00	0.00	5.68	5.68
p25	0.01	0.00	26.48	27.20
Median	0.11	0.01	31.23	32.94

Distribution	Grass	Dietary	Non-Dietary	All objects
p75	0.37	2.07	38.01	41.04
p95	2.20	7.46	48.49	48.49
p99	6.09	9.93	57.64	57.64
Max	6.09	9.93	57.64	57.64

Table F-27. Hourly Object/Surface Contact Duration for Both Hands While Playing on Turf (Min/Hour) (n=56)

Distribution	Grass	Dietary	Non-Dietary	All objects
Mean	0.93	1.81	36.57	38.38
SD	1.97	3.08	13.71	14.60
Min	0.00	0.00	20.65	22.36
p25	0.05	0.00	29.26	31.55
Median	0.24	0.12	33.33	34.83
p75	1.22	2.47	35.98	36.97
p95	4.63	8.10	64.64	67.61
p99	8.02	11.90	81.66	87.12
Max	11.96	12.14	92.96	105.10
p-value*	0.876	0.265	0.167	0.071

*Wilcoxon Signed Rank test comparison of left- and right-hand contact frequency

There were no significant differences in median contact duration with object/surfaces between right hand and left hand (Table F-28 and Table F-29). Therefore, both hands were combined, re-analyzed, and summarized (Table F-30). This means that for each object category the durations of all the discreet contacts with an object for both the right and left hands were grouped and reranked to determine the median value of contact duration across all the “hand” contacts with that object. Note that the median for aggregate categories like “All Objects” was calculated as the median duration of contacts with any object. The median contact duration of both hands combined and grass was 2.00 seconds. However, one child had a median contact duration of both hands with grass of 13.00 seconds.

Table F-28. Right Hand Median Contact Duration While Playing on the Turf (Second)

Distribution	Grass	Dietary	Non-Dietary	All Objects
n*	38	28	56	56

Distribution	Grass	Dietary	Non-Dietary	All Objects
Mean	2.54	8.07	3.37	3.44
SD	1.48	6.11	1.08	1.10
Min	0.50	1.00	1.00	1.00
p25	1.50	4.00	3.00	3.00
Median	2.00	6.50	3.00	3.00
p75	3.00	11.63	4.00	4.00
p95	5.00	16.65	5.00	5.00
p99	6.83	24.30	5.73	5.73
Max	8.00	27.00	6.00	6.00

*Only participants who contacted object included in calculation of median contact duration

Table F-29. Left Hand Median Contact Duration While Playing on the Turf (Second)

Distribution	Grass	Dietary	Non-Dietary	All objects
n*	42	28	56	56
Mean	3.52	7.57	3.28	3.29
SD	4.19	5.63	0.89	0.87
Min	0.50	1.00	2.00	2.00
p25	2.00	3.00	3.00	3.00
Median	2.00	6.50	3.00	3.00
p75	3.00	10.38	4.00	4.00
p95	12.33	18.13	5.00	4.63
p99	19.48	20.46	5.23	5.23
Max	20.50	21.00	5.50	5.50

*Only participants who contacted object included in calculation of median contact duration

Table F-30. Both Hands Median Contact Duration While Playing on the Turf (Second)

Distribution	Grass	Dietary	Non - Dietary	All objects
n*	42	28	56	56
Mean	2.72	7.47	3.28	3.31
SD	2.05	5.25	0.92	0.95

Distribution	Grass	Dietary	Non - Dietary	All objects
Min	0.50	1.00	1.00	1.00
p25	2.00	4.00	3.00	3.00
Median	2.00	6.75	3.00	3.00
p75	3.00	10.00	4.00	4.00
p95	5.00	18.00	5.00	5.00
p99	13.00	23.00	5.00	5.00
Max	13.00	23.00	5.00	5.00
p-value*	0.815	0.367	0.611	0.245

*p-value from Wilcoxon Signed Rank test comparison of left- and right-hand contact frequency

Hand Contact Activity by Age While Playing on Turf

Frequency, hourly duration and median duration for both hands contact activities while playing on turf are presented in Table F-31 to Table F-33 for the three age categories. Although there were more children in the 2 <9 years of age group, most of the contact with grass seem to have occurred in the older group (9 <16 years old). There were no significant differences in contact frequency, hourly contact duration, or median contact duration across all three age groups (Kruskal-Wallis Test). Also, there were no correlations between age groups and both hand activities (Table F-34).

Table F-31. Both Hands Contact Frequency (Event/Hour) While Playing on Turf by Age Groups

Age Group	Distribution	Grass	Dietary	Non-Dietary	All objects
<2 (n=8)	Mean	11.06	1.42	285.68	287.10
<2 (n=8)	SD	11.83	3.56	75.83	76.10
<2 (n=8)	Min	0.34	0.00	187.91	187.91
<2 (n=8)	p25	2.92	0.00	238.21	238.21
<2 (n=8)	Median	8.52	0.00	282.76	287.87
<2 (n=8)	p75	14.01	0.59	308.16	308.37
<2 (n=8)	p95	37.24	10.22	439.28	440.02
<2 (n=8)	p99	37.24	10.22	439.28	440.02
<2 (n=8)	Max	37.24	10.22	439.28	440.02
2 to <9 (n=36)	Mean	8.00	6.76	271.32	278.08

Age Group	Distribution	Grass	Dietary	Non-Dietary	All objects
2 to <9 (n=36)	SD	13.24	10.28	143.03	140.67
2 to <9 (n=36)	Min	0.00	0.00	107.69	109.66
2 to <9 (n=36)	p25	0.00	0.00	191.80	200.72
2 to <9 (n=36)	Median	2.61	1.47	218.08	228.40
2 to <9 (n=36)	p75	11.59	9.12	290.15	290.15
2 to <9 (n=36)	p95	29.39	27.91	680.29	680.29
2 to <9 (n=36)	p99	70.00	40.28	765.84	768.32
2 to <9 (n=36)	Max	70.00	40.28	765.84	768.32
9 to <16 (n=12)	Mean	36.41	7.13	287.30	294.43
9 to <16 (n=12)	SD	70.56	13.00	106.31	107.87
9 to <16 (n=12)	Min	0.00	0.00	138.75	138.75
9 to <16 (n=12)	p25	3.39	0.00	210.38	212.37
9 to <16 (n=12)	Median	7.51	0.59	276.31	296.81
9 to <16 (n=12)	p75	40.13	7.36	351.09	353.82
9 to <16 (n=12)	p95	251.87	40.33	494.87	494.87
9 to <16 (n=12)	p99	251.87	40.33	494.87	494.87
9 to <16 (n=12)	Max	251.87	40.33	494.87	494.87
p-value*	Not applicable	0.081	0.281	0.398	0.368

*p-value from Kruskal-Wallis Test

Table F-32. Both Hands Hourly Contact Duration (Min/Hour) While Playing on Turf by Age Groups

Age Group	Distribution	Grass	Dietary	Non-Dietary	All objects
<2 (n=8)	Mean	0.90	0.71	29.58	36.38
<2 (n=8)	SD	1.59	1.72	14.02	15.59
<2 (n=8)	Min	0.01	0.00	15.63	26.78
<2 (n=8)	p25	0.10	0.00	22.66	28.18
<2 (n=8)	Median	0.49	0.01	26.90	29.61
<2 (n=8)	p75	0.61	0.39	29.87	38.14

Age Group	Distribution	Grass	Dietary	Non-Dietary	All objects
<2 (n=8)	p95	4.79	4.91	62.19	72.41
<2 (n=8)	p99	4.79	4.91	62.19	72.41
<2 (n=8)	Max	4.79	4.91	62.19	72.41
2 to <9 (n=36)	Mean	0.63	2.19	32.79	37.84
2 to <9 (n=36)	SD	1.21	3.17	11.64	11.10
2 to <9 (n=36)	Min	0.00	0.00	18.85	22.36
2 to <9 (n=36)	p25	0.03	0.00	25.07	33.26
2 to <9 (n=36)	Median	0.20	0.16	30.97	35.40
2 to <9 (n=36)	p75	0.49	3.51	34.87	36.99
2 to <9 (n=36)	p95	4.63	8.16	62.51	67.25
2 to <9 (n=36)	p99	4.63	11.71	65.28	68.70
2 to <9 (n=36)	Max	4.63	11.71	65.28	68.70
9 to <16 (n=12)	Mean	1.87	1.39	34.82	41.35
9 to <16 (n=12)	SD	3.44	3.46	22.90	22.49
9 to <16 (n=12)	Min	0.00	0.00	14.72	22.89
9 to <16 (n=12)	p25	0.06	0.00	20.87	30.87
9 to <16 (n=12)	Median	0.51	0.01	30.87	34.02
9 to <16 (n=12)	p75	2.00	1.04	35.41	37.19
9 to <16 (n=12)	p95	11.96	12.14	96.03	105.10
9 to <16 (n=12)	p99	11.96	12.14	96.03	105.10
9 to <16 (n=12)	Max	11.96	12.14	96.03	105.10
p-value*	Not applicable	0.295	0.201	0.474	0.218

*p-value from Kruskal-Wallis Test

Table F-33. Both Hands Median Contact Duration (Second) While Playing on Turf by Age Groups

Age Group	Distribution	Grass	Dietary	Non-Dietary	All objects
<2	n	8	3	8	8
<2	Mean	2.50	4.00	3.63	3.63

Age Group	Distribution	Grass	Dietary	Non-Dietary	All objects
<2	SD	0.76	4.77	0.52	0.52
<2	Min	2.00	1.00	3.00	3.00
<2	p25	2.00	1.00	3.00	3.00
<2	Median	2.00	1.50	4.00	4.00
<2	p75	3.00	9.50	4.00	4.00
<2	p95	4.00	9.50	4.00	4.00
<2	p99	4.00	9.50	4.00	4.00
<2	Max	4.00	9.50	4.00	4.00
2 to <9	n	24	22	36	36
2 to <9	Mean	2.54	9.09	3.38	3.43
2 to <9	SD	1.62	5.35	0.83	0.87
2 to <9	Min	0.50	1.00	2.00	2.00
2 to <9	p25	1.75	6.00	3.00	3.00
2 to <9	Median	2.00	7.75	3.25	3.75
2 to <9	p75	3.00	12.00	4.00	4.00
2 to <9	p95	5.00	18.00	5.00	5.00
2 to <9	p99	8.00	23.00	5.00	5.00
2 to <9	Max	8.00	23.00	5.00	5.00
9 to <16	n	11	7	12	12
9 to <16	Mean	3.27	3.86	2.75	2.75
9 to <16	SD	3.29	1.93	1.22	1.22
9 to <16	Min	1.00	1.00	1.00	1.00
9 to <16	p25	2.00	2.50	2.00	2.00
9 to <16	Median	2.00	4.00	2.50	2.50
9 to <16	p75	3.00	6.00	3.00	3.00
9 to <16	p95	13.00	6.50	5.00	5.00
9 to <16	p99	13.00	6.50	5.00	5.00
9 to <16	Max	13.00	6.50	5.00	5.00

Age Group	Distribution	Grass	Dietary	Non-Dietary	All objects
p-value*	Not applicable	0.744	0.134	0.054	0.054

*p-value from Kruskal-Wallis Test

Table F-34. Spearman Rank Correlation for Age (Years) and Hand Contact Events

Activity Variables	Contact	r	p-value
Hand contact frequency (event/hour)	Grass (n=56)	0.1371	0.314
Hand contact frequency (event/hour)	Non-Dietary (n=56)	0.0839	0.538
Hand contact frequency (event/hour)	Dietary (n=56)	-0.003	0.983
Hand contact frequency (event/hour)	All objects (n=56)	0.087	0.523
Hourly hand contact duration (min/hour)	Grass (n=56)	0.113	0.406
Hourly hand contact duration (min/hour)	Non-Dietary (n=56)	0.098	0.471
Hourly hand contact duration (min/hour)	Dietary (n=56)	-0.083	0.542
Hourly hand contact duration (min/hour)	All objects (n=56)	0.139	0.306
Hand contact median duration (second)	Grass (n=42)	0.137	0.314
Hand contact median duration (second)	Non-Dietary (n=56)	0.084	0.538
Hand contact median duration (second)	Dietary (n=28)	-0.003	0.983
Hand contact median duration (second)	All objects (n=56)	0.087	0.523

The hand contact frequency, hourly duration and median duration summary of the EPA recommended age categories (U.S. EPA, 2005) are presented in Supplemental Material Section S2.1. There were no significant differences in contact frequency, hourly contact duration, or median contact duration across the EPA recommended age groups (Kruskal-Wallis Test). Also, in Supplemental Material Section S2.1, the contact frequency, hourly duration and median duration for both hands contact activities while playing on turf are presented in Table S2-5 to Table S2-8 for children aged 1-6 years and 7-12. There were no significant difference between these two age groups and contact activities (Table S2-9).

Hand Contact Activity by Gender While Playing on Turf

As presented in Table F-35 to Table F-37 by gender (i.e., male, female), there were no significant differences in contact frequency, hourly contact duration, or median contact duration by gender while playing on turf.

Table F-35. Both Hands Contact Frequency (Event/Hour) While Playing on Turf by Gender

Gender	Distribution	Grass	Dietary	Non-Dietary	All Objects
Male (n=27)	Mean	12.54	5.11	267.70	272.80
Male (n=27)	SD	15.15	9.45	137.05	137.48
Male (n=27)	Min	0.00	0.00	107.69	109.66
Male (n=27)	Median	1.08	0.00	189.18	190.04
Male (n=27)	p25	7.34	0.86	227.39	228.25
Male (n=27)	p75	17.43	4.36	300.83	320.07
Male (n=27)	p95	45.03	26.61	528.37	532.73
Male (n=27)	p99	59.17	40.33	765.84	768.32
Male (n=27)	Max	59.17	40.33	765.84	768.32
Female (n=29)	Mean	16.38	6.98	285.27	292.25
Female (n=29)	SD	47.47	11.14	118.16	114.49
Female (n=29)	Min	0.00	0.00	163.11	173.66
Female (n=29)	Median	0.34	0.00	211.05	222.22
Female (n=29)	p25	3.78	0.00	253.24	253.24
Female (n=29)	p75	9.70	8.86	325.19	349.05
Female (n=29)	p95	70.00	27.91	494.87	494.87
Female (n=29)	p99	251.87	40.28	680.29	680.29
Female (n=29)	Max	251.87	40.28	680.29	680.29
p-value*	Not applicable	0.242	0.621	0.321	0.216

*p-value from Wilcoxon sum rank

Table F-36. Both Hands Hourly Contact Duration (Min/Hour) While Playing on Turf by Gender

Gender	Distribution	Grass	Dietary	Non-Dietary	All Objects
Male (n=27)	Mean	0.94	1.86	33.78	39.52
Male (n=27)	SD	1.40	3.52	17.40	18.16
Male (n=27)	Min	0.00	0.00	14.72	22.36
Male (n=27)	Median	0.09	0.00	23.44	30.02

Gender	Distribution	Grass	Dietary	Non-Dietary	All Objects
Male (n=27)	p25	0.40	0.13	29.74	34.01
Male (n=27)	p75	0.96	2.36	34.97	37.26
Male (n=27)	p95	4.63	11.71	62.19	72.41
Male (n=27)	p99	4.79	12.14	96.03	105.10
Male (n=27)	Max	4.79	12.14	96.03	105.10
Female (n=29)	Mean	0.92	1.76	31.82	37.32
Female (n=29)	SD	2.41	2.66	12.10	10.48
Female (n=29)	Min	0.00	0.00	16.75	23.24
Female (n=29)	Median	0.01	0.00	23.47	31.58
Female (n=29)	p25	0.11	0.11	29.83	35.19
Female (n=29)	p75	0.38	2.80	34.18	36.95
Female (n=29)	p95	4.63	8.08	62.51	65.20
Female (n=29)	p99	11.96	8.16	65.28	67.25
Female (n=29)	Max	11.96	8.16	65.28	67.25
p-value*	Not applicable	0.059	0.679	0.974	0.486

*p-value from Wilcoxon sum rank

Table F-37. Both Hands Contact Median Duration (Second) While Playing on Turf by Gender

Gender	Distribution	Grass	Dietary	Non-Dietary	All Objects
Male	n	22	27	27	27
Male	Mean	2.70	16.67	62.50	79.17
Male	SD	1.67	45.85	30.09	52.22
Male	Min	0.50	0.00	22.75	34.00
Male	Median	2.00	0.00	39.00	50.50
Male	p25	2.00	1.50	57.00	59.00
Male	p75	3.00	19.00	80.00	87.00
Male	p95	5.00	31.50	114.50	173.00
Male	p99	8.00	241.00	159.00	282.50

Gender	Distribution	Grass	Dietary	Non-Dietary	All Objects
Male	Max	8.00	241.00	159.00	282.50
Female	n	21	29	29	29
Female	Mean	2.54	9.69	77.80	87.49
Female	SD	2.12	33.31	54.47	65.71
Female	Min	0.50	0.00	22.50	22.50
Female	Median	1.50	0.00	52.25	52.25
Female	p25	2.00	0.00	61.00	74.50
Female	p75	2.50	16.00	85.25	90.00
Female	p95	4.00	42.50	135.50	191.50
Female	p99	13.00	56.00	415.50	445.00
Female	Max	13.00	56.00	415.50	445.00
p-value	Not applicable	0.324	0.567	0.358	0.566

*p-value from Wilcoxon sum rank

F.2.3.1.3. Mouthing Activity While Playing on Turf

The mouthing contact frequency for children playing on turf is summarized in Table F-38. Only 7% of the children (4/56) contacted grass with their mouth. Thus, the median mouth contact frequency for grass was 0.00 events/hour, and the maximum was 2.49 events/hour. The median mouthing frequencies were 7.56 events/hour and 10.87 events/hour for hands and non-dietary objects, respectively. These contacts could indicate additional exposure to crumb rubber if there have been transfers to the child's hands (Section F.2.3.1.2) or the objects that they are placing in their mouths.

Table F-38. Mouth Contact Frequency (Event/Hour) While Playing on the Turf (n=56)

Distribution	Grass	Hand	Dietary	Non-Dietary	All Objects
Mean	0.11	11.65	14.83	22.00	36.83
SD	0.44	14.16	28.40	29.87	44.66
Min	0.00	0.00	0.00	0.00	0.00
p25	0.00	3.38	0.00	6.61	7.28
Median	0.00	7.56	0.84	10.87	20.39
p75	0.00	15.74	19.82	26.36	56.17
p95	1.17	41.04	74.00	76.19	160.77

Distribution	Grass	Hand	Dietary	Non-Dietary	All Objects
p99	2.49	80.11	159.12	185.14	205.09
Max	2.49	80.11	159.12	185.14	205.09

The mouthing hourly contact duration for children playing on turf is summarized in Table F-39. The median mouthing hourly contact duration for grass was 0.00 min/hour, and the maximum was 0.10 min/hour. The median mouthing hourly durations were 0.21 min/hour and 0.30 min/hour for hands and non-dietary objects, respectively. These contacts could indicate additional exposure to crumb rubber if there have been transfers to the child's hands (Section F.2.3.1.2) or the objects that they are placing in their mouths.

Table F-39. Mouthing Hourly Contact Duration (Min/Hour) While Playing on the Turf (n=56)

Distribution	Grass	Hand	Dietary	Non-Dietary	All Objects
Mean	0.00	0.46	1.80	1.39	3.19
SD	0.01	0.76	5.30	4.65	7.35
Min	0.00	0.00	0.00	0.00	0.00
p25	0.00	0.10	0.00	0.14	0.24
Median	0.00	0.21	0.04	0.30	0.66
p75	0.00	0.42	1.17	1.31	3.06
p95	0.02	2.25	9.47	3.92	12.53
p99	0.10	3.54	36.52	34.71	39.65
Max	0.10	3.54	36.52	34.71	39.65

The mouthing median contact duration for children playing on turf is summarized in Table F-40. Median duration is only calculated from those children that contacted the object. The median mouthing contact duration for grass was 1.00 second, and the maximum was 2.5 seconds. The median mouthing contact durations were 1.00 second and 1.00 second for hands and non-dietary objects, respectively. These contacts could indicate additional exposure to crumb rubber if there have been transfers to the child's hands (Section F.2.3.1.2) or the objects that they are placing in their mouths.

Table F-40. Mouthing Median Contact Duration While Playing on Turf (Second)

Distribution	Grass	Hand	Dietary	Non-Dietary	All Objects
n*	4	49	30	52	53
Mean	1.38	1.86	7.40	1.88	2.89

Distribution	Grass	Hand	Dietary	Non-Dietary	All Objects
SD	0.75	1.90	22.05	1.87	8.09
Min	1.00	0.50	1.00	0.00	0.00
p25	1.00	1.00	2.00	1.00	1.00
Median	1.00	1.00	2.00	1.00	1.00
p75	1.75	2.00	4.00	2.00	2.00
p95	2.50	5.00	14.00	5.00	5.50
p99	2.50	12.00	123.00	12.00	60.00
Max	2.50	12.00	123.00	12.00	60.00

*Only participants who contacted object included in calculation of median contact duration

Mouthing Contact Activity by Age While Playing on Turf

Frequency, hourly duration and median duration for mouthing contact activities while playing on turf are presented in Table F-41 to Table F-43 for three age categories (<2, 2 to <9, 9 to <16 years). There were no differences in mouthing contact frequency, hourly duration or median duration across these three age groups. Age (by year, 1-12 years) was negatively correlated ($p < 0.05$) with the hourly contact duration of mouthing activities for non-dietary objects and all objects (Table F-44). Age was also negatively correlated ($p < 0.05$) with the median contact duration of mouthing activities for hands and non-dietary objects (Table F-44).

Table F-41. Mouthing Contact Frequency (Event/Hour) While Playing on Turf by Age Groups

Age Group	Distribution	Grass	Hands	Dietary	Non-Dietary	All Objects
<2 (n=8)	Mean	0.34	12.74	2.79	25.69	28.48
<2 (n=8)	SD	0.65	11.69	4.39	22.61	23.62
<2 (n=8)	Min	0.00	0.66	0.00	1.48	2.96
<2 (n=8)	Median	0.00	3.70	0.00	9.44	9.44
<2 (n=8)	p25	0.00	11.99	0.74	16.30	19.68
<2 (n=8)	p75	0.51	16.56	4.41	44.37	51.41
<2 (n=8)	p95	1.69	36.78	12.05	63.82	63.82

Age Group	Distribution	Grass	Hands	Dietary	Non-Dietary	All Objects
<2 (n=8)	p99	1.69	36.78	12.05	63.82	63.82
<2 (n=8)	Max	1.69	36.78	12.05	63.82	63.82
2 to <9 (n=36)	Mean	0.10	8.95	19.03	20.81	39.84
2 to <9 (n=36)	SD	0.45	8.98	32.70	32.37	47.91
2 to <9 (n=36)	Min	0.00	0.00	0.00	0.00	0.00
2 to <9 (n=36)	Median	0.00	2.91	0.00	6.85	7.70
2 to <9 (n=36)	p25	0.00	7.12	1.21	9.85	23.53
2 to <9 (n=36)	p75	0.00	11.03	31.66	24.80	60.66
2 to <9 (n=36)	p95	1.17	33.69	80.19	76.19	189.59
2 to <9 (n=36)	p99	2.49	41.04	159.12	185.14	205.09
2 to <9 (n=36)	Max	2.49	41.04	159.12	185.14	205.09
9 to <16 (n=12)	Mean	ND	19.06	10.26	23.09	33.36
9 to <16 (n=12)	SD	ND	23.96	20.79	28.00	47.11
9 to <16 (n=12)	Min	ND	0.00	0.00	0.00	0.00
9 to <16 (n=12)	Median	ND	3.76	0.00	4.94	6.50
9 to <16 (n=12)	p25	ND	8.07	0.75	10.43	11.29
9 to <16 (n=12)	p75	ND	27.12	9.02	38.14	42.53
9 to <16 (n=12)	p95	ND	80.11	72.43	88.34	160.77
9 to <16 (n=12)	p99	ND	80.11	72.43	88.34	160.77
9 to <6 (n=12)	Max	ND	80.11	72.43	88.34	160.77
p-value*	Not applicable	0.091	0.444	0.643	0.690	0.726

*p-value from Kruskal-Wallis Test
ND: not determined

Table F-42. Mouthing Hourly Contact Duration (Min/Hour) While Playing on Turf by Age Groups

Age Group	Distribution	Grass	Hands	Dietary	Non-Dietary	All Objects
<2 (n=8)	Mean	0.01	1.13	0.65	1.54	2.18
<2 (n=8)	SD	0.01	1.50	1.39	1.52	1.84

Age Group	Distribution	Grass	Hands	Dietary	Non-Dietary	All Objects
<2 (n=8)	Min	0.00	0.03	0.00	0.16	0.16
<2 (n=8)	Median	0.00	0.24	0.00	0.30	0.31
<2 (n=8)	p25	0.00	0.33	0.01	0.96	2.09
<2 (n=8)	p75	0.01	2.17	0.58	2.84	3.98
<2 (n=8)	p95	0.03	3.54	4.02	3.95	4.57
<2 (n=8)	p99	0.03	3.54	4.02	3.95	4.57
<2 (n=8)	Max	0.03	3.54	4.02	3.95	4.57
2 to <9 (n=36)	Mean	0.00	0.27	2.45	1.61	4.05
2 to <9 (n=36)	SD	0.02	0.38	6.47	5.74	8.97
2 to <9 (n=36)	Min	0.00	0.00	0.00	0.00	0.00
2 to <9 (n=36)	Median	0.00	0.08	0.00	0.13	0.18
2 to <9 (n=36)	p25	0.00	0.16	0.07	0.28	0.78
2 to <9 (n=36)	p75	0.00	0.29	1.58	0.93	3.12
2 to <9 (n=36)	p95	0.02	1.59	10.53	3.92	36.66
2 to <9 (n=36)	p99	0.10	1.75	36.52	34.71	39.65
2 to <9 (n=36)	Max	0.10	1.75	36.52	34.71	39.65
9 to <16 (n=12)	Mean	ND	0.56	0.63	0.66	1.28
9 to <16 (n=12)	SD	ND	0.73	1.42	0.89	2.09
9 to <16 (n=12)	Min	ND	0.00	0.00	0.00	0.00
9 to <16 (n=12)	Median	ND	0.10	0.00	0.12	0.20
9 to <16 (n=12)	p25	ND	0.25	0.09	0.26	0.41
9 to <16 (n=12)	p75	ND	0.79	0.54	0.92	1.18
9 to <16 (n=12)	p95	ND	2.25	4.99	2.71	7.06
9 to <16 (n=12)	p99	ND	2.25	4.99	2.71	7.06
9 to <16 (n=12)	Max	ND	2.25	4.99	2.71	7.06
p-value*	Not applicable	0.094	0.075	0.797	0.145	0.415

*p-value from Kruskal-Wallis Test
ND: not determined

Table F-43. Mouthing Contact Median Duration (Second) While Playing on Turf by Age Groups

Age Group	Distribution	Grass	Hands	Dietary	Non-Dietary	All Objects
<2	n	2	8	4	8	8
<2	Mean	1.00	3.69	6.88	3.44	2.63
<2	SD	0.00	3.83	5.81	3.90	2.15
<2	Min	1.00	1.00	1.00	1.00	1.00
<2	Median	1.00	1.00	2.25	1.00	1.00
<2	p25	1.00	2.50	6.25	2.00	2.00
<2	p75	1.00	4.75	11.50	4.25	3.75
<2	p95	1.00	12.00	14.00	12.00	6.50
<2	p99	1.00	12.00	14.00	12.00	6.50
<2	Max	1.00	12.00	14.00	12.00	6.50
2 to <9	n	2	30	19	33	34
2 to <9	Mean	1.75	1.58	9.11	1.71	3.46
2 to <9	SD	1.06	1.11	27.65	1.19	10.05
2 to <9	Min	1.00	0.50	1.00	0.00	0.00
2 to <9	Median	1.00	1.00	1.00	1.00	1.00
2 to <9	p25	1.75	1.00	2.00	1.00	1.50
2 to <9	p75	2.50	2.00	4.00	2.00	2.00
2 to <9	p95	2.50	5.00	123.00	5.00	5.00
2 to <9	p99	2.50	5.00	123.00	5.00	60.00
2 to <9	Max	2.50	5.00	123.00	5.00	60.00
9 to <16	n	0	11	7	11	11
9 to <16	Mean	ND	1.27	3.07	1.23	1.32
9 to <16	SD	ND	0.47	2.65	0.41	0.46
9 to <16	Min	ND	1.00	1.50	1.00	1.00
9 to <16	Median	ND	1.00	2.00	1.00	1.00
9 to <16	p25	ND	1.00	2.00	1.00	1.00

Age Group	Distribution	Grass	Hands	Dietary	Non-Dietary	All Objects
9 to <16	p75	ND	2.00	3.00	1.50	2.00
9 to <16	p95	ND	2.00	9.00	2.00	2.00
9 to <16	p99	ND	2.00	9.00	2.00	2.00
9 to <16	Max	ND	2.00	9.00	2.00	2.00
p-value*	Not applicable	0.317	0.097	0.461	0.187	0.306

*p-value from Kruskal-Wallis Test
ND: not determined

Table F-44. Spearman Rank Correlation (r) for Age (1 - 12 Years) and Mouthing Events

Activity Variables	Contact	r	p-value
Mouth contact frequency (event/hour)	Grass (n=56)	-0.221	0.101
Mouth contact frequency (event/hour)	Hands (n=56)	-0.033	0.811
Mouth contact frequency (event/hour)	Non-Dietary (n=56)	-0.124	0.364
Mouth contact frequency (event/hour)	Dietary (n=56)	-0.058	0.672
Mouth contact frequency (event/hour)	All Objects (n=56)	-0.160	0.241
Mouth contact duration (min/hour)	Grass (n=56)	-0.221	0.102
Mouth contact duration (min/hour)	Hands (n=56)	-0.194	0.151
Mouth contact duration (min/hour)	Non-Dietary (n=56)*	-0.308	0.021
Mouth contact duration (min/hour)	Dietary (n=56)	-0.067	0.625
Mouth contact duration (min/hour)	All Objects (n=56)*	-0.266	0.048
Mouth median duration (second)	Grass (n=4)	0.272	0.728
Mouth median duration (second)	Hands (n=49)*	-0.357	0.012
Mouth median duration (second)	Non-Dietary (n=52)*	-0.353	0.010
Mouth median duration (second)	Dietary (n=30)	-0.072	0.707
Mouth median duration (second)	All Objects (n=53)	-0.254	0.067

* Significant ($p < 0.05$) correlation with age (Spearman's rank correlation)

As presented in Table S2-10 to Table S2-12 in Supplemental Material Section S2.1,

there were significant differences across the EPA recommended age groups (U.S. EPA, 2005) in mouthing hourly contact duration with hands and non-dietary objects (Table S2-11; Figure S2-1 and Figure S2-2). There were no significant differences in mouthing contact frequency and contact median duration. Also, for children aged 1-6 years and 7-12 years, the frequency, hourly duration and median duration for mouthing contact activities while playing on turf are presented in Table S2-13 to Table S2-15. There were significant differences between younger and older children in mouthing median duration with non-dietary objects and all objects (Table S2-15; Figure S2-3).

Mouthing Contact Activity by Gender While Playing on Turf

Frequency, hourly duration and median duration for mouthing contact activities while playing on turf are presented in Table F-45 to Table F-47 by gender (i.e., male, female). There were no significant differences in contact frequency, hourly contact duration, or median contact duration by gender.

Table F-45. Mouthing Contact Frequency (Event/Hour) While Playing on Turf by Gender

Gender	Distribution	Grass	Hands	Dietary	Non-Dietary	All Objects
Male (n=27)	Mean	0.10	12.76	14.30	19.97	34.28
Male (n=27)	SD	0.37	16.79	22.93	22.12	37.66
Male (n=27)	Min	0.00	0.00	0.00	0.00	0.00
Male (n=27)	p25	0.00	3.25	0.00	4.01	6.35
Male (n=27)	Median	0.00	8.14	1.48	13.31	22.77
Male (n=27)	p75	0.00	16.61	30.91	26.47	59.22
Male (n=27)	p95	1.02	41.04	72.43	63.82	106.17
Male (n=27)	p99	1.69	80.11	74.00	88.34	160.77
Male (n=27)	Max	1.69	80.11	74.00	88.34	160.77
Female (n=29)	Mean	0.13	10.63	15.33	23.88	39.20
Female (n=29)	SD	0.50	11.38	33.10	35.92	50.87
Female (n=29)	Min	0.00	0.00	0.00	0.00	0.00
Female (n=29)	p25	0.00	4.51	0.00	7.14	7.42
Female (n=29)	Median	0.00	7.14	0.00	10.85	18.28
Female (n=29)	p75	0.00	12.63	19.69	26.24	53.12
Female (n=29)	p95	1.17	36.78	80.19	76.19	189.59
Female (n=29)	p99	2.49	47.70	159.12	185.14	205.09

Gender	Distribution	Grass	Hands	Dietary	Non-Dietary	All Objects
Female (n=29)	Max	2.49	47.70	159.12	185.14	205.09
p-value*	Not applicable	0.971	0.825	0.412	0.737	0.941

*p-value from Wilcoxon sum rank

Table F-46. Mouthing Contact Duration (Min/Hour) While Playing on Turf by Gender

Gender	Distribution	Grass	Hands	Dietary	Non-Dietary	All Objects
Male (n=27)	Mean	0.00	0.47	1.00	0.70	1.70
Male (n=27)	SD	0.01	0.75	2.02	0.87	2.44
Male (n=27)	Min	0.00	0.00	0.00	0.00	0.00
Male (n=27)	p25	0.00	0.10	0.00	0.14	0.27
Male (n=27)	Median	0.00	0.20	0.08	0.30	0.81
Male (n=27)	p75	0.00	0.51	1.26	0.99	2.04
Male (n=27)	p95	0.02	1.75	4.99	2.14	7.06
Male (n=27)	p99	0.03	3.53	8.94	3.53	10.91
Male (n=27)	Max	0.03	3.53	8.94	3.53	10.91
Female (n=29)	Mean	0.00	0.45	2.55	2.03	4.59
Female (n=29)	SD	0.02	0.78	7.08	6.39	9.82
Female (n=29)	Min	0.00	0.00	0.00	0.00	0.00
Female (n=29)	p25	0.00	0.10	0.00	0.12	0.16
Female (n=29)	Median	0.00	0.22	0.00	0.29	0.50
Female (n=29)	p75	0.00	0.30	1.06	1.67	3.88
Female (n=29)	p95	0.02	2.25	10.53	3.95	36.66
Female (n=29)	p99	0.10	3.54	36.52	34.71	39.65
Female (n=29)	Max	0.10	3.54	36.52	34.71	39.65
p-value*	Not applicable	0.956	0.594	0.598	0.902	0.961

*p-value from Wilcoxon sum rank

Table F-47. Mouthing Median Duration (Second) by Gender

Gender	Distribution	Grass	Hands	Dietary	Non-Dietary	All Objects
Male	n[a]	2	25	17	25	26

Gender	Distribution	Grass	Hands	Dietary	Non-Dietary	All Objects
Male	Mean	1.00	2.18	3.12	2.24	1.98
Male	SD	0.00	2.52	2.69	2.50	1.56
Male	Min	1.00	1.00	1.00	1.00	1.00
Male	p25	1.00	1.00	1.00	1.00	1.00
Male	Median	1.00	1.00	2.00	1.00	1.00
Male	p75	1.00	2.00	4.00	2.00	2.00
Male	p95	1.00	6.50	9.00	6.50	5.50
Male	p99	1.00	12.00	9.00	12.00	6.50
Male	Max	1.00	12.00	9.00	12.00	6.50
Female	n[a]	2	24	13	27	27
Female	Mean	1.75	1.52	13.00	1.54	3.76
Female	SD	1.06	0.81	33.24	0.91	11.27
Female	Min	1.00	0.50	1.00	0.00	0.00
Female	p25	1.00	1.00	2.00	1.00	1.00
Female	Median	1.75	1.00	3.00	1.00	2.00
Female	p75	2.50	2.00	3.50	2.00	2.00
Female	p95	2.50	3.00	123.00	3.00	4.00
Female	p99	2.50	3.50	123.00	4.00	60.00
Female	Max	2.50	3.50	123.00	4.00	60.00
p-value[b]	Not applicable	0.317	0.718	0.241	0.512	0.962

[a]Only participants who contacted object included in calculation of median contact duration.
[b]p-value from Wilcoxon sum rank

F.2.3.2. Children Playing on Playgrounds:

F.2.3.2.1. Children's Description and Footage Length

From the analyzed total footage, we found that out of the total footage (2,548 min), children spent about 21% of the time playing on a playground. The median time per child spent playing on a playground was 21 min (See Table F-48 for details). 24 children (11 males and 13 females) played on playground structures at some point during the video recording and there was only one child in the oldest age group (9 to <16 years old) that played on playgrounds. See Table F-49 for details.

Table F-48. Time Spent on Playground (n=24)

Time Spent	Time in View	Time Not in View
Total playground time (minutes)	531.0	38.2
Median playground time per child (min)	21.0	0.3
Percentage of time spent on playground (%)	20.8	1.5

Table F-49. Number of Children Playing on Turf Grouped by Age Group and Gender

Gender	0<2 Years	2<9 Years	9<16 Years	Total
Male	3	8	0	11
Female	2	10	1	13
Total	5	18	1	24

F.2.3.2.2. Hands Object Activity While Playing on Playground Structures

The right- and left-hand frequencies are presented in Table F-50 to Table F-52. Since there were no significant differences in the contact frequency with object/surfaces between right hand and left hand, both hands were combined and summarized (Table F-52). This means that contact frequency for the left and right hands were summed, however, it does not mean that both hands were in contact with the object at the same time. The median contact frequency with floors for *both hands* combined was 12.12 events/hour.

Table F-50. Right Hand Frequency (Event/Hour) While Playing on the Playground (n=24)

Distribution	Floors	Dietary	Non-Dietary	All Objects
Mean	15.69	0.56	148.11	148.68
SD	32.22	1.66	86.26	86.11
Min	0.00	0.00	15.88	15.88
p25	0.00	0.00	97.53	99.39
Median	4.81	0.00	128.13	128.13
p75	13.49	0.00	193.30	193.30
p95	69.23	3.71	327.27	327.27
p99	146.70	7.02	342.86	342.86
Max	146.70	7.02	342.86	342.86

Table F-51. Left Hand Frequency (Event/Hour) While Playing on Playground (n=24)

Distribution	Floors	Dietary	Non-Dietary	All Objects
Mean	13.95	1.02	144.55	145.57
SD	20.58	2.83	79.16	78.79
Min	0.00	0.00	10.71	10.71
p25	0.00	0.00	95.60	95.60
Median	5.69	0.00	143.56	145.79
p75	15.55	0.00	174.49	175.07
p95	62.43	8.86	291.34	291.34
p99	72.00	10.77	337.96	337.96
Max	72.00	10.77	337.96	337.96

Table F-52. Both Hands Object/Surface Contact Frequency (Event/Hour) on Playground (n=24)

Distribution	Floors	Dietary	Non-Dietary	All Objects
Mean	29.64	1.58	292.67	294.25
SD	48.01	3.87	160.75	160.35
Min	0.00	0.00	30.60	30.60
p25	0.00	0.00	198.42	204.18
Median	12.12	0.00	261.38	262.28
p75	36.31	0.59	377.91	378.50
p95	141.23	10.77	602.49	602.49
p99	196.37	15.88	634.20	634.20
Max	196.37	15.88	634.20	634.20
p-value*	0.592	0.663	0.821	0.820

*p-value from Wilcoxon Signed Rank test comparison of left- and right-hand contact

The hourly contact with the objects for right- and left-hand duration are presented in Table F-53 to Table F-55. Since there were no significant differences in the contact duration with object/surfaces between right hand and left hand, both hands were combined and summarized (Table F-55). This means that contact hourly duration for the left and right hands were summed, however it does not mean that both hands were in contact with the object at the same time. If both hands were in contact with object for

the entire time, the maximum value would be 120 min/hour. The median hourly object contact duration with floors was 0.58 min/hour for both hands, however, the 99th percentile was about ten times higher (10 min/hour).

Table F-53. Hourly Object/Surface Contact Duration (Min/Hour) cor Right Hand While Playing on Playground (n=24)

Distribution	Floors	Dietary	Non-Dietary	All Objects
Mean	1.04	0.25	16.50	16.74
SD	1.83	1.03	3.28	3.26
Min	0.00	0.00	3.64	3.64
p25	0.00	0.00	15.52	15.93
Median	0.23	0.00	17.21	17.52
p75	1.17	0.00	18.62	18.64
p95	6.13	0.75	19.23	19.23
p99	6.26	5.04	19.85	19.85
Max	6.26	5.04	19.85	19.85

Table F-54. Hourly Object/Surface Contact Duration (Min/Hour) for Left Hand While Playing on Playground (n=24)

Distribution	Floors	Dietary	Non-Dietary	All Objects
Mean	0.85	0.19	16.05	16.23
SD	1.21	0.80	3.29	3.33
Min	0.00	0.00	4.38	4.38
p25	0.00	0.00	14.86	15.16
Median	0.19	0.00	16.97	17.15
p75	1.25	0.00	18.09	18.24
p95	3.54	0.43	19.82	19.82
p99	3.81	3.93	20.00	20.00
Max	3.81	3.93	20.00	20.00

Table F-55. Hourly Object/Surface Contact Duration (Min/Hour) for Both Hands While Playing on Playground (n=24)

Distribution	Floors	Dietary	Non-Dietary	All Objects
Mean	1.96	0.43	32.44	32.87
SD	2.98	1.28	4.43	4.63
Min	0.00	0.00	22.98	22.98
p25	0.00	0.00	31.61	31.66
Median	0.58	0.00	32.76	33.66
p75	2.32	0.01	35.42	36.65
p95	9.67	3.93	38.59	38.59
p99	10.07	5.04	39.67	39.67
Max	10.07	5.04	39.67	39.67
p-value	0.753	0.737	0.275	0.216

* p value from Wilcoxon Signed Rank test comparison of left- and right-hand contact

The median durations for right and left contact with objects are presented in Table F-56 to Table F-58. Since there were no significant differences in the contact median duration with object/surfaces between right hand and left hand, both hands were combined and summarized (Table F-58). This means that for each object category the durations of all the discreet contacts with an object for both the right and left hands were grouped and reranked to determine the median value of contact duration across all the “hand” contacts with that object. The median duration for contact of hands with floors is 2.00 seconds as presented in Table F-58. However, only 17 out of the 24 children touched the floors with their hands.

Table F-56. Right Hand Median Contact Duration (Second) While Playing on the Playground

Distribution	Floors	Dietary	Non-Dietary	All Objects
n	15	3	24	24
Mean	4.10	18.67	4.15	4.13
SD	2.35	26.31	2.31	2.31
Min	1.00	2.00	1.00	1.00
p25	2.50	3.50	3.00	3.00
Median	4.00	5.00	4.00	4.00
p75	5.25	27.00	5.00	5.00

Distribution	Floors	Dietary	Non-Dietary	All Objects
p95	7.90	44.60	6.85	6.85
p99	9.58	48.12	11.24	11.24
Max	10.00	49.00	12.50	12.50

Table F-57. Left Hand Median Contact Duration (Second) While Playing on the Playground

Distribution	Floors	Dietary	Non-Dietary	All Objects
n	17	4	24	24
Mean	3.26	4.75	10.33	10.29
SD	2.89	6.18	23.87	23.89
Min	1.00	1.00	2.00	2.00
p25	1.50	1.75	3.00	3.00
Median	3.00	2.00	4.00	3.75
p75	4.00	5.00	5.00	5.00
p95	7.40	12.20	50.05	50.20
p99	11.88	13.64	97.66	97.66
Max	13.00	14.00	109.50	109.50

Table F-58. Both Hands Object/Surface Median Duration (Second)

Distribution	Floors	Dietary	Non-Dietary	All Objects
n	17	6	24	24
Mean	3.32	11.75	3.90	3.94
SD	2.32	18.89	2.24	2.25
Min	1.00	1.00	1.00	1.00
p25	2.00	2.00	3.00	3.00
Median	2.00	2.25	4.00	4.00
p75	4.00	11.13	4.00	4.13
p95	6.90	40.25	6.00	6.00
p99	9.78	47.25	11.01	11.01
Max	10.50	49.00	12.50	12.50

Distribution	Floors	Dietary	Non-Dietary	All Objects
p-value	0.136	0.279	0.942	0.883

*p-value from Wilcoxon Signed Rank test comparison of left- and right-hand contact

Hand Contact Activity by Age While Playing on Playground

Both hands contact frequency, hourly duration and median duration are summarized by age groups (<2, 2 to <9, 9 to <16 years) in Table F-59 to Table F-61. There were no significant differences between contact frequency, hourly contact duration, or median contact duration across all three age groups. Also, there were no correlations between age groups and both hand activities (Table F-62).

Table F-59. Both Hands Contact Frequency (Event/Hour) on Playground by Age Groups

Age Group	Distribution	Floors	Dietary	Non-Dietary	All Objects
<2 (n=5)	Mean	39.97	0.23	426.60	426.84
<2 (n=5)	SD	27.85	0.52	184.50	184.39
<2 (n=5)	Min	0.71	0.00	205.86	205.86
<2 (n=5)	Median	20.26	0.00	336.18	336.18
<2 (n=5)	p25	58.06	0.00	354.28	355.45
<2 (n=5)	p75	58.41	0.00	602.49	602.49
<2 (n=5)	p95	62.43	1.17	634.20	634.20
<2 (n=5)	p99	62.43	1.17	634.20	634.20
<2 (n=5)	Max	62.43	1.17	634.20	634.20
2 to <9 (n=18)	Mean	28.41	2.04	257.28	259.32
2 to <9 (n=18)	SD	53.40	4.39	142.43	142.33
2 to <9 (n=18)	Min	0.00	0.00	30.60	30.60
2 to <9 (n=18)	Median	0.00	0.00	182.39	182.39
2 to <9 (n=18)	p25	9.87	0.00	256.63	259.11
2 to <9 (n=18)	p75	19.48	2.80	288.28	304.16
2 to <9 (n=18)	p95	196.37	15.88	567.27	567.27
2 to <9 (n=18)	p99	196.37	15.88	567.27	567.27
2 to <9 (n=18)	Max	196.37	15.88	567.27	567.27
9 to <16 (n=1)	Mean	ND	ND	259.97	259.97
9 to <16 (n=1)	SD	ND	ND	ND	ND

Age Group	Distribution	Floors	Dietary	Non-Dietary	All Objects
9 to <16 (n=1)	Min	ND	ND	ND	ND
9 to <16 (n=1)	Median	ND	ND	ND	ND
9 to <16 (n=1)	p25	ND	ND	ND	ND
9 to <16 (n=1)	p75	ND	ND	ND	ND
9 to <16 (n=1)	p95	ND	ND	ND	ND
9 to <16 (n=1)	p99	ND	ND	ND	ND
9 to <16 (n=1)	Max	ND	ND	ND	ND
p-value*	NA	0.245	0.719	0.147	0.169

*p-value from Kruskal-Wallis Test
NA: not applicable; and ND: not determined

Table F-60. Both Hands Hourly Contact Duration (Min/Hour) on Playground by Age Groups

Age Group	Distribution	Floors	Dietary	Non-Dietary	All Objects
<2 (n=5)	Mean	3.16	0.00	29.74	29.74
<2 (n=5)	SD	4.05	0.01	3.66	3.67
<2 (n=5)	Min	0.01	0.00	24.90	24.90
<2 (n=5)	Median	0.78	0.00	26.87	26.87
<2 (n=5)	p25	1.65	0.00	31.56	31.56
<2 (n=5)	p75	3.28	0.00	31.86	31.88
<2 (n=5)	p95	10.07	0.02	33.51	33.51
<2 (n=5)	p99	10.07	0.02	33.51	33.51
<2 (n=5)	Max	10.07	0.02	33.51	33.51
2 to <9 (n=18)	Mean	1.73	0.58	33.23	33.80
2 to <9 (n=18)	SD	2.73	1.46	4.53	4.69
2 to <9 (n=18)	Min	0.00	0.00	22.98	22.98
2 to <9 (n=18)	Median	0.00	0.00	31.76	31.89
2 to <9 (n=18)	p25	0.36	0.00	34.04	34.98
2 to <9 (n=18)	p75	1.76	0.09	36.59	36.76
2 to <9 (n=18)	p95	9.67	5.04	39.67	39.67

Age Group	Distribution	Floors	Dietary	Non-Dietary	All Objects
2 to <9 (n=18)	p99	9.67	5.04	39.67	39.67
2 to <9 (n=18)	Max	9.67	5.04	39.67	39.67
9 to <16 (n=1)	Mean	ND	ND	31.83	31.83
9 to <16 (n=1)	SD	ND	ND	ND	ND
9 to <16 (n=1)	Min	ND	ND	ND	ND
9 to <16 (n=1)	Median	ND	ND	ND	ND
9 to <16 (n=1)	p25	ND	ND	ND	ND
9 to <16 (n=1)	p75	ND	ND	ND	ND
9 to <16 (n=1)	p95	ND	ND	ND	ND
9 to <16 (n=1)	p99	ND	ND	ND	ND
9 to <16 (n=1)	Max	ND	ND	ND	ND
p-value*	NA	0.233	0.719	0.151	0.088

*p-value from Kruskal-Wallis Test
NA: not applicable; and ND: not determined

Table F-61. Both Hands Contact Median Duration (Second) on Playground by Age Groups

Age Group	Distribution	Floors	Dietary	Non-Dietary	All Objects
<2	n	5	2	5	5
<2	Mean	2.60	1.00	3.50	3.50
<2	SD	1.95	ND	1.00	1.00
<2	Min	1.00	ND	2.00	2.00
<2	Median	2.00	ND	3.00	3.00
<2	p25	2.00	ND	4.00	4.00
<2	p75	2.00	ND	4.00	4.00
<2	p95	6.00	ND	4.50	4.50
<2	p99	6.00	ND	4.50	4.50
<2	Max	6.00	ND	4.50	4.50
2 to <9	n	12	5	18	18
2 to <9	Mean	3.63	13.90	4.00	4.06

Age Group	Distribution	Floors	Dietary	Non-Dietary	All Objects
2 to <9	SD	2.48	20.28	2.55	2.56
2 to <9	Min	1.00	2.00	1.00	1.00
2 to <9	Median	2.00	2.00	3.00	3.00
2 to <9	p25	3.50	2.50	4.00	4.00
2 to <9	p75	4.00	14.00	4.00	5.00
2 to <9	p95	10.50	49.00	12.50	12.50
2 to <9	p99	10.50	49.00	12.50	12.50
2 to <9	Max	10.50	49.00	12.50	12.50
9 to <16	n	0	0	1	1
9 to <16	Mean	ND	ND	4.00	4.00
9 to <16	SD	ND	ND	ND	ND
9 to <16	Min	ND	ND	ND	ND
9 to <16	Median	ND	ND	ND	ND
9 to <16	p25	ND	ND	ND	ND
9 to <16	p75	ND	ND	ND	ND
9 to <16	p95	ND	ND	ND	ND
9 to <16	p99	ND	ND	ND	ND
9 to <16	Max	ND	ND	ND	ND
p-value*	NA	0.296	0.138	0.933	0.941

*p-value from Kruskal-Wallis Test
NA: not applicable; and ND: not determined

Table F-62. Spearman Rank Correlation (r) for Both Hand Events and Age (Years) While Playing on Playgrounds

Activity Variables	Contact	r	p-value
Both hands contact frequency (event/hour)	Floors (n=24)	-0.343	0.101
Both hands contact frequency (event/hour)	Non-Dietary (n=24)	0.235	0.270
Both hands contact frequency (event/hour)	Dietary (n=24)	0.054	0.801
Both hands contact frequency (event/hour)	All Objects (n=24)	-0.234	0.272
Both hands contact duration (min/hour)	Floors (n=24)	-0.163	0.448

Activity Variables	Contact	r	p-value
Both hands contact duration (min/hour)	Non-Dietary (n=24)	0.360	0.084
Both hands contact duration (min/hour)	Dietary (n=24)	0.061	0.776
Both hands contact duration (min/hour)	All Objects (n=24)	0.391	0.059
Both hands median contact duration (second)	Floors (n=17)	0.274	0.287
Both hands median contact duration (second)	Non-Dietary* (n=24)	-0.072	0.737
Both hands median contact duration (second)	Dietary (n=7)	0.537	0.272
Both hands median contact duration (second)	All Objects* (n=24)	-0.023	0.916

* Significant ($p < 0.05$) correlation with age (Spearman's rank correlation).

As presented in Supplemental Material Section S2.2, contact frequency, hourly contact duration and median contact duration divided by the EPA recommended age categories (U.S. EPA, 2005) for both hands are presented in Table S2-17 to Table S2-19. There were no statistically significant differences between EPA age groups (Kruskal Wallis Test). Contact frequency, hourly duration and median duration for hand contact activities while playing on playgrounds are presented in Supplemental Material Section S2.2 in Table S2-20 to Table S2-22 for children aged 1-6 years and 7-12 years. There are no significant differences between younger and older children in hand contact activities Wilcoxon Rank Test.

Hand Contact Activity by Gender While Playing on Playground

Frequency, hourly duration and median duration for both hands' contact activities while playing on playgrounds are presented in Table F-63 to Table F-65 by gender (i.e., male, female). There were no significant differences in contact frequency, hourly contact duration, or median contact duration by gender.

Table F-63. Both Hands Contact Frequency While Children Play on Playgrounds by Gender

Gender	Distribution	Floors	Dietary	Non-Dietary	All Objects
Male (n=11)	Mean	42.16	0.36	272.99	273.35
Male (n=11)	SD	66.00	0.88	180.55	180.58
Male (n=11)	Min	0.00	0.00	30.60	30.60
Male (n=11)	p25	0.00	0.00	80.59	80.59
Male (n=11)	Median	16.60	0.00	275.85	275.85
Male (n=11)	p75	58.06	0.00	401.54	401.54

Gender	Distribution	Floors	Dietary	Non-Dietary	All Objects
Male (n=11)	p95	196.37	2.80	602.49	602.49
Male (n=11)	p99	196.37	2.80	602.49	602.49
Male (n=11)	Max	196.37	2.80	602.49	602.49
Female (n=13)	Mean	19.04	2.61	309.32	311.93
Female (n=13)	SD	22.85	5.05	147.34	146.19
Female (n=13)	Min	0.00	0.00	171.54	171.54
Female (n=13)	p25	0.00	0.00	205.86	208.83
Female (n=13)	Median	11.01	0.00	259.97	261.77
Female (n=13)	p75	19.48	3.62	288.28	304.16
Female (n=13)	p95	62.43	15.88	634.20	634.20
Female (n=13)	p99	62.43	15.88	634.20	634.20
Female (n=13)	Max	62.43	15.88	634.20	634.20
p-value*	Not applicable	0.224	0.599	0.257	0.251

*p-value from Wilcoxon Sum Rank test comparison of male and female

Table F-64. Both Hands Hourly Contact Duration (Min/Hour) While Children Play on Playgrounds by Gender

Gender	Distribution	Floors	Dietary	Non-Dietary	All Objects
Male (n=11)	Mean	2.51	0.01	32.71	32.72
Male (n=11)	SD	3.31	0.03	4.43	4.43
Male (n=11)	Min	0.00	0.00	22.98	22.98
Male (n=11)	p25	0.00	0.00	31.56	31.56
Male (n=11)	Median	0.78	0.00	32.20	32.20
Male (n=11)	p75	5.60	0.00	36.34	36.34
Male (n=11)	p95	9.67	0.09	39.67	39.67
Male (n=11)	p99	9.67	0.09	39.67	39.67
Male (n=11)	Max	9.67	0.09	39.67	39.67
Female (n=13)	Mean	1.49	0.79	32.22	33.01
Female (n=13)	SD	2.72	1.69	4.59	4.97

Gender	Distribution	Floors	Dietary	Non-Dietary	All Objects
Female (n=13)	Min	0.00	0.00	23.64	23.64
Female (n=13)	Median	0.00	0.00	31.66	31.76
Female (n=13)	p25	0.38	0.00	33.31	34.50
Female (n=13)	p75	1.65	0.12	34.50	36.70
Female (n=13)	p95	10.07	5.04	38.59	38.59
Female (n=13)	p99	10.07	5.04	38.59	38.59
Female (n=13)	Max	10.07	5.04	38.59	38.59
p-value*	Not applicable	0.630	0.224	0.599	0.257

*p-value from Wilcoxon Sum Rank test comparison of male and female

Table F-65. Both Hands Median Contact Duration (Second) While Children Play on Playgrounds by Gender

Gender	Distribution	Floors	Dietary	Non-Dietary	All Objects
Male	n	8	2	11	11
Male	Mean	3.44	1.50	4.59	4.59
Male	SD	3.18	0.71	3.01	3.01
Male	Min	1.00	1.00	1.00	1.00
Male	Median	1.50	1.00	3.00	3.00
Male	p25	2.00	1.50	4.00	4.00
Male	p75	4.50	2.00	6.00	6.00
Male	p95	10.50	2.00	12.50	12.50
Male	p99	10.50	2.00	12.50	12.50
Male	Max	10.50	2.00	12.50	12.50
Female	n	9	4	13	13
Female	Mean	3.22	16.88	3.31	3.38
Female	SD	1.39	22.12	1.13	1.21
Female	Min	2.00	2.00	1.00	1.00
Female	Median	2.00	2.25	3.00	3.00
Female	p25	3.00	8.25	3.50	3.50

Gender	Distribution	Floors	Dietary	Non-Dietary	All Objects
Female	p75	4.00	31.50	4.00	4.00
Female	p95	6.00	49.00	5.00	5.00
Female	p99	6.00	49.00	5.00	5.00
Female	Max	6.00	49.00	5.00	5.00
p-value*	Not applicable	0.753	0.638	0.675	0.573

*p-value from Wilcoxon Sum Rank test comparison of male and female

F.2.3.2.3. Mouthing Activity While Playing on Playground

The mouthing contact frequency for children playing on playground is summarized in Table F-66. Only one child (1/24) contacted “floors” with their mouth, resulting in a contact frequency of 2.30 events/hour. The median mouthing frequencies were 9.80 events/hour and 10.20 events/hour for hands and non-dietary objects, respectively. These contacts could indicate additional exposure to playmat chemicals that have transferred to their child’s hands (Section F.2.3.2.2) or the objects they are placing in their mouths.

Table F-66. Mouth Contact Frequency (Event/Hour) While Playing on the Playground (n=24)

Distribution	Floors	Hands	Dietary	Non-Dietary	All Objects
Mean	2.30	19.60	43.10	28.20	71.30
SD	ND	20.30	112.30	46.80	114.30
Min	ND	1.40	0.00	0.00	0.00
p25	ND	4.30	0.00	2.90	4.00
Median	ND	9.80	0.00	10.20	20.40
p75	ND	25.40	3.20	30.30	66.00
p95	ND	67.50	313.40	82.50	335.00
p99	ND	67.50	378.95	218.18	378.95
Max	ND	67.50	378.95	218.18	378.95

ND: not determined

The mouthing hourly contact duration for children playing on playgrounds is summarized in Table F-67. The hourly contact duration for the one child who contacted “floors” with their mouth was 0.04 min/hour. The median hourly mouthing duration was 0.10 and 0.00 min/hour for hands and non-dietary objects, respectively. These contacts could indicate additional exposure to playmat chemicals that have transferred to their

child's hands (Section F.2.3.2.2) or the objects they are placing in their mouths.

Table F-67. Hourly Mouthing Contact Duration (Min/Hour) While Playing on Playground (n=24)

Distribution	Floors	Hands	Dietary	Non-Dietary	All Objects
Mean	0.04	1.00	1.50	1.70	3.20
SD	ND	1.60	4.10	4.10	5.50
Min	ND	0.00	0.00	0.00	0.00
Median	ND	0.10	0.00	0.00	0.00
p25	ND	0.30	0.00	0.30	0.80
p75	ND	0.70	0.20	1.30	3.80
p95	ND	5.00	11.40	5.00	16.60
p99	ND	5.00	16.50	20.00	20.00
Max	ND	5.00	16.50	20.00	20.00

ND: not determined

The mouthing median contact duration for children playing on playgrounds is summarized in Table F-68. Median duration is only contacted from those children that contacted the object. The median mouthing contact duration for the one child that contacted "floors" with their mouth is 1.00 second. Median mouthing contact duration was 1.00 second and 1.50 seconds for hands and non-dietary objects, respectively.

Table F-68. Mouth Median Contact Duration (Second) While Playing on Playground

Distribution	Floors	Hands	Dietary	Non-Dietary	All Objects
n	1	14	6	13	20
Mean	1.00	2.07	25.58	2.21	7.83
SD	ND	1.87	59.00	1.91	26.11
Min	ND	1.00	0.50	0.00	0.00
p25	ND	1.00	1.00	1.00	1.00
Median	ND	1.00	1.50	1.00	1.00
p75	ND	2.00	2.75	3.00	2.25
p95	ND	6.18	110.25	6.10	12.10
p99	ND	6.44	138.85	6.42	97.22
Max	ND	6.50	146.00	6.50	118.50

ND: not determined

Mouthing Activity While Playing on Playground by Age

Frequency, hourly duration and median duration for mouthing contact activities while playing on playgrounds are presented in Table F-69 to Table F-71 for three age categories (<2, 2 to <9, 9 to <16 years). There were no significant differences in mouthing contact frequency across these age groups. Out of the 24 children, only one child (less than 2 years of age) made a mouthing contact with any type of floor while playing on playground structures. Age (by year, 1-12 years) was negatively correlated ($p < 0.05$) with the contact frequency, hourly contact duration and median contact duration of mouthing activities with total objects (Table F-72). Age was also negatively correlated ($p < 0.05$) with hourly mouthing duration and frequency for hands. Finally, the non-dietary objects were negatively correlated with mouthing duration and median duration.

Table F-69. Mouthing Contact Frequency (Event/Hour) While on Playground (n=24) by Age Groups

Age Group	Distribution	Floors	Hands	Dietary	Non-Dietary	All Objects
<2 (n=5)	Mean	2.30	26.60	6.39	27.23	33.63
<2 (n=5)	SD	ND	18.56	9.31	14.84	18.91
<2 (n=5)	Min	ND	9.22	0.00	4.96	4.96
<2 (n=5)	p25	ND	9.22	0.00	24.43	24.43
<2 (n=5)	Median	ND	24.43	0.00	29.95	41.47
<2 (n=5)	p75	ND	46.15	11.52	30.68	46.15
<2 (n=5)	p95	ND	46.15	20.45	46.15	51.13
<2 (n=5)	p99	ND	46.15	20.45	46.15	51.13
<2 (n=5)	Max	ND	46.15	20.45	46.15	51.13
2 to <9 (n=18)	Mean	ND	17.74	55.69	29.98	85.67
2 to <9 (n=18)	SD	ND	21.18	127.94	53.51	129.04
2 to <9 (n=18)	Min	ND	1.39	0.00	0.00	0.00
2 to <9 (n=18)	p25	ND	3.85	0.00	2.78	2.94
2 to <9 (n=18)	Median	ND	9.12	0.00	9.54	13.42
2 to <9 (n=18)	p75	ND	25.42	0.00	25.42	82.50
2 to <9 (n=18)	p95	ND	67.50	378.95	218.18	378.95
2 to <9 (n=18)	p99	ND	67.50	378.95	218.18	378.95

Age Group	Distribution	Floors	Hands	Dietary	Non-Dietary	All Objects
2 to <9 (n=18)	Max	ND	67.50	378.95	218.18	378.95
9 to <16 (n=0)	Mean	ND	ND	ND	ND	ND
9 to <16 (n=0)	SD	ND	ND	ND	ND	ND
9 to <16 (n=0)	Min	ND	ND	ND	ND	ND
9 to <16 (n=0)	p25	ND	ND	ND	ND	ND
9 to <16 (n=0)	Median	ND	ND	ND	ND	ND
9 to <16 (n=0)	p75	ND	ND	ND	ND	ND
9 to <16 (n=0)	p95	ND	ND	ND	ND	ND
9 to <16 (n=0)	p99	ND	ND	ND	ND	ND
9 to <16 (n=0)	Max	ND	ND	ND	ND	ND
p-value*	NA	0.150	0.312	0.711	0.161	0.341

*p-value from Kruskal-Wallis Test
NA: not applicable; and ND: not determined

Table F-70. Mouthing Contact Duration (Min/Hour) on Playground (n=24) by Age Groups

Age Group	Distribution	Floors	Hands	Dietary	Non-Dietary	All Objects
<2 (n=5)	Mean	0.04	3.09	0.26	2.66	2.92
<2 (n=5)	SD	ND	2.60	0.42	2.05	1.88
<2 (n=5)	Min	ND	0.12	0.00	0.33	0.33
<2 (n=5)	p25	ND	0.12	0.00	0.78	1.74
<2 (n=5)	Median	ND	4.14	0.00	3.07	3.41
<2 (n=5)	p75	ND	5.00	0.34	4.14	4.14
<2 (n=5)	p95	ND	5.00	0.96	5.00	5.00
<2 (n=5)	p99	ND	5.00	0.96	5.00	5.00
<2 (n=5)	Max	ND	5.00	0.96	5.00	5.00
2 to <9 (n=18)	Mean	ND	0.41	1.98	1.53	3.52
2 to <9 (n=18)	SD	ND	0.49	4.62	4.64	6.23
2 to <9 (n=18)	Min	ND	0.02	0.00	0.00	0.00
2 to <9 (n=18)	p25	ND	0.06	0.00	0.00	0.04

Age Group	Distribution	Floors	Hands	Dietary	Non-Dietary	All Objects
2 to <9 (n=18)	Median	ND	0.27	0.00	0.24	0.55
2 to <9 (n=18)	p75	ND	0.51	0.00	1.00	3.16
2 to <9 (n=18)	p95	ND	1.75	16.52	20.00	20.00
2 to <9 (n=18)	p99	ND	1.75	16.52	20.00	20.00
2 to <9 (n=18)	Max	ND	1.75	16.52	20.00	20.00
9 to <16 (n=0)	Mean	ND	ND	ND	ND	ND
9 to <16 (n=0)	SD	ND	ND	ND	ND	ND
9 to <16 (n=0)	Min	ND	ND	ND	ND	ND
9 to <16 (n=0)	p25	ND	ND	ND	ND	ND
9 to <16 (n=0)	Median	ND	ND	ND	ND	ND
9 to <16 (n=0)	p75	ND	ND	ND	ND	ND
9 to <16 (n=0)	p95	ND	ND	ND	ND	ND
9 to <16 (n=0)	p99	ND	ND	ND	ND	ND
9 to <16 (n=0)	Max	ND	ND	ND	ND	ND
p-value*	NA	0.149	0.187	0.782	0.043	0.176

*p-value from Kruskal-Wallis Test
NA: not applicable; and ND: not determined

Table F-71. Mouthing Contact Median Duration (Second) on Playground (n=24) by Age Groups

Age Group	Distribution	Floors	Hands	Dietary	Non-Dietary	All Objects
<2	n	1	3	2		5
<2	Mean	1.00	4.50	2.00	4.13	3.50
<2	SD	ND	3.04	1.41	2.59	2.65
<2	Min	ND	1.00	1.00	1.00	1.00
<2	p25	ND	1.00	1.00	2.00	1.00
<2	Median	ND	6.00	2.00	4.50	3.00
<2	p75	ND	6.50	3.00	6.25	6.00
<2	p95	ND	6.50	3.00	6.50	6.50
<2	p99	ND	6.50	3.00	6.50	6.50

Age Group	Distribution	Floors	Hands	Dietary	Non-Dietary	All Objects
<2	Max	ND	6.50	3.00	6.50	6.50
2 to <9	n	0	11	4	13	15
2 to <9	Mean	ND	1.41	37.38	1.62	9.27
2 to <9	SD	ND	0.66	72.42	1.26	30.24
2 to <9	Min	ND	1.00	0.50	0.00	0.00
2 to <9	p25	ND	1.00	0.75	1.00	1.00
2 to <9	Median	ND	1.00	1.50	1.00	1.00
2 to <9	p75	ND	2.00	74.00	2.00	2.00
2 to <9	p95	ND	3.00	146.00	5.00	118.50
2 to <9	p99	ND	3.00	146.00	5.00	118.50
2 to <9	Max	ND	3.00	146.00	5.00	118.50
9 to <16	n	0	0	0	0	0
9 to <16	Mean	ND	ND	ND	ND	ND
9 to <16	SD	ND	ND	ND	ND	ND
9 to <16	Min	ND	ND	ND	ND	ND
9 to <16	p25	ND	ND	ND	ND	ND
9 to <16	Median	ND	ND	ND	ND	ND
9 to <16	p75	ND	ND	ND	ND	ND
9 to <16	p95	ND	ND	ND	ND	ND
9 to <16	p99	ND	ND	ND	ND	ND
9 to <16	Max	ND	ND	ND	ND	ND
p-value*	NA	ND	0.121	0.814	0.055	0.183

*p-value from Kruskal-Wallis Test
NA: not applicable; and ND: not determined

Table F-72. Spearman Rank Correlation for Age (Years) and Mouthing Events While Playing on Playgrounds

Activity Variables	Contact	r	p-value
Mouth contact frequency (event/hour)	Floors (n=24)	-0.289	0.170
Mouth contact frequency (event/hour)	Hands* (n=24)	-0.631	**0.016***

Activity Variables	Contact	r	p-value
Mouth contact frequency (event/hour)	Non-Dietary (n=24)	0.378	0.705
Mouth contact frequency (event/hour)	Dietary	-0.163	0.448
Mouth contact frequency (event/hour)	All objects* (n=24)	-0.459	**0.024***
Mouth contact duration (min/hour)	Floors (n=24)	-0.289	0.170
Mouth contact duration (min/hour)	Hands* (n=24)	-0.593	**0.025***
Mouth contact duration (min/hour)	Non-Dietary* (n=24)	-0.624	**0.011***
Mouth contact duration (min/hour)	Dietary	-0.095	0.657
Mouth contact duration (min/hour)	All objects* (n=24)	-0.025	**0.025***
Mouth median contact duration (second)	Floors (n=1)	-0.289	0.169
Mouth median contact duration (second)	Hands (n=14)	-0.322	0.261
Mouth median contact duration (second)	Non-Dietary* (n=13)	-0.555	**0.005***
Mouth median contact duration (second)	Dietary (n=6)	-0.122	0.570
Mouth median contact duration (second)	All objects* (n=20)	-0.418	**0.042***

*Significant ($p < 0.05$) correlation with age (Spearman's rank correlation).

In Supplemental Material Section S2.2, the mouthing events are summarized by the EPA recommended age categories (U.S. EPA, 2005) in Table S2-23 to Table S2-25. There were significant differences between the EPA age categories with respect to mouthing frequency for non-dietary objects and all objects. Similarly, a significant difference was observed for the mouthing duration for non-dietary objects.

Also, in Supplemental Material Section S2.2, the frequency, hourly duration and median duration for mouthing contact activities while playing on playgrounds are presented in Table S2-26 to Table S2-28 for children aged 1-6 and 7-12 years. There were significant differences between younger (1-6 years old) and older children (7-12 years old) groups for the mouthing frequency and duration with all objects (Table S2-26 and Table S2-27) and for the mouthing duration with non-dietary objects (Table S2-27).

Mouthing Activity While Playing on Playground by Gender

Frequency, hourly duration and median duration for mouthing contact activities while playing on playgrounds are presented in Table F-73 to Table F-75 by gender (i.e., male, female). There were no significant differences in contact frequency or hourly contact

duration by gender. However, female children had significantly longer contact durations with “All objects”.

Table F-73. Mouthing Frequency (Event/Hour) While Children Play on Playgrounds by Gender

Gender	Distribution	Floors	Hands	Dietary	Non-Dietary	All objects
Male (n=11)	Mean	2.30	27.87	64.96	27.91	92.87
Male (n=11)	SD	ND	24.68	137.82	30.70	128.10
Male (n=11)	Min	ND	2.94	0.00	0.00	0.00
Male (n=11)	p25	ND	9.22	0.00	0.00	2.94
Male (n=11)	Median	ND	20.36	0.00	24.43	51.13
Male (n=11)	p75	ND	46.84	20.45	65.16	82.50
Male (n=11)	p95	ND	67.50	378.95	82.50	378.95
Male (n=11)	p99	ND	67.50	378.95	82.50	378.95
Male (n=11)	Max	ND	67.50	378.95	82.50	378.95
Female (n=13)	Mean	ND	13.46	24.60	28.37	52.97
Female (n=13)	SD	ND	15.13	86.80	58.44	102.80
Female (n=13)	Min	ND	1.39	0.00	0.00	0.00
Female (n=13)	p25	ND	4.08	0.00	3.85	4.96
Female (n=13)	Median	ND	8.09	0.00	10.03	10.27
Female (n=13)	p75	ND	17.90	0.00	21.56	25.42
Female (n=13)	p95	ND	46.15	313.43	218.18	334.99
Female (n=13)	p99	ND	46.15	313.43	218.18	334.99
Female (n=13)	Max	ND	46.15	313.43	218.18	334.99
p-value*	NA	ND	0.197	0.223	0.705	0.212

* p-value from Wilcoxon Sum Rank test comparison of male and female
NA: not applicable; and ND: not determined

Table F-74. Mouthing Duration (Min/Hour) While Children Play on Playgrounds by Gender

Gender	Distribution	Floors	Hands	Dietary	Non-Dietary	All Objects
Male (n=11)	Mean	0.04	1.17	0.83	1.10	1.93
Male (n=11)	SD	ND	1.59	1.58	1.40	1.71

Gender	Distribution	Floors	Hands	Dietary	Non-Dietary	All Objects
Male (n=11)	Min	ND	0.05	0.00	0.00	0.00
Male (n=11)	p25	ND	0.12	0.00	0.00	0.05
Male (n=11)	Median	ND	0.47	0.00	0.78	1.74
Male (n=11)	p75	ND	1.75	0.96	1.87	3.41
Male (n=11)	p95	ND	4.14	4.62	4.14	4.77
Male (n=11)	p99	ND	4.14	4.62	4.14	4.77
Male (n=11)	Max	ND	4.14	4.62	4.14	4.77
Female (n=13)	Mean	ND	0.84	2.15	2.21	4.36
Female (n=13)	SD	ND	1.69	5.35	5.51	7.20
Female (n=13)	Min	ND	0.02	0.00	0.00	0.00
Female (n=13)	p25	ND	0.17	0.00	0.04	0.04
Female (n=13)	Median	ND	0.28	0.00	0.33	0.33
Female (n=13)	p75	ND	0.42	0.00	0.58	5.00
Female (n=13)	p95	ND	5.00	16.52	20.00	20.00
Female (n=13)	p99	ND	5.00	16.52	20.00	20.00
Female (n=13)	Max	ND	5.00	16.52	20.00	20.00
p-value*	NA	ND	0.697	0.402	0.770	0.662

*p-value from Wilcoxon Sum Rank test comparison of male and female
NA: not applicable; and ND: not determined

Table F-75. Mouthing Median Duration (Second) While Children Play on Playgrounds by Gender

Gender	Distribution	Floors	Hands	Dietary	Non-Dietary	All Objects
Male	n	1	6	4	6	9
Male	Mean	1.00	1.83	1.38	1.83	1.50
Male	SD	ND	2.04	1.11	2.04	1.70
Male	Min	ND	1.00	0.50	1.00	0.50
Male	p25	ND	1.00	0.75	1.00	1.00
Male	Median	ND	1.00	1.00	1.00	1.00
Male	p75	ND	1.00	2.00	1.00	1.00

Gender	Distribution	Floors	Hands	Dietary	Non-Dietary	All Objects
Male	p95	ND	6.00	3.00	6.00	6.00
Male	p99	ND	6.00	3.00	6.00	6.00
Male	Max	ND	6.00	3.00	6.00	6.00
Female	n	0	8	2	11	11
Female	Mean	ND	2.25	74.00	2.41	13.00
Female	SD	ND	1.85	101.82	1.91	35.04
Female	Min	ND	1.00	2.00	0.00	0.00
Female	p25	ND	1.00	2.00	1.00	1.00
Female	Median	ND	1.75	74.00	2.00	2.00
Female	p75	ND	2.50	146.00	3.00	5.00
Female	p95	ND	6.50	146.00	6.50	118.50
Female	p99	ND	6.50	146.00	6.50	118.50
Female	Max	ND	6.50	146.00	6.50	118.50
p-value*	NA	ND	0.174	0.156	0.264	**0.041***

*p-value from Wilcoxon Sum Rank test comparison of male and female
NA: not applicable; and ND: not determined

F.2.4. References

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F.3. Quantification of Micro-level Activities from Recorded Data of Children Playing Soccer on Artificial Turf - by The University of Arizona

Part II: Quantification of Micro-level Activities from Recorded Data of Children Playing Soccer on Artificial Turf

Prepared for the California Office of Environmental Health Hazard Assessment
California Environmental Protection Agency

Principal Investigator: Paloma Beamer

Prepared by: Nicolas Lopez-Galvez

University of Arizona, College of Public Health

August 20, 2018

Table of Contents

F.3.1. Introduction

There is a lack of information on the exposure to crumb rubber infill for artificial soccer fields. The dermal and ingestion pathways of exposure have not been fully assessed and may pose a particular risk for children. Risk assessment models are used to evaluate the non-dietary ingestion and dermal pathway of exposure, which require the use of precise activity data on hand and mouthing contacts. However, there is limited information on the behaviors of soccer players while playing on artificial turf. Direct observation (including videotaping) is considered the most accurate way to record a child's dermal contact and mouthing behaviors (Cohen Hubal et al., 2000a). While eliminating recall bias, videotaping preserves real-time activities that can later be carefully analyzed for detailed contact frequency and duration, and for inter- and intra-observer reliability, as well as any other needs should new concerns arise (Zartarian et al., 1997a). This approach may be the only viable approach for collecting activity patterns to estimate non-dietary ingestion since it allows quantification of frequent mouthing events of short duration (Cohen Hubal et al., 2000b; Juberg et al., 2001). Therefore, this study focused on the collection and analysis of micro-level activity time series (MLATS) from video data of participants playing soccer in the San Francisco Bay Area and the Sacramento area. The objective of this report is to provide quantified activity data to support estimating potential health risks of Californians that play soccer on synthetic turf fields.

F.3.2. Methods

F.3.2.1. Data Collection

In order to collect the MLATS, a total of 40 participants were video recorded while playing soccer by a team of researchers from the University of California, Berkeley (UCB) and The Office of Environmental Health Hazard Assessment (OEHHA). The videotaping occurred during scheduled games or practices in Northern California. A total of 10 events (an average of 4 players per event) were recorded. Research staff completed an "Object Palette Log Sheet", where they recorded descriptions of the objects contacted by participants. This was later used to confirm objects in the video recording. The "Taper's Log Time" sheet was completed to record all of the start and stop times, and to describe any particular change during the recording.

The collected video data were saved to an encrypted computer at UCB and then the data were received by the University of Arizona (UA) via a secure platform. Once at UA, the data was saved to an encrypted protected external hard drive, which was stored in a locked drawer. The UA Institutional Review Board (IRB) approved to cede the project to the UC Berkeley Committee for the Protection of Human Subjects (CPHS) and the California State IRB. The UC Berkeley CPHS approval was received on November 13, 2017 and the California State IRB approved on December 4th, 2017.

F.3.2.2. Video Translation and Data Processing

The video data was translated for body part (hands and mouth) to object/surface contact data behavior, macro-activities, specific actions and intensity of players during a soccer event on artificial turf. Before transcription, each video was converted from an MTS file type to an MP4 file type using Windows Movie Maker V2013 to be analyzed. The Video Translator -TE software developed by Dr. Robert Canales in the College of Public Health at the University of Arizona was adapted from the Virtual Timing Device previously developed by Stanford's Exposure Research Group (Ferguson et al., 2006). This computer software was used to translate the video footage into computer text files. Video Translator -TE software is a tool designed to quantify real-time, sequential micro-activity pattern data collected via videos. The software couples grid activation with a computer clock that records (to fractions of a second), the total duration of each contact/activity event in the sequence that the activities occurred. A computer text file of the time series is produced from the translation process (Figure F-19).

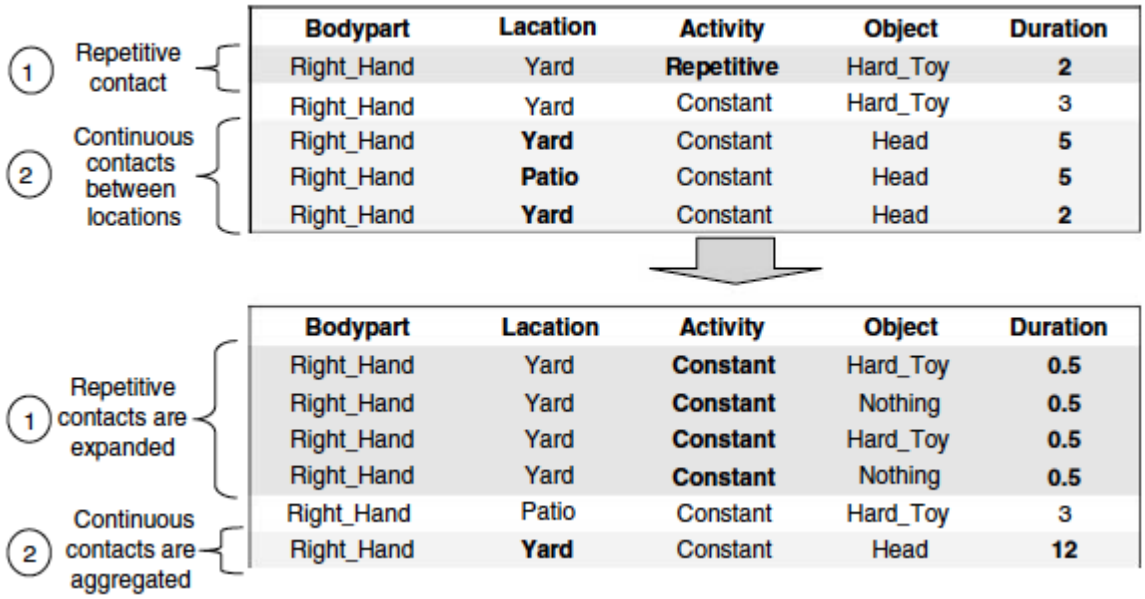

Figure F-1. Example of Computer Text File Produced from Video Translator -TE Interface and Processing of Repetitive and Continuous Contacts (Adapted from AuYeung et al., 2006).

The Video Translator -TE interface is an on-screen window containing multiple grids. This interface is referred to as a "palette" and can be customized for a specific study. For this study, two palettes were designed. The first consists of four grids, each comprising cells labeled with names of: (a) locations, (b) moments/time of event, (c) glove use, and (d) object/surfaces relevant to people playing soccer (Figure F-20). While monitoring a contact boundary (e.g., right hand, left hand, mouth) on the video, the video translator collects data by activating (i.e., positioning the cursor over a cell and

clicking the pointing device) the appropriate cell in each grid.

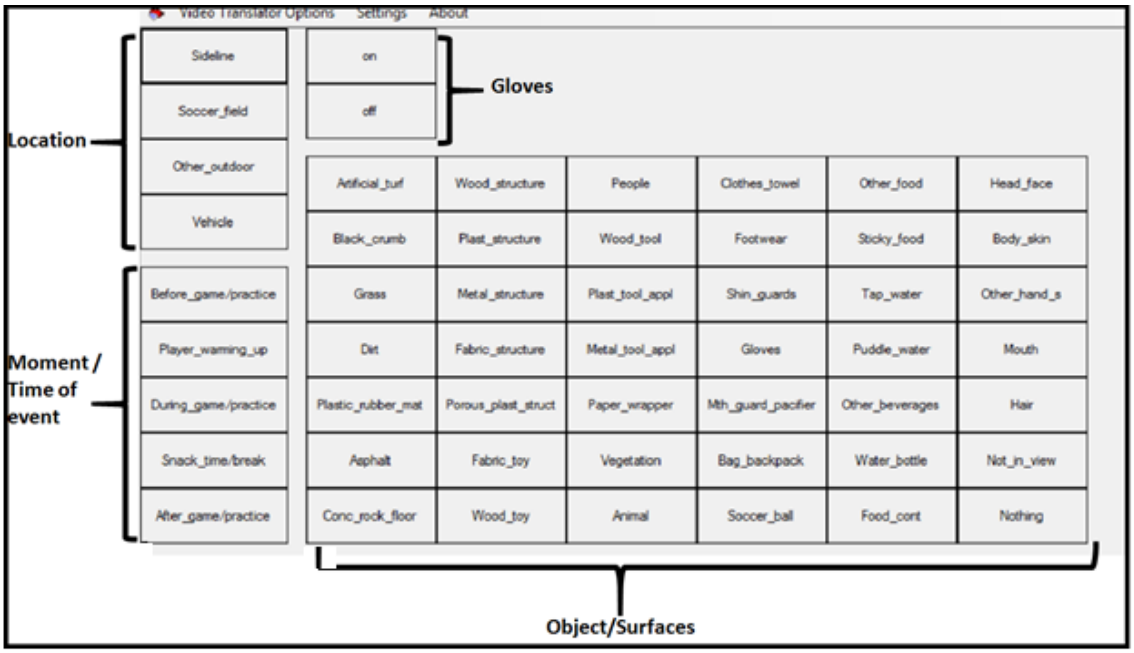

Figure F-2. Palette Used to Collect Data on Contact Frequency and Duration of Body Parts with Objects, Location of Participant, Glove Use, and The Moment/Time of The Event

As presented in Figure F-21, to collect data on macro-activities, specific actions and player intensity, the Video Translator -TE palette was modified to have four grids (palette) with: (a) locations, (b) moments/time of event, (c) macro-activities/actions and (d) player intensity during the soccer event.

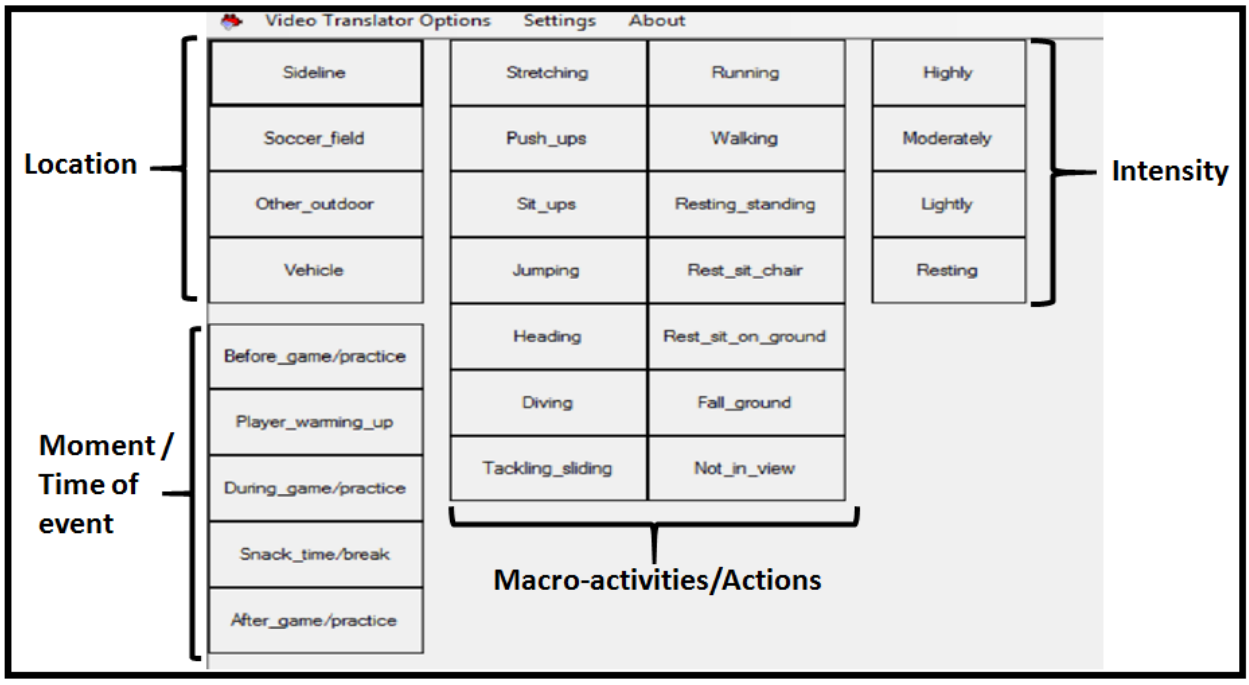

Figure F-3. Palette used to collect data on macro-activities, specific actions, and intensity during the soccer event.

F.3.2.2.1. Training

All of the videos were translated by six members of the research team who passed a rigorous training. The training consisted of analyzing four videos of increasing difficulty. The training videos were transcribed using the two palettes (Figure F-20 and Figure F-21). The transcribed data was then compared to a "gold standard" (previously transcribed by an experienced transcriber). To acquire a high inter-observer reliability, the trainee's transcription had to be less than 10% different compared to the gold standard before the trainee could move on to the next training video and eventually to collect data once all 4 training videos were completed adequately. For additional information on the training process, see Supplemental Material Section S3.1.1. Code was written in Rstudio V1.1 (RStudio Team, 2017) to compare the files and calculate the percent difference between them (Supplemental Material Section S3.1).

F.3.2.2.2. Quality Control and Quality Assurance

In addition to the translation training requirements, in order to maintain consistency and quality of translations, 10% of the translated video files were "spot-checked." These files were re-translated by experienced researchers. To pass the "spot-check," a 90% agreement between translator and experienced translator was required. For every 12 hours of translated video data, a re-translation was randomly conducted for the body parts (mouth and hands) and macro-activities. In case there was a discrepancy of more than 10% between the translator file and the experienced translator file, both worked together to resolve the discrepancy. Some of the errors may have occurred due to mis-designations of objects, lack of attention, or the participant not being in view. In order to

check to correct and minimize the possible errors, a portion of videos were randomly reviewed following strict protocols attached in Supplemental Material Section S3.1. For intra-observer reliability, some of the videos were translated twice by the same translator. All these files had 90% agreement. All of the QC/QA checks were completed using code developed in Rstudio V1.1 (Supplemental Material Section S3.1.4).

F.3.2.3. Data Analysis

F.3.2.3.1. Analysis for Both Hands and Mouthing Events

The translated plain text files were exported into Microsoft Excel 2013 files before analyzing them using Rstudio V1.1. (Rstudio team, 2017). Contact frequency, hourly contact duration and median contact duration were calculated for the mouth and each hand separately.

- Contact frequency (events/hour) is the total number of contacts of a body part with a specific object divided by the total time that the child was in view (hour).
- Hourly contact duration (min/hour) is the total time that the body part was in contact with the object (min) divided by the total time that the child was in view (hour).
- Median contact duration (second) for each child was calculated from the duration (second) of all the contacts a body part had with an object during the time in view. Median contact duration is only calculated for participants that contacted the object.

To represent the overall distribution for the population, children who did not contact an object/surface were still included in the calculation of contact frequency and hourly contact duration. However, median duration of contact was only calculated among those participants who contacted the object. The object/surfaces were selected and grouped as presented in Table F-76. More specific objects were assigned to the palette categories, and examples are available in Supplemental Material Section S3.1.

All calculations were made for individual categories and also for “non-dietary” and “all objects.” While for contact frequency and hourly contact duration, the values for individual object categories were summed, median contact duration for these aggregate categories was calculated across all of the contacts for that aggregate category. For example, median duration for “all objects” was calculated as the median duration of contact with any object.

Table F-76. Selected Object/Surfaces Summarized in This Study

Object “Super” Categories	Specific Categories from Video Translator -TE Interface
Shin guards	Shin guards
Footwear	Footwear
Water bottle	Water bottle

Object "Super" Categories	Specific Categories from Video Translator -TE Interface
Soccer ball	Soccer ball
Artificial turf	Artificial turf, Black crumb
Body	Body skin, People, Other hand
Clothes	Clothes and towels, Bags and backpacks, Fabric toys
Head	Head face, Hair
Field structures	Plastic tools, Plastic structures, Fabric structures, Metal structure
Dietary objects	Tap water, Other beverages, Water bottle, Other food, Food container
Non-Dietary objects	Everything, but dietary categories
Hands*	Hands
All objects/surfaces	Shin guards, Artificial turf, Black crumb, Head and face, Hair, Clothes and towels, Bag and backpack, Fabric toy, Plastic tools, Plastic structures, Fabric structures, Metal structures, Vegetation, Grass, Body skin, People, Concrete or rock floor, Paper wrapper, Water bottle, Soccer ball, Gloves, Footwear, Tap water, Food container, Wood toy, Other food, Dirt, Puddle water, Plastic or rubber mat, Asphalt, Wood structure, Porous plastic structure, Wood tool, Metal tools, Animal, Mouth guard - pacifier, Sticky food, Other beverages.

* Only used for mouthing events

F.3.2.3.2. Analysis for Macro-Activities, Actions and Intensity

The macro-activities, actions and intensity categories used in this study are presented in Table F-105. Macro-activities are discrete major behavior or activities, such as walking, running, or resting. Using RStudio V1.1, activity patterns were also summarized for macro-activities, specific actions, and player intensity as follows:

- Frequency of specific actions (event/hour) is the total number times a participant did a specific action (event) divided by participant's time in view (hour)
- Hourly duration of macro-activities (min/hour) is the total time a participant spent doing the macro-activity (min) over their total time in view (hour)
- Hourly duration of player intensity (min/hour) is the total time a player spent at each intensity (min) divided by their total time in view (hour)

Table F-77. Macro-Activities, Specific Actions and Player Intensity Categories

Activity Variables	Specific Categories from Video Translator -TE Interface
Macro-activity	Resting standing, Running, Stretching, Walking, Rest, Sit on the ground, Resting sitting on a chair, Push-ups, Sit ups.
Specific Actions	Jumping, Diving, Fall or slip on the ground, Tackling or sliding, Heading
Intensity	Highly, Moderately, Lightly, Resting

All of the previous activity variables were also calculated according to the following categories: event schedule (moment/time), player location, glove use, player age, player gender, player position, and event type. (Table F-106).

Table F-78. Description of Analysis Categories

Category	Description
Event Schedule	During game or practice, warming up, after/before/breaks, other combined time (after/before/breaks, and warming up with exception of during the game).
Player Location	On field, Off field (Sideline, Vehicle, Other)
Glove Use	Gloves on, Gloves off
Player Age	2 - <9 years, 9-16 years, >16 years
Player Gender	Male, Female
Player Position	Goalie, Others
Type of Event	Game, Practice

F.3.2.3.3. Statistical Analysis

Using Rstudio V1.1 (RStudio Team, 2017), the activity pattern variables (i.e., hand and mouth contact frequency, hourly contact duration, median contact duration, duration of macro-activities, frequency of specific actions, and duration of player intensity) were evaluated for significant differences as a function of each of the analysis categories (Table F-106). The Wilcoxon Signed Rank Test for paired data was used to assess if there is a difference in hand contact activity between the left and right hands. The Kruskal-Wallis Test was used to assess for differences across the four age groups. To determine if there are differences between gender, position, event type, we used the Wilcoxon Rank Sum Test.

F.3.3. Results

40 participants were recruited and video recorded at 10 events for a total of 74 hours of footage (Table F-79). Unless specified (i.e., by event schedule), activity patterns are summarized for the entire time each player was in view on the footage.

Table F-79. Footage and View Time for All 10 Soccer Events (n=40)

Unit	Total Footage	Time not in view	Time in view
Minutes	4410.30	272.30	4138.00
Hours	73.50	4.50	69.00
Percentage	100.00	6.20	93.80

F.3.3.1. Activities with Hands

The left and right hand contact activities with objects are presented in Table F-80 to Table F-85, respectively. The contact frequency, duration and median duration seem to be similar for the left and right hand. There was no significant difference for right and left hand contact activities (Table F-86). Consequently, the activities for left and right hands were combined into both hands.

Table F-80. Left Hand Contact Frequency (Event/Hour) (n=40)

Object	Mean	SD	Min	p25	Median	p75	p95	p99	Max
Artificial turf	4.34	6.06	0.00	0.73	1.75	4.83	16.60	23.96	28.43
Body	12.21	11.52	0.73	3.48	10.42	16.37	30.22	49.55	52.62
Clothes	76.33	39.32	17.15	53.55	65.18	94.63	150.49	194.80	212.21
Field structures	7.33	5.90	0.50	2.18	5.88	10.20	16.83	23.50	26.41
Footwear	5.77	5.33	0.00	1.88	4.33	8.71	12.90	22.34	28.28
Head/ face/hair	29.46	26.47	1.80	12.36	20.30	38.68	94.33	105.76	111.06
Shin guards	1.23	2.96	0.00	0.00	0.00	0.91	5.99	12.45	16.44
Soccer ball	20.73	25.79	0.43	6.25	10.35	23.63	63.62	107.16	108.32
Water bottle	6.15	5.23	0.00	1.86	5.25	9.28	13.65	19.73	22.80
Dietary objects	6.21	5.26	0.00	1.86	5.25	9.28	13.65	19.73	22.80
Non-dietary objects	200.97	79.63	87.56	152.38	187.48	217.86	354.94	421.31	429.36
All objects	207.18	80.85	91.21	158.70	193.75	226.28	363.74	427.43	429.85

Table F-81. Left Hand Contact Duration (Min/Hour) (n=40)

Object	Mean	SD	Min	p25	Median	p75	p95	p99	Max
Artificial turf	0.24	0.52	0.00	0.02	0.09	0.27	0.58	2.29	3.21
Body	1.26	1.87	0.01	0.12	0.37	1.79	4.75	7.27	8.41
Clothes	13.94	12.14	1.71	5.51	9.39	17.83	36.88	47.70	52.61
Field structures	0.77	0.83	0.03	0.13	0.46	1.35	2.56	2.97	3.15
Footwear	0.54	0.59	0.00	0.10	0.32	0.88	1.87	2.14	2.23
Head/face/hair	1.02	1.35	0.05	0.33	0.67	1.27	2.45	6.05	8.27
Shin guards	0.12	0.34	0.00	0.00	0.00	0.08	0.67	1.53	1.81
Soccer ball	0.78	0.89	0.01	0.16	0.45	1.12	3.17	3.57	3.81
Water bottle	1.00	1.17	0.00	0.25	0.78	1.52	2.04	5.13	6.73
Dietary objects	1.01	1.17	0.00	0.25	0.80	1.53	2.04	5.13	6.73
Non-dietary objects	21.31	12.68	5.93	12.96	17.40	26.87	45.67	54.05	58.09
All objects	22.32	12.88	6.13	13.11	18.59	28.23	46.10	55.61	58.80

Table F-82. Left Hand Contact Median Duration (second)

Object	N	Mean	SD	Min	p25	Median	p75	p95	p99	Max
Artificial turf	35	2.55	3.72	0.19	0.87	1.22	2.55	9.59	16.73	18.23
Body	40	2.01	1.90	0.57	1.11	1.39	2.30	4.19	9.09	12.17
Clothes	40	4.21	2.55	1.68	2.62	3.38	4.53	9.35	12.44	13.65
Field structures	40	3.47	2.27	0.38	1.85	2.90	4.71	7.71	9.87	10.22
Footwear	40	4.11	3.52	0.93	2.05	2.88	5.24	9.00	15.82	19.75
Head/ face/hair	40	1.34	0.51	0.55	1.08	1.20	1.56	2.25	2.87	3.16
Shin guards	17	4.62	4.26	1.41	1.82	3.31	5.38	12.01	15.76	16.70
Soccer ball	40	1.69	0.77	0.64	1.20	1.55	2.03	3.16	3.93	4.39
Water bottle	38	7.88	5.83	0.73	4.66	6.39	10.18	16.14	27.90	31.77
Dietary objects	38	7.86	5.84	0.73	4.71	6.39	10.18	16.14	27.90	31.77

Object	N	Mean	SD	Min	p25	Median	p75	p95	p99	Max
Non-dietary objects	40	2.33	1.14	0.54	1.61	2.15	2.79	3.65	6.21	7.19
All objects	40	2.41	1.12	0.54	1.65	2.22	2.98	3.75	6.09	6.95

Table F-83. Right Hand Contact Frequency (Event/Hour) (n=40)

Object	Mean	SD	Min	p25	Median	p75	p95	p99	Max
Artificial turf	4.46	5.72	0.00	1.26	2.55	4.89	12.58	25.24	26.94
Body	14.77	11.99	1.85	6.33	10.90	18.56	38.45	50.19	56.20
Clothes	72.63	34.94	18.11	47.21	68.24	87.23	151.98	154.52	156.13
Field structures	7.86	6.59	1.34	3.43	5.77	10.97	19.72	27.47	30.60
Footwear	6.75	5.89	0.73	2.76	5.74	8.36	14.37	25.84	33.06
Head/ face/hair	27.32	24.59	1.39	9.49	19.78	37.98	70.45	103.02	116.46
Shin guards	1.47	3.69	0.00	0.00	0.00	1.23	5.53	16.32	21.16
Soccer ball	20.90	25.07	0.51	4.92	12.00	31.55	68.54	101.57	104.03
Water bottle	7.08	6.03	0.00	3.28	5.72	8.83	18.70	25.89	29.73
Dietary objects	7.12	6.04	0.00	3.28	5.72	8.83	18.70	25.89	29.73
Non-dietary objects	199.52	70.80	95.10	145.07	184.38	230.37	308.10	378.36	418.10
All objects	206.64	71.95	101.04	149.90	195.47	249.85	318.85	382.38	419.59

Table F-84. Right Hand Contact Frequency (Min/Hour) (n=40)

Object	Mean	SD	Min	p25	Median	p75	p95	p99	Max
Artificial Turf	0.27	0.53	0.00	0.02	0.11	0.30	0.81	2.42	2.90
Body	1.25	1.65	0.04	0.16	0.54	1.62	4.73	5.67	5.73
Clothes	12.21	11.16	1.53	5.72	8.35	14.32	34.98	47.52	52.84
Field Structures	0.84	0.99	0.02	0.20	0.43	1.05	3.40	3.51	3.55
Footwear	0.59	0.56	0.02	0.15	0.31	0.86	1.73	1.89	1.93
Head/face/hair	0.99	1.42	0.01	0.31	0.61	1.20	2.15	6.32	8.87
Shin guards	0.12	0.34	0.00	0.00	0.00	0.09	0.65	1.50	1.89

Object	Mean	SD	Min	p25	Median	p75	p95	p99	Max
Soccer ball	0.95	1.06	0.01	0.25	0.67	1.19	3.85	4.22	4.38
Water bottle	1.42	1.44	0.00	0.53	1.01	1.84	3.77	6.10	6.80
Dietary Objects	1.43	1.44	0.00	0.53	1.01	1.84	3.77	6.10	6.80
Non-dietary Objects	19.70	11.82	5.88	12.39	15.35	25.67	44.15	53.47	57.80
All Objects	21.13	12.06	6.53	12.87	18.15	26.10	44.64	55.62	59.75

Table F-85. Right Hand Contact Median Duration (Second) (n=40)

Object	Mean	SD	Min	p25	Median	p75	p95	p99	Max
Artificial Turf	1.37	0.84	0.18	0.74	1.18	1.74	3.18	3.25	3.27
Body	1.59	1.39	0.43	0.91	1.18	1.85	3.15	7.11	7.70
Clothes	4.31	2.66	1.51	2.61	3.49	4.99	8.66	12.62	12.88
Field Structures	3.52	3.62	0.72	1.46	2.66	4.23	7.74	16.61	22.10
Footwear	3.55	3.18	0.83	1.55	2.30	4.99	9.91	13.84	15.40
Head/face/hair	1.34	0.47	0.54	1.05	1.24	1.48	2.13	2.94	3.42
Shin guards	4.96	5.07	0.90	2.28	3.02	5.39	16.97	18.00	18.26
Soccer ball	2.54	1.79	0.46	1.53	1.97	3.24	6.76	8.02	8.40
Water bottle	8.18	5.07	2.01	4.78	6.57	10.25	15.96	23.88	24.74
Dietary Objects	8.17	5.07	2.01	4.78	6.57	10.25	15.96	23.88	24.74
Non-dietary Objects	2.27	1.09	0.33	1.49	2.02	2.89	3.79	5.62	6.34
All Objects	2.36	1.12	0.33	1.55	2.26	2.98	3.94	5.79	6.52

Table F-86. p-Values from Comparing the Left and Right Hand Activities Using Wilcoxon Signed Rank Test

Object	Frequency* (n=40)	Duration* (n=40)	Median Duration*
Artificial Turf	0.519	0.703	0.401 (n=70)
Body	0.154	0.413	0.062 (n=80)
Clothes	0.765	0.557	0.946 (n=80)
Field Structures	0.707	0.686	0.447 (n=80)
Footwear	0.303	0.651	0.168 (n=78)

Object	Frequency* (n=40)	Duration* (n=40)	Median Duration*
Head/face/hair	0.630	0.729	0.871 (n=80)
Shin guards	0.499	0.472	0.917 (n=30)
Soccer ball	0.950	0.356	0.153 (n=80)
Water bottle	0.567	0.164	0.567 (n=74)
Dietary Objects	0.564	0.167	0.566 (n=74)
Non-dietary Objects	0.954	0.535	0.825 (n=80)
All Objects	0.908	0.744	0.817 (n=80)

*There were no significant differences between left and right hand for frequency, duration and median duration.

Since there was no significant difference between left and right hand contact activities, the data sets were combined to calculate activity patterns for both hands (Table F-86). The both hands contact frequency for participants playing soccer on turf is summarized in Table F-87. The median hand contact frequency with artificial turf is 2.39 events/hour, with a maximum of 27.68 events/hour. Aside from clothes, body and their head, participants contacted soccer balls the most frequently with a median contact frequency of 10.83 event/hour. The median hand contact frequency was 160.99 events/hour for non-dietary objects.

Table F-87. Table 3.1.8 Both Hands Contact Frequency (Event/Hour) (n=40)

Objects	Mean	SD	Min	p25	Median	p75	p95	p99	Max
Artificial turf	4.49	5.90	0.00	1.09	2.39	4.83	17.44	23.79	27.68
Body	13.54	11.52	1.52	5.10	9.78	16.48	35.48	49.38	54.40
Clothes	74.72	35.55	17.63	54.03	65.91	91.02	151.33	174.31	182.29
Field structures	7.62	6.01	1.46	3.04	6.03	10.64	19.65	23.88	24.75
Footwear	6.32	5.52	0.72	2.26	5.05	9.15	12.68	23.74	30.66
Head/ face/hair	28.74	25.09	2.28	12.35	20.21	33.70	78.41	103.75	113.79
Shin guards	1.36	3.30	0.00	0.00	0.00	1.10	5.76	14.38	18.79
Soccer ball	21.40	27.34	0.55	5.60	10.83	29.33	65.67	116.98	123.89
Water bottle	6.67	5.37	0.00	3.23	5.15	9.04	17.57	20.82	20.89
Dietary Objects	6.72	5.39	0.00	3.27	5.15	9.04	17.57	20.82	20.89

Objects	Mean	SD	Min	p25	Median	p75	p95	p99	Max
Non-dietary objects	169.80	66.85	73.89	122.44	160.99	188.22	303.96	352.05	361.74
All objects	176.52	68.47	80.69	131.96	165.08	197.66	308.60	364.63	371.23

The hourly hand contact duration for participants playing soccer on artificial turf is summarized in Table F-88. The median hourly hand contact duration for artificial turf was 0.11 min/hour, and the maximum is 3.05 min/hour. The median hand hourly duration with non-dietary objects was 15.02 min/hour.

Table F-88. Both Hands Hourly Contact Duration (Min/Hour) (n=40)

Objects	Mean	SD	Min	p25	Median	p75	p95	p99	Max
Artificial turf	0.26	0.51	0.00	0.03	0.11	0.31	0.79	2.24	3.05
Body	1.26	1.72	0.03	0.16	0.43	2.03	4.56	6.25	6.99
Clothes	12.75	11.81	1.60	5.74	9.02	16.84	35.19	47.61	52.73
Field structures	0.81	0.87	0.03	0.18	0.44	1.29	2.43	3.20	3.30
Footwear	0.57	0.57	0.01	0.16	0.32	0.86	1.85	1.98	1.98
Head/face/hair	1.01	1.37	0.03	0.35	0.65	1.44	2.15	6.09	8.57
Shin guards	0.12	0.34	0.00	0.00	0.00	0.08	0.66	1.51	1.85
Soccer ball	0.89	1.03	0.01	0.22	0.57	1.19	3.61	4.20	4.27
Water bottle	1.23	1.26	0.00	0.42	0.89	1.77	2.74	5.48	6.77
Dietary objects	1.23	1.26	0.00	0.42	0.91	1.77	2.74	5.48	6.77
Non-dietary objects	18.44	12.01	1.27	9.83	15.02	22.65	42.63	52.64	56.91
All objects	19.67	12.11	3.44	11.78	15.92	24.87	43.15	54.50	58.83

The median hand contact duration for participants while playing on artificial turf is summarized in Table F-89. Median duration is only calculated from those participants that contacted the object. The median hand contact duration for artificial turf was 1.20 second, and the maximum was 5.14 seconds. The median hand contact duration was 2.10 for non-dietary objects. Note that for the all objects (Table F-76), median duration was calculated across all of the contacts with all of the object categories included. Thus, sometimes the values will be lower than for some of the individual object categories, particularly if there was proportionally a lower number of contacts with that object.

Table F-89. Both Hands Contact Median Duration (Second)

Objects	n*	Mean	SD	Min	p25	Median	p75	p95	p99	Max
Artificial turf	35	1.53	1.11	0.46	0.84	1.20	1.65	3.85	4.95	5.14
Body	40	1.70	1.62	0.53	0.96	1.26	1.92	3.13	8.43	9.78
Clothes	40	4.21	2.54	1.85	2.50	3.43	4.77	9.26	12.23	13.16
Field structures	40	3.47	3.27	0.41	1.78	2.56	4.40	6.93	15.19	19.96
Footwear	40	3.74	3.38	0.89	1.66	2.47	4.83	9.91	15.18	15.34
Head/ face/hair	40	1.35	0.46	0.60	1.11	1.21	1.59	2.08	2.79	3.09
Shin guards	17	4.28	4.26	0.90	1.61	2.64	4.68	13.55	16.07	16.70
Soccer ball	40	1.86	0.87	0.64	1.20	1.64	2.09	3.78	3.90	3.95
Water bottle	38	6.87	2.98	2.09	5.19	6.64	8.41	13.40	13.76	13.79
Dietary objects	38	6.84	2.97	2.09	5.16	6.64	8.30	13.40	13.76	13.79
Non-dietary objects	40	2.48	1.20	1.23	1.70	2.10	2.93	4.22	6.50	6.93
All objects	40	2.57	1.20	1.25	1.79	2.18	3.01	4.28	6.58	6.94

*Only calculated from participants who contacted the object.

F.3.3.2. Mouthing activities

The mouthing contact frequency for participants playing soccer on turf is summarized in Table F-90. None of the participants observed contacted artificial turf (including black crumb) with their mouths during the recordings. There were also no mouthing contacts with shin guards or footwear observed. The median mouth contact frequency was 7.55 and 14.48 events/hour for hands and non-dietary objects, respectively.

Table F-90. Mouthing Contact Frequency (Event/Hour) (n=40)

Objects	Mean	SD	Min	p25	Median	p75	p95	p99	Max
Artificial turf*	NA	NA	NA	NA	NA	NA	NA	NA	NA
Body skin	0.55	1.71	0.00	0.00	0.00	0.12	2.1	7.71	9.93
Clothes	9.13	16.98	0.00	1.33	4.05	11.1	24.3	74.82	104.27

Objects	Mean	SD	Min	p25	Median	p75	p95	p99	Max
Field structures	0.01	0.06	0.00	0.00	0.00	0.00	0.00	0.24	0.4
Footwear*	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hands	8.91	5.87	0.71	5.64	7.55	11.31	18.41	25.8	26.03
Head/ face/hair	0.03	0.15	0.00	0.00	0.00	0.00	0.02	0.67	0.83
Shin guards*	NA	NA	NA	NA	NA	NA	NA	NA	NA
Soccer ball	0.01	0.09	0.00	0.00	0.00	0.00	0.00	0.34	0.55
Water bottle	4.96	4.65	0.00	1.7	3.75	6.43	15.58	17.7	17.81
Dietary objects	5.17	4.56	0.00	2.04	4.03	6.85	15.58	17.7	17.81
Non-dietary objects	19.81	18.76	2.94	9.78	14.48	23.68	42.97	91	111.92
All objects	24.97	19.94	3.57	12.18	18.87	30.93	50.75	96.76	118.87

*No participants contacted artificial turf, shin guards or footwear with their mouths
NA: not applicable

The hourly mouthing contact duration for participants playing soccer on artificial turf is summarized in Table F-91. There were no mouthing contacts observed with artificial turf, shin guards, or footwear. The median mouthing hourly duration was 0.21 and 0.41 min/hour with hands and non-dietary objects, respectively.

Table F-91. Mouthing Hourly Contact Duration (Min/Hour) (n=40)

Objects	Mean	SD	Min	p25	Median	p75	p95	p99	Max
Artificial turf*	NA	NA	NA	NA	NA	NA	NA	NA	NA
Body skin	0.01	0.04	0.00	0.00	0.00	0.00	0.04	0.2	0.25
Clothes	0.31	0.52	0.00	0.03	0.12	0.37	1.00	2.32	2.76
Field structures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.03
Footwear*	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hands	0.41	0.76	0.01	0.10	0.21	0.37	0.92	3.32	4.74
Head/face/hair	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01
Shin guards*	NA	NA	NA	NA	NA	NA	NA	NA	NA
Soccer ball	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water bottle	0.36	0.55	0.00	0.10	0.24	0.41	1.12	2.5	3.17

Dietary objects	0.37	0.54	0.00	0.10	0.25	0.42	1.12	2.5	3.17
Non-dietary objects	0.76	0.92	0.05	0.20	0.41	0.98	1.8	4.21	4.99
All objects	1.13	1.18	0.06	0.40	0.82	1.42	3.06	5.34	6.45

*No participants contacted these objects with their mouth.
NA: not applicable

The median mouthing contact duration for participants while playing on artificial turf is summarized in Table F-92. Median duration is only contacted from those children that contacted the object with their mouth. No participants were observed contacting artificial turf, shin guards or footwear with their mouths. The median mouthing contact duration was 1.10 second for both hands and 1.14 second non-dietary objects. Thus, sometimes the values will be lower than for some of the individual object categories, particularly if there was proportionally a lower number of contacts with that object.

Table F-92. Mouthing Median Contact Duration (Second)

Objects	n	Mean	SD	Min	p25	Median	p75	p95	p99	Max
Artificial turf	0	NA	NA	NA	NA	NA	NA	NA	NA	NA
Body skin	10	1.00	0.41	0.54	0.61	0.98	1.25	1.59	1.60	1.60
Clothes	36	1.72	1.7	0.62	0.91	1.36	1.78	3.62	8.35	10.61
Field structures	1	5.18	ND	ND	ND	ND	ND	ND	ND	ND
Footwear	0	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hands	40	1.35	0.79	0.66	0.91	1.10	1.45	2.56	4.15	4.76
Head/face/hair	2	1.15	0.5	0.79	0.97	1.15	1.33	1.47	1.50	1.50
Shin guards	0	NA	NA	NA	NA	NA	NA	NA	NA	NA
Soccer ball	1	0.13	ND	ND	ND	ND	ND	ND	ND	ND
Water bottle	35	3.60	1.33	1.71	2.59	3.37	4.40	5.81	6.5	6.83
Dietary objects	37	3.48	1.31	1.71	2.48	3.15	4.34	5.73	6.46	6.83
Non-dietary objects	37	1.33	0.73	0.74	0.87	1.14	1.40	2.55	3.87	4.45
All objects	39	1.64	0.86	0.79	1.08	1.34	2.06	3.07	4.5	5.36

NA: not applicable; and ND: not determined

F.3.3.3. Macro-Activities (e.g., Walking, Running)

The hourly duration for participants engaging in macro-activities on artificial turf is summarized in Table F-93. The macro-activities that participants engaged in for the largest proportion of their time were walking, standing, and running with median

durations of 24.51, 16.75, 13.85 min/hour respectively. All 40 participants were observed doing those activities. 39 participants were observed sitting on the ground, while only 17 were observed sitting in a chair. 31 participants were observed stretching and only 2 participants were observed doing push-ups.

Table F-93. Hourly Duration (Min/Hour) of Macro-Activities (n=40)

Macro-Activities	Mean	SD	Min	p25	Median	p75	p95	p99	Max
Push ups	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.06	0.1
Running	13.69	6.13	2.47	9.13	13.85	18.21	23.61	24.49	24.99
Sit ups*	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sitting on chair	2.26	4.5	0.00	0.00	0.00	2.73	11.61	17.65	17.67
Sitting on ground	1.18	1.73	0.00	0.11	0.55	1.57	3.21	7.69	9.75
Standing	17.31	5.54	6.98	14.99	16.75	19.89	27.23	31.06	32.5
Stretching	0.75	1.27	0.00	0.09	0.37	0.81	3.24	5.6	5.86
Walking	24.49	6.08	10.5	21.18	24.51	28.52	33.63	35.87	37.28

*No participants were observed doing sit ups.
NA: not applicable

F.3.3.4. Specific Actions (e.g., Tackling, Falling)

The event frequency for participants engaging in specific actions on artificial turf is summarized in Table F-94. The specific actions that participants engaged in the most frequently was jumping with a median frequency of 3.65 events/hour, followed by slipping/falling with a median frequency of 0.78 event/hour. 34 participants were observed jumping. 27 participants were observed slipping or falling on the artificial turf. Fewer participants were observed diving, heading, and tackling, with only 8, 12, and 13 participants observed conducting these actions, respectively.

Table F-94. Frequency (Event/Hour) of Actions During the Whole Event (n=40)

Specific Actions	Mean	SD	Min	p25	Median	p75	p95	p99	Max
Diving	0.53	1.69	0.00	0.00	0.00	0.00	2.44	7.40	9.89
Heading	0.33	0.61	0.00	0.00	0.00	0.48	1.91	2.07	2.10
Jumping	9.46	17.72	0.00	0.68	3.65	9.30	65.16	71.43	75.30
Slip/fall	2.19	3.45	0.00	0.00	0.78	2.31	11.30	13.06	13.19
Tackling or sliding	0.42	0.78	0.00	0.00	0.00	0.51	2.20	2.81	2.81

F.3.3.5. Player Intensity

The hourly duration for player intensity while on artificial turf is summarized in Table F-95. Players spent the majority of their time at "low" intensity, with a median duration of 24.00 min/hour. Low intensity corresponds to players who were moving but walking. Moderate and high intensity correspond to jogging and running, respectively. All 40 participants were observed at least for some time at each of the 4 intensities.

Table F-95. Hourly Duration (Min/Hour) of Player Intensity (n=40)

Intensity	Mean	SD	Min	p25	Median	p75	p95	p99	Max
High	2.00	0.99	0.09	1.15	1.99	2.68	3.64	3.84	3.88
Moderate	12.52	5.09	3.75	8.65	12.98	15.88	20.80	22.05	22.82
Low	24.04	5.31	10.65	21.58	24.00	27.47	31.05	33.75	34.29
Resting	21.44	7.81	10.86	16.50	18.68	26.98	33.83	40.91	41.81

F.3.3.6. Analyzed by Event Schedule, Location, Gloves Usage, Age, Gender, Players' Position, and Event Type

F.3.3.6.1. Event Schedule (Moment/Time)

The data was summarized based on the event schedule which included: the whole event (Section F.3.3.1 to Section F.3.3.5), during the game/practice, warming up, after/before/break time, and other combined time with the exception of during the game (i.e., warming up and after/before/break time combined). The hand to object, mouthing events, actions, macro-activities, and intensity according to different event times are presented in Supplemental Material Section S3.2. As presented in Supplemental Material Section S3.2, the data was summarized for each specific time of the event such as *during the game, game/practice, warming up, after/before/break time, and other combined time*.

During the Game (Supplemental Material Section S3.2.1.1)

Data during the game/practice were very similar to the whole event. There were more contacts of hands to artificial turf (median frequency: 2.16 event/hour), followed by contacts of hands to footwear (median frequency: 3.44 event/hour), and hands to soccer ball (median frequency: 9.97 event/hour) than contacts with dietary objects (median frequency: 1.30 event/hour). However, the median contact duration was longer for dietary objects than all of the other objects, which may indicate that there was a longer holding time of these dietary objects than the rest of the objects. The mouth to hand median contact frequency was 7.49 event/hour. Also, the most common action event per hour was jumping (median: 2.32 event/hour) followed by slipping/falling on the artificial turf (median 0.81 event/hour). With respect to macro-activities, players spent the majority of the time walking (median: 25.8 min/hour) and running (median: 15.10 min/hour) during the game and only about 0.37 min/hour sitting on the ground, which corresponds to their intensity, as they spent only 1.84 min/hour doing high intensity

activities. (See Supplemental Material S3.2.1.1 of activity patterns during games/practice for details).

Warming Up (Supplemental Material Section S3.2.1.2)

The median frequency of players hands to artificial turf (0.00 event/hour) contact was less during warm up than during the game as only four players made hand to artificial turf contact while warming up. Also, the median mouthing frequency event for mouth to hand (0.00 event/hour) contact was lower than during the game. Similar to during the game, players spent the majority of the time walking (median: 21.12 min/hour) and running (median: 15.21 min/hour). However, while warming up, they spent less time sitting on the ground (0.00 min/hour) than during the game. Additionally, with respect to intensity, players spent most of the time resting (median: 5.30 min/hour) while warming up (See Supplemental material Section S3.2.2.2for details). *Please note that the intensity corresponds to actions and macro-activities together.*

After/Before/Break Time (Supplemental Material Section S3.2.1.3)

Similar to warming up, the median frequency of players hands to artificial turf contacts was 0.00 event/hour. For the mouthing with artificial turf, regardless of the time of the event, there was not any mouthing events with artificial turf and only one person had a mouth to soccer ball contact. The median mouthing frequency event for mouth to hand was 0.00 event/hour. For macro-activities, "Resting standing" was the macro-activity that players did most of the time (median: 30.40 min/hour) on after/before/or during break time, which coincides with the intensity where they spent most of the time resting (37.00 min/hour). (See Supplemental Material Section S3.2.1.3 for details).

Other Combined Time (Supplemental Material Section S3.2.1.4)

The median frequency of players hands to artificial turf contacts was 0.00 event/hour. The hand to non-dietary objects median contact frequency was 206.41. However, there were no mouthing events with artificial turf. Similarly to when players were on before/after/break time, dietary objects were contacted most frequently, for longer hourly durations and for longer periods of time (8.50 event/hour, 1.10 min/hour, and 3.70 seconds) than non-dietary objects. Also, "Resting standing" was the macro-activity that players did most of the time (median: 26.39 min/hour) on other combined time, while the intensity that they spent most of the time was resting (34.95 min/hour).

F.3.3.6.2. Location (On or Off Field) (Supplemental Material Sections S3.2.2.1 and S3.2.2.2)

There seems to not be some differences between hand to mouth contact when players were on or off the field. The hands to artificial turf median frequency contact for players recorded on field (2.61 event/hour) was higher than players recorded off field (0.00 event/hour). The mouthing median frequency with hands was higher for players on the field (6.99 event/hour) than off the field (5.90 event/hour). However, mouthing median frequency contact with clothes was higher off field than on field. While jumping was the most common event per hour for players on the field and off the field, players spent

more time walking (median: 27.19 min/hour) on the field and more than resting (median: 25.99 min/hour) when off the field. (See Supplemental Material Sections S3.2.2.1 and S3.2.2.2 for details).

F.3.3.6.3. Use Of Gloves (On or Off) (Supplemental Material Sections S3.2.3.1 and S3.2.3.2)

There seem not be a large difference between the median frequency of players hands to artificial turf contacts when players wore gloves or not (2.30 event/hour and 0.0 event/hour, respectively). However, more mouthing events with hands were recorded for players who did not wear any gloves during the than the players who wore gloves at some point during the whole event (1.88 event/hour and 7.18 event/hour for people wearing gloves and not wearing gloves, respectively). (See Supplemental Material Sections S3.2.3.1 and S3.2.3.2 for details).

F.3.3.6.4. Player Age (Supplemental Material Section S3.3)

Activity statistics by age and results from statistical tests (Wilcoxon sum rank test) are presented in Supplemental Material Section S3.3.

During the Whole Event (Supplemental Material Section S3.3.1):

Hand to Object Contacts. There were significant differences ($p < 0.05$) in contact frequency (events/hour) between the three age groups with artificial turf, clothes, soccer ball, and field structures. The younger age group (2 to <9 years) had more contacts per hour with artificial turf, soccer ball, and field structure than the other two older age groups. There were significant differences in hourly contact duration between all three age groups with artificial turf and field structures. While the youngest children had the longer hourly contact duration with artificial turf, the oldest age group had longer hourly contact duration with field structures. However, for median duration, contact with artificial turf was not significantly different between the three age groups, but contact with non-dietary objects, clothes, and soccer ball were significantly different between the three age groups. The middle age group had the longest durations of contact with clothes. The oldest age group had the longest durations of contact with the soccer ball and the shortest with non-dietary objects.

Mouthing Events: There were significant differences ($p < 0.05$) in mouthing contact frequency (event/hour) between age groups with water bottle and non-dietary objects. The younger age group (2 to <9 years) had more mouthing contacts per hour with water bottle and non-dietary objects than the other two age groups. There were also significant differences ($p < 0.05$) in mouthing duration (min/hour) between age groups with water bottle, non-dietary objects and all objects. For the mouthing median duration, there was a significant difference ($p < 0.05$) between age groups with hands. The younger age group (2 to <9 years) had longer periods of hand to mouth contacts than the other age groups.

Actions: There were significant differences in frequency (event/hour) between the three age groups while players were jumping and slipping/falling. Older soccer players (16+

years) were jumping and slipping/falling on the ground more frequently per hour than the younger age groups.

Macro-Activities. There was a significant difference in hourly duration (min/hour) between the three age groups while players were stretching. The older group (16 yrs +) spent more minutes per hour stretching than the other two age groups.

Intensity. There were no significant differences between the three age groups in hourly duration of player intensity.

During the Game/Practice (Supplemental Material Section S3.3.2.1):

Hands to Object Contacts. There were significant differences ($p < 0.05$) in contact frequency (event/hour) between the three age groups with artificial turf, water bottle and dietary objects during the game/practice. The younger age group (2 to <9 years) had more contacts per hour with artificial turf, water bottle and dietary objects than the other two age groups. There was only one significant difference in hourly duration between three age groups with soccer ball. The middle age group of players (9 to <16 years) contacted soccer ball more minutes per hour than the other age groups. For median duration (second), there were significant differences between the three age groups with artificial turf, body, head/face/hair, water bottle, and dietary objects.

Mouthing Events. There were no significant differences ($p < 0.05$) in mouthing contact frequency (event/hour) between age groups during the game/practice. There was a significant difference in mouthing duration (min/hour) of hands between the age group. The younger age group (2 to <9 years) had longer mouthing of hands per hour than the other age groups. Similarly, for the median duration (second), there was a significant difference in mouthing between age groups with hands. The younger age group (2 to <9 years) had longer durations of hand to mouth contacts than other two age groups.

Actions. There were significant differences in frequency (event/hour) between the three age groups for players jumping. Older soccer players (16+ years) jumped more frequently per hour than the younger age groups.

Macro-Activities. There were no significant differences between the three age groups in hourly duration of macro-activities.

Intensity. There were no significant differences between the three age groups in hourly duration of player intensity.

Warming up (Supplemental Material Section S3.3.2.2):

Hands to Object Contacts. There were no significant differences in contact frequency (event/hour), duration (min/hour), or median duration (second) between the three age groups with any of the observed objects during warm up.

Mouthing Events. Similarly, as hand to object activities, there were no significant differences in mouthing contact frequency (event/hour), duration (min/hour), or median duration (second) between the three age groups with any of the observed objects during

warm up.

Actions. There were no significant differences between the three age groups for any of the specific actions while players were warming up.

Macro-Activities. There was a significant difference in hourly duration between age groups for time spent walking during warm up. The older groups (9 to <16 years and 16 years +) spent more time walking than the younger age groups.

Intensity. There were no significant differences between the three age groups in hourly duration of player intensity.

After/Before/Break Time (Supplemental Material Section S3.3.2.3):

Hands to Object Contacts. There were significant differences ($p < 0.05$) in contact frequency (event/hour) between age groups with body, soccer ball, non-dietary objects, and all objects during after or before the event and during break times. The older age group (16+ years) had fewer contacts per hour with body, soccer ball, non-dietary objects, and all objects than the other two age groups. There was a significant difference in contact duration (min/hour) between age groups with non-dietary objects. The middle age group of players (9 to <16 years) contacted non-dietary objects for more minutes per hour than the other age groups. For the median duration, there were no significant differences between age groups.

Mouthing Events. There were no significant differences in mouthing contact frequency (event/hour), duration (min/hour), or median duration (second) between the three age groups with any of the observed objects after or before the event and during break times.

Actions. There were no significant differences in frequency (event/hour) of specific actions between age groups.

Macro-Activities. There were no significant differences in contact frequency and median duration between age groups. However, there were significant differences in hourly duration (min/hour) between age groups while players were sitting on a chair or stretching. The older groups (9 to <16 years and 16 years +) had less minutes per hour stretching or sitting on a chair than the younger age group. Also, there were significant difference in hourly duration between age groups for time players spent walking and standing. The older groups (9 to <16 years and 16 years +) had more minutes per hour walking or standing than the younger age group.

Intensity. There were significant differences in hourly duration (min/hour) of intensity between age groups. Older groups (9 to <16 years and 16 years +) had longer periods of light intensity, but shorter periods of moderate and high intensity than the younger age group.

Other Combined Time (After/Before/Break/Warming Up Time) But During the Game (Supplemental Material Section S3.3.2.4):

Hands to Object Contacts. There was a significant difference in contact frequency (event/hour) with non-dietary objects between age groups during the other combined times that did not include the actual game or practice. The younger age group (2 to <9 years) had less contacts per hour with non-dietary objects than the other two age groups. There were significant differences in hourly duration (min/hour) between age groups with soccer ball and non-dietary objects. The middle age group (9 to <16 years) contacted the ball and non-dietary objects for more minutes per hour than the other age groups. There were no significant differences in median duration (second) between age groups with any of the observed objects during this other combined time.

Mouthing events. There were significant differences ($p < 0.05$) in mouthing frequency (event/hour) between age groups with water bottle, non-dietary objects, and all objects. The older age group (16+ years) had fewer mouthing contacts with these objects than the other two groups. Also, there were significant differences ($p < 0.05$) in hourly contact duration (min/hour) between age groups with water bottle, non-dietary objects, and all objects. The older age group (16+ years) had a shorter contact duration (min/hour) with these objects than the other two groups. For the median duration (second), there were no significant differences between the three age groups.

Actions. There were no significant differences in frequency of any specific action between age groups not during the game or practice.

Macro-activities. Not during the game or practice, there was a significant difference in duration (min/hour) between age groups while players were resting standing. The older group (16 years +) had shorter periods of standing per hour than the younger age groups. The younger age group (2 to <9 years) also had longer durations for running than other age groups. The older age group (16+ years) spent more time stretching than the other two groups.

Intensity. There were no significant differences between the three age groups in hourly duration of player intensity not during the game or practice (note: intensity includes activities and actions)

On Field (Supplemental Material Section S3.3.3.1):

Hands to Object Contacts. There was a significant difference in contact frequency (event/hour) between age groups with body while participants were on the field. The older age group (16+ years) had more contacts per hour with body than the other two age groups. Another significant difference in contact frequency (event/hour) between age groups was observed with soccer ball. There were significant differences in hourly duration (min/hour) between age groups with soccer ball. The middle age group of players (9 to <16 years) contacted the ball for more minutes per hour than the other age groups. For the median contact duration, there were no significant differences between age groups with any of the observed objects.

Mouthing Events. There were significant differences ($p < 0.05$) in mouthing hourly duration between age groups with hands. The middle age group (2 to <9 years) had a

greater contact duration (min/hour) with hands than the other two age groups while on the field. The mouthing frequency and median duration were not significantly different between age groups while players were on the field.

Actions. There were significant differences in frequency (event/hour) of specific actions between age groups when players were on the field. The older age group (16+ years) jumped and slipped/fell on the ground more times per hour than the younger age groups.

Macro-Activities. There were no significant difference between age groups in hourly duration of player macro-activities while on the field.

Intensity. There were no significant differences between age groups in hourly duration of player intensity while on the field.

Off Field (Supplemental Material Section S3.3.3.2):

Hands to Object Contacts. There was a significant difference in contact frequency (event/hour) between age groups with artificial turf while players were off the field. The younger age group (2 to <9 years) had more contacts per hour with artificial turf than the other two age groups. There were significant differences in contact hourly duration (min/hour) between age groups with water bottles and artificial turf while off the field. The younger age group (2 to <9 years) contacted the turf and water bottles for more minutes per hour than the other age groups. For median contact duration, there were no significant differences between age groups with any of the observed objects (note that artificial turf can be present on sideline and not just on soccer field).

Mouthing Events. There was a significant difference ($p < 0.05$) in mouthing frequency (event/hour) between age groups with “all objects” while players were off the field. The youngest group (2 to <9 years) had more mouthing events with all objects per hour than the other two groups. There were no statistical differences in mouthing hourly duration between age groups. Also, there were no significant difference in median duration between age groups with contact with any object, while players were off the field.

Actions. There were no significant differences in frequency of specific actions between age groups while players were off the field.

Macro-Activities. There was a significant difference in hourly duration between age groups when players were walking off the field. The younger age group (2 to <9 years) had less minutes walking per hour than the older age groups.

Intensity. There were no significant differences between age groups in hourly duration of player intensity.

Gloves On (Supplemental Material Section S3.3.4.1):

Hands to Object Contacts. There were no significant differences ($p < 0.05$) in contact frequency (event/hour) between age groups. There were no significant differences in contact hourly duration (min/hour) between age groups with field structures and artificial

turf. There were significant differences in median contact duration (second) between age groups with water bottle, and dietary objects. The middle age group (9 to <16 years) had longer contacts with clothes and non-dietary than the other age groups. The younger age group (2 to <9 years) contacted water bottle and dietary objects for longer periods than the other age groups.

Mouthing Events. There were no significant difference ($p < 0.05$) in mouthing contact frequency (event/hour) between age groups. There were no significant difference ($p < 0.05$) in hourly contact duration (min/hour) between the age groups. There was a significant difference ($p < 0.05$) in mouthing median duration between the age groups with water bottle. The younger group (2 to <9 years) had shorter mouthing periods with water bottle than the other age groups, even while wearing gloves.

Gloves Off (Supplemental Material Section S3.3.4.2):

Hands to Object Contacts. There were significant differences ($p < 0.05$) in hand contact frequency (event/hour) between age groups with clothes, water bottle, dietary objects, non-dietary objects, and all objects when players were not wearing gloves. The older age group (16+ years) had more contacts per hour with water bottle, dietary objects, non-dietary objects, and all objects than the other two age groups. There was a significant difference in hourly contact duration (min/hour) between age groups with soccer ball, water bottle and dietary objects. The older age group (16+ years) contacted turf for less minutes per hour than the other age groups, while not wearing gloves. There were no significant differences in hand contact median duration (second) between age groups.

Mouthing Events. There were significant differences ($p < 0.05$) in mouthing frequency (event/hour) between age groups with water bottle and dietary objects. The younger group (2 to <9 years) had more frequent mouthing with these two objects than the other two groups. There was a significant difference ($p < 0.05$) in hourly mouthing duration (min/hour) between age groups with water bottle, dietary, and all objects. The younger group (2 to <9 years) had more mouthing minutes per hour with these objects than the other two groups. There were no significant difference ($p < 0.05$) in mouthing median duration (second) between age groups.

F.3.3.6.5. Player Gender

Activity statistics by gender and results from statistical tests (Wilcoxon sum rank test) are presented in ***Supplemental Material Section S3.4***.

During the Whole Event (Supplemental Material Section S3.4.1):

Hands to Object Contacts. There were significant differences ($p < 0.05$) in contact frequency (events/hour) between males and females with field structures, head/face/hair, water bottle, dietary, non-dietary, and all objects. Females had more contacts per hour with field structures, head/face/hair, water bottle, dietary, non-dietary, and all objects than males. There were significant differences ($p<0.05$) in hourly contact duration between males and females for head/face/hair, shin guards, water bottle, and

dietary objects. Females' hands contacted these objects for more minutes per hour than males. For median contact duration, there were no significant differences between males and females.

Mouthing Events. There were significant differences ($p < 0.05$) in mouthing contact frequency (events/hour) between males and females with water bottle and dietary objects. Females had more mouthing contacts with these objects than males. Similarly, there were significant differences ($p < 0.05$) in mouthing duration (min/hour) between males and females with water bottle, and dietary objects. Females had longer mouthing of water bottle and dietary objects per hour than males. For the mouthing median contact duration, there were significant differences ($p < 0.05$) between males and females with dietary and all objects. Females touched these objects with their mouths for longer periods of times than males.

Actions. There were no significant differences between males and females in frequency of specific actions.

Macro-Activities. There were no significant differences between males and females in hourly duration of macro-activities.

Intensity. There were no significant differences between males and females in hourly duration of player intensity.

During the Game/Practice (Supplemental Material Section S3.4.2.1):

Hands to Object Contacts. There were significant differences ($p < 0.05$) in hand contact frequency (event/hour) between males and females with head/face/hair, non-dietary objects, and all objects while during the game or practice. Females had more contacts per hour with these objects than males. There was a significant difference in contact hourly duration (min/hour) between males and females with head/face/hair. Females' hands contacted head/face/hair for more minutes per hour than males. For the median duration, there were no significant differences between males and females.

Mouthing Events. There were no significant differences in contact frequency, duration or median duration between males and females while during the game or practice.

Actions. There were no significant differences between males and females in frequency of specific actions while during the game or practice.

Macro-Activities. There was a significant difference in hourly duration (min/hour) between males and females with duration of time spent stretching. Females stretched more minutes per hour than males during the game.

Intensity. There were no significant differences between males and females in hourly duration of player intensity while during the game.

Warming Up (Supplemental Material Section S3.4.2.2):

Hands to Object Contacts. There were no significant differences in hand contact frequency, hourly contact duration, or median contact duration between males and

females while warming up.

Mouthing Events. There were no significant differences by gender in mouthing frequency, hourly contact duration and median contact duration while warming up.

Actions. There were no significant differences between males and females in frequency of specific actions while warming up.

Macro-Activities. There were no significant differences between males and females in hourly contact duration of macro-activities while warming up.

Intensity. There were no significant differences between males and females in hourly duration of player intensity while warming up.

Before/After/Break Time (Supplemental Material Section S3.4.2.3):

Hands to Object Contacts. There were significant differences ($p < 0.05$) in hand contact frequency (event/hour) between males and females with head/face/hair, water bottle and dietary objects. Females had more contacts per hour with these objects than males. There were significant differences in contact hourly duration (min/hour) between males and females with head/face/hair, water bottle, shin guards and dietary objects. Females' hands contacted head/face/hair, water bottle and dietary objects for more minutes per hour than males. However, males contacted shin guards for more minutes per hour than females. For the median duration, there were no significant differences between males and females.

Mouthing Events. There were significant differences in mouthing frequency (event/hour) between the males and females in water bottle, dietary and all objects. Females had more mouthing events per hour with these objects than males. Similarly, there were significant differences ($p < 0.05$) in mouthing hourly duration (min/hour) between males and females with water bottle, dietary and all objects. Females contacted these objects with their hands for more minutes per hour than males. Finally, there was a significant difference in mouthing median duration (second) between males and females for all objects. Females contacted all objects for longer period of time than males.

Actions. There were no significant differences between males and females in frequency of specific actions.

Macro-Activities. There were no significant differences between males and females in hourly duration of macro-activities.

Intensity. There were no significant differences between males and females in hourly duration of player intensity.

Other Combined Time (After/Before/Break/Warming Up Time) But Not During the Game (Supplemental Material Section S3.4.2.4):

Hands to Object Contacts. There were significant differences ($p < 0.05$) in hand contact frequency (event/hour) between males and females with head/face/hair, water bottle

and dietary objects. Females had more contacts per hour with these objects than males. There were significant differences in contact hourly duration (min/hour) between males and females with head/face/hair, water bottle and dietary objects. Females' hands contacted head/face/hair, water bottle and dietary objects for more minutes per hour than males. For the contact median duration, there were no significant differences between males and females.

Mouthing Events. There were significant differences in mouthing frequency (event/hour) between males and females with water bottle, dietary and all objects. Females had more mouthing events per hour with these objects than males. There were significant differences ($p < 0.05$) in mouthing hourly duration (min/hour) between males and females with water bottle, dietary and all objects. Females mouthing contacts with these objects was more minutes per hour than males. There was a significant difference in mouthing median duration between males and females with all objects. Females had longer mouthing contacts with all objects than males.

Actions. There were no significant differences between males and females in frequency of specific actions.

Macro-Activities. There were no significant differences between males and females in hourly duration of macro-activities.

Intensity. There were no significant differences between males and females in hourly duration of player intensity.

On Field (Supplemental Material Section S3.4.3.1):

Hands to Object Contacts. While on the field, there were significant differences ($p < 0.05$) in contact frequency (event/hour) between males and females with head/face/hair, non-dietary objects, and all objects. Females had more contacts per hour with these objects than males. There were significant differences in contact hourly duration (min/hour) between males and females with head/face/hair, and shin guards. Females' hands contacted head/face/hair for more minutes per hour than males, while males' hands contacted shin guards for more minutes per hour than females. For the median contact duration, there were no significant differences between males and females.

Mouthing Events. There were significant differences in mouthing frequency (event/hour) between males and females with water bottle, dietary and all objects while on the field. Females had more mouthing events per hour with these objects than males. There were significant differences ($p < 0.05$) in mouthing hourly duration (min/hour) between males and females with water bottle, dietary and all objects. Females contacted these objects with their mouth for more minutes per hour than males. There was a significant difference in mouthing median duration (second) between males and females with all objects. Females contacted all objects with their mouth for longer period of time than males while on the field.

Actions. Males tackled or slid significantly ($p < 0.05$) more times than females (event/hour) while on the field.

Macro-Activities. There was a significant difference in hourly duration (min/hour) between males and females with time spent stretching while on the field. Females stretched more minutes per hour than males on the field.

Intensity. There were no significant differences between males and females in hourly duration of player intensity while on the field.

Off field (Supplemental Material Section S3.4.3.2):

Hands to Object Contacts. There were significant differences ($p < 0.05$) in contact frequency (event/hour) between males and females with field structures, head/face/hair, water bottle, and dietary objects while off the field. Females had more contacts per hour with these objects than males. There were significant differences ($p < 0.05$) in hourly contact duration (min/hour) between males and females with field structures, head/face/hair, water bottle, and dietary objects. Females' hands contacted these objects for more minutes per hour than males. There was a significant difference in contact median duration (second) between males and females with soccer ball. Females contacted soccer ball with their hands for longer periods than males.

Mouthing Events. There were significant differences ($p < 0.05$) in mouthing frequency (event/hour) between males and females with water bottle, and dietary objects while off the field. Females had more mouthing events per hour with these objects than males. There were significant differences ($p < 0.05$) in mouthing hourly duration (min/hour) between males and females with water bottle, and dietary objects. Females contacted these objects with their mouth for more minutes per hour than males. There was a significant difference in mouthing median duration (second) between males and females with all objects. Females contacted all objects with the mouth for longer periods of time than males.

Actions. There were no significant differences between males and females in frequency of specific actions while off the field.

Macro-Activities. There were no significant differences between males and females in hourly duration of macro-activities while off the field.

Intensity. There were no significant differences between males and females in hourly duration of player intensity while off the field.

Gloves On (Supplemental Material Section S3.4.4.1):

Hands to Object Contacts. There were significant differences ($p < 0.05$) in contact frequency (event/hour) between males and females with non-dietary objects, and all objects when participants were wearing gloves. Females had more contacts per hour with these objects than males. There were significant differences in contact hourly duration (min/hour) between males and females with all objects. Females' hands contacted these objects for more minutes per hour than males, while wearing gloves. For the median duration, there were no significant differences between males and females while wearing gloves.

Mouthing Events. There was a significant difference in mouthing frequency (event/hour) between males and females with hands. Males had more mouthing contacts per hour with their hands than females. There was significant differences ($p < 0.05$) in mouthing hourly duration (min/hour) between males and females with hands. Males contacted their mouths with their mouths for more minutes per hour than females. There were no significant differences in mouthing median duration (second) between males and females.

Gloves Off (Supplemental Material Section S3.4.4.2):

Hands to Object Contacts. There were significant differences ($p < 0.05$) in contact frequency (event/hour) between males and females with field structures, and head/face/hair when they were not wearing gloves. Females had more contacts per hour with these objects than males. There was a significant difference in contact hourly duration (min/hour) between males and females with head head/face/hair. Females' hands contacted these objects for more minutes per hour than males. For median hand contact duration, there were no significant differences between males and females while wearing gloves.

Mouthing Events. There were significant differences in mouthing frequency (event/hour) between males and females with hands. Females had more mouthing contacts per hour with hands than males while not wearing gloves. There were significant differences ($p < 0.05$) in mouthing hourly duration (min/hour) between males and females with water bottle, and dietary objects. Females contacted these objects with their mouth for more minutes per hour than males. There were no significant differences in mouthing median duration (second) between males and females.

F.3.3.6.6. Player Position (Goalie or Others)

Activity statistics by player position and results from statistical tests (Wilcoxon sum rank test) are presented in Supplemental Material Section S3.5.

Whole Event (Supplemental Material Section S3.5.1):

Hands to Object Contacts. There were no significant differences ($p < 0.05$) in contact frequency and hourly contact duration between goalies and other positions. There was a significant difference in contact median duration (second) between goalies and other positions with head/face/hair. Goalies contacted their face/hair/head contact for longer periods of time than other players' positions.

Mouthing Events. There were no significant differences in mouthing frequency and hourly contact duration between goalies and other positions. There was a significant difference ($p < 0.05$) in mouthing median duration (second) between goalies and other positions with clothes. Goalies mouthing of clothes was for longer periods of times than other players' positions.

Actions. There were no significant differences between goalies and other positions in frequency of specific actions.

Macro-Activities. There were significant differences in hourly duration (min/hour) between goalies and other positions for the amount of time players spent stretching, sitting on the ground, or running. Goalies spent more time sitting on the ground that other players. Goalies ran and stretched for less minutes per hour than other players positions.

Intensity. There were significant differences on intensity between goalies and other positions for high, light, and resting. Goalies played more time at light and resting intensities in comparison to other players.

During the Game/Practice (Supplemental Material Section S3.5.2.1):

Hands to Object Contacts. There were significant differences ($p < 0.05$) in contact frequency (event/hour) between goalies and other positions with contact with the body while during the game/practice. Goalies had less contacts per hour with body parts than other positions. There were not significant differences in contact hourly duration (min/hour) between goalies and other positions. There was a significant difference in contact median duration (second) between goalies and other positions with face/head/hair. Goalies had longer contact with head/face/hair than other players' positions.

Mouthing Events. There were no significant differences in mouthing frequency, and hourly duration between goalies and other positions while during the game/practice. There was a significant difference in mouthing median duration (second) between goalies and other positions with clothes. Goalies had longer mouthing contact with clothes than other the players' positions.

Actions. There were no significant differences between goalies and other positions in frequency of specific actions.

Macro-Activities. There were significant differences in hourly duration (min/hour) between goalies and other positions for players in the time spent running and stretching while during the game. Goalies were running and stretching less minutes per hour than other players during the game.

Intensity. There were significant differences in hourly duration of player intensity between goalies and other positions for high, median and resting intensity. Goalies had less minutes per hour of high and median intensity than the other players' positions. However, goalies had more minutes per hour of resting intensity than other positions.

Warming Up (Supplemental Material Section S3.5.2.2):

Hands to Object Contacts. There were no significant differences in frequency, duration, or median duration between goalies and other positions while warming up.

Mouthing Events. For the mouthing frequency, duration and median duration, there were no significant differences between goalies and other positions while warming up.

Actions. There were no significant differences between goalies and other positions in

frequency of specific actions while warming up.

Macro-Activities. There were no significant differences between goalies and other positions in hourly duration of macro-activities while warming up.

Intensity. There was a significant difference between goalies and other positions in hourly duration of player intensity. Goalies rested for more minutes per hour than other positions while warming up.

Before/After/Break Time (Supplemental Material Section S3.5.2.3):

Hands to Object Contacts. There were significant differences ($p < 0.05$) in contact frequency (event/hour) between goalies and other positions with field structures and dietary objects. Goalies had less contacts per hour with field structures than other positions. Also, goalies had more contacts per hour with dietary objects than other positions. There was a significant difference in contact hourly duration (min/hour) between goalies and other positions with field structures. Goalies contacted field structured in less minutes per hour than other players' positions. There were significant differences in contact median duration (second) between goalies and other positions with water bottle and dietary objects. Goalies had shorter contact with these objects than other players' positions.

Mouthing events. There were no significant differences in mouthing frequency, hourly duration, and median duration between goalies and other positions.

Actions. There were no significant differences between goalies and other positions in frequency of specific actions.

Macro-Activities. There were no significant differences between goalies and other positions in hourly duration of macro-activities.

Intensity. There were no significant differences between goalies and other positions in hourly duration of player intensity.

Other Combined Time (After/Before/Break/Warming Up Time) But During the Game (Supplemental Material Section S3.5.2.4):

Hands to Object Contacts. There were significant differences ($p < 0.05$) in contact frequency (event/hour) between goalies and other positions with field structures. Goalies had less contacts per hour with field structures than other positions. There was a significant difference in contact hourly duration (min/hour) between goalies and other positions with field structures. Goalies contacted field structured for less minutes per hour than other players' positions. There were significant differences in contact median duration (second) between goalies and other positions with field structures, head/face/hair, and dietary objects. Goalies had shorter contact with field structures and dietary objects than other players' positions. However, goalies had longer contacts with head/face/hair than other players' positions.

Mouthing Events. There were no significant differences in mouthing frequency, and

hourly duration, and median duration between goalies and other positions.

Actions. There were no significant differences between goalies and other positions in frequency of specific actions.

Macro-Activities. There was a significant difference between goalies and other positions in hourly duration of players walking. Goalies had less minutes per hour walking than other players positions.

Intensity. There were no significant differences between goalies and other positions in hourly duration of player intensity.

On Field (Supplemental Material Section S3.5.3.1):

Hands to Object Contacts. There was significant difference ($p < 0.05$) in contact frequency (event/hour) between goalies and other positions with field structures while on the field. Goalies had more contacts per hour with field structures. There was a significant difference in contact hourly duration (min/hour) between goalies and other positions with field structures. Goalies contacted field structured for less minutes per hour than other players' positions. There was a significant difference in contact median duration (second) between goalies and other positions dietary objects. Goalies had shorter contacts with these objects than other players' positions.

Mouthing Events. There were no significant differences in mouthing frequency, and hourly duration between goalies and other positions while on the field. There was significant difference in mouthing median duration (second) between goalies and other positions with clothes. Goalies had longer mouthing contacts with clothes than other players' positions.

Actions. There were no significant differences between goalies and other positions in frequency of specific actions while on the field.

Macro-Activities. There were significant differences between goalies and other positions in hourly duration for time spent by players running and sitting on the ground. Goalies ran less minutes per hour than other players' positions, but goalies sat on the ground more minutes per hour than other positions.

Intensity. There were significant differences between goalies and other positions in hourly duration of player intensity while players were at high, moderate, and resting intensities. Goalies rested for more minutes per hour than other positions. However, goalies spent less time playing at high and moderate intensities than other positions.

Off field (Supplemental Material Section S3.5.3.2):

Hands to Object Contacts. There were significant differences ($p < 0.05$) in contact frequency (event/hour) between goalies and other positions with field structures and all objects while off the field. Goalies had less contacts per hour with field structures and all objects compared to other players. There was a significant difference in contact hourly duration (min/hour) between goalies and other positions with field structures. Goalies

contacted field structures for less minutes per hour than other players' positions. There were no significant differences in contact median duration (second) between goalies and other positions.

Mouthing Events. There were no significant differences in mouthing frequency, hourly duration, and median duration between goalies and other positions while off the field.

Actions. There were no significant differences between goalies and other positions in frequency of specific actions while off the field.

Macro-Activities. There were no significant differences between goalies and other positions in hourly duration for each micro-activity while off the field.

Intensity. There was a significant difference between goalies and other positions in hourly duration of player intensity for time that players spent resting while off the field. Goalies rested for more minutes per hour than other positions.

Gloves On (Supplemental Material Section S3.5.4.1):

Hands to Object Contacts. There was significant differences ($p < 0.05$) in contact frequency between goalies with head/face/hair while wearing gloves. Goalies contacted hand/face/hair less times per hour than players in other positions. There were no significant differences ($p < 0.05$) in contact hourly duration between goalies and other positions while players were wearing gloves. There was a significant difference in contact median duration (second) between goalies and other positions with body. Goalies contacted body for shorter durations than other players while wearing gloves.

Mouthing Events. There were no significant differences in mouthing frequency, hourly duration, and median duration between goalies and other positions while wearing gloves.

Gloves Off (Supplemental Material Section S3.5.4.2):

Hands to Object Contacts. There was significant differences ($p < 0.05$) in contact frequency between goalies with footwear while not wearing gloves. Goalies contacted footwear less times per hour than players in other positions. There was a significant difference in contact hourly (min/hour) between goalies and other positions with non-dietary objects and all objects. Goalies contacted these objects more minutes per hour than other positions when not wearing gloves. There were significant differences in contact median duration (second) between goalies and other positions with head/face/hair, soccer ball, non-dietary objects, and all objects. Goalies contacted these objects for longer durations than other players without gloves.

Mouthing Events. There were no significant differences in mouthing frequency, hourly duration and median duration between goalies and other positions when not wearing gloves.

F.3.3.6.7. Event Type (Game or Practice)

Activity statistics by event type and results from statistical tests (Wilcoxon sum rank

test) are presented in the Supplemental Material S3.6.

Whole Event (Supplemental Material Section S3.6.1):

Hands to Object Contacts. Players had significantly more frequent contacts between their hands and clothes during a practice compared to a game. There were no significant differences ($p < 0.05$) in contact hourly duration and median duration between players playing a game or practice.

Mouthing Events. There were no significant differences in mouthing frequency and median duration between players playing a game and practice. There was a significant difference ($p < 0.05$) in mouthing hourly duration (min/hour) between game and practice with dietary objects. Players who were playing a game had more mouthing minutes per hour with dietary objects than players who played in practices.

Actions. There were no significant differences in frequency of specific actions between players who played soccer in a practice and players who played in a game.

Macro-Activities. There was a significant difference in hourly duration (min/hour) between players who played in practice and game when stretching. During practices players stretched for more minutes per hour than players who played in games.

Intensity. There were no significant differences in hourly duration of player intensity between players who played in practices and players who played in games.

During the game/practice (Supplemental Material Section S3.6.2.1):

Hands to Object Contacts. There was a significant difference ($p < 0.05$) in contact frequency (event/hour) between players playing games and practices with field structures while during the game/practice. Players who played in games had less contacts per hour with field structures than other players who played in practices. There was a significant difference in contact hourly duration (min/hour) between players in games or practices with field structures. Players who played in games had less minutes per hour with field structures than players in practices. There was a significant difference in hand contact median duration (second) between players playing games and practices with water bottle and dietary objects. Players who played in games had longer contact with water bottle and dietary objects than players who played in practice while during the game/practice.

Mouthing Events. There was a significant difference in mouthing frequency (event/hour) between players playing in games and practices with body, while during the game and practice. Players who played in games had less mouthing events per hour with body than players who played in practices. There was a significant difference in mouthing hourly duration (min/hour) between players playing games and practices with body while during the game or practice. Players who played in games had less mouthing minutes per hour with body than players who played in practices. There were no significant differences in mouthing median duration between players playing a game and practice, while during the game or practice.

Actions. There were no significant differences in frequency of specific actions between players who played in games and players who played in practices while during the game/practice.

Macro-Activities. There were no significant differences in hourly duration of macro-activities between players who played in games and players who played in practices while during the game/practice.

Intensity. There were no significant differences in hourly duration of intensity between players who played in games and players who played in practices while during the game/practice.

Warming up (Supplemental Material Section S3.6.2.2):

Hands to Object Contacts. There were no significant differences in hourly hand contact duration, or median hand contact duration between players who played in games and players who played in practices while warming up. There was a significant difference in contact frequency (event/hour) between players who played in games and players who played in practices with body, non-dietary and all objects. Players who played in games had less hand contact events per hour with body, non-dietary and all objects than players who played in practices while warming up.

Mouthing Events. There were no significant differences in mouthing frequency, duration and median duration between players who played in games and players who played in practices while warming up.

Actions. There were no significant differences between players who played in games and players who played in practices while warming up in frequency of specific actions.

Macro-Activities. There was a significant difference between players who played in games and players who played in practices for time spent running. Players who played in games spent less minutes per hour running than players who played in practices.

Intensity. There were no significant differences in hourly duration of intensity between players who played in games and players who played in practices during warm up.

Before/after/break time (Supplemental Material Section S3.6.2.3):

Hands to Object Contacts. There was a significant difference ($p < 0.05$) in hand contact frequency (event/hour) between players playing games and practices with body and clothes. Players who played in games had less hand contacts per hour with clothes than other players who played in practices. Players who played in games had more contacts per hour with body than other players who played in practices. There was a significant difference in contact hourly duration (min/hour) between players playing games or practices with body. Players who played in games had more hand hourly contact duration with body than players who played in practices. There was a significant difference in contact median duration (second) between players playing games and practices with artificial turf, field structure, and non-dietary objects. Players who played in games had shorter contact with artificial turf, field structure, and non-dietary objects

than players who played in practice.

Mouthing events. There were significant differences in mouthing frequency (event/hour) between players during games and practices with water bottle, dietary objects and all objects. Players who played in games had less mouthing events per hour with water bottle, dietary objects and all objects than players who played in practices. There were significant differences in hourly duration between players playing games and practices with water bottle, dietary objects and all objects. Players who played in games had less mouthing hourly duration with water bottle, dietary objects and all objects than other players who played in practices. There were no significant differences in mouthing median duration between players playing games and practices.

Actions. There were no significant differences in frequency of specific actions between players who played in games and players who played in practices.

Macro-Activities. There were no significant differences in hourly duration of macro-activities between players who played in games and players who played in practices.

Intensity. There was a significant difference in hourly duration between players who played in games and players who played in practices. Players who played in games had more minutes per hour of high intensity activities than players during practices.

Other Combined Time (After/Before/Break/Warming Up Time) But During the Game (Supplemental Material Section S3.6.2.4):

Hands to Object Contacts. There was a significant difference ($p < 0.05$) in hand contact frequency (event/hour) between players playing in games and practices with body, clothes, non-dietary and all objects. Players who played in games had less hand contacts per hour with clothes, non-dietary and all objects than other players during practices. Players who played in games had more contacts per hour with body than other players during practices. There was a significant difference in contact hourly duration (min/hour) between players playing games and practices with body. Players who played in games had longer hourly duration of contact with body than players during practice. There was a significant difference in contact median duration (second) between players playing games and practices with artificial turf. Players who played in games had shorter contacts with artificial turf than players during practice.

Mouthing Events. There were significant differences in mouthing frequency (event/hour) between players playing in games and practices with water bottle, dietary objects and all objects. Players who played in games had less mouthing events per hour with water bottle, dietary objects and all objects than other players who played in practices. There were significant differences in hourly duration between players playing games and practices with water bottle, dietary objects and all objects. Players who played in games had less mouthing hourly duration with water bottle, dietary objects and all objects than other players who played in practices. There were no significant differences in mouthing median duration between players playing games and practices.

Actions. There were no significant differences in frequency of specific actions between

players who played in games and players who played in practices.

Macro-Activities. There were no significant differences in hourly contact duration of macro-activities between players who played in games and players who played in practices.

Intensity. There were no significant differences in hourly duration of intensity between players who played in games and players who played in practices.

On Field (Supplemental Material Section S3.6.3.1):

Hands to Object Contacts. There was a significant difference ($p < 0.05$) in contact frequency (event/hour) between players playing games and practices with clothes, field structure, water bottle, dietary, non-dietary and all objects while on the field. Players who played in games had less contacts per hour with clothes, field structure, water bottle, non-dietary and all objects than players during practices. There were significant differences in contact hourly duration (min/hour) between players playing games and practices with field structure, water bottle, non-dietary and all objects. Players who played in games had shorter hourly hand contact duration with field structure, water bottle, non-dietary and all objects than other players who played in practices. There were no significant differences in contact median duration (second) between players playing games and practices.

Mouthing Events. There were significant differences in mouthing frequency (event/hour) between players playing games and practices with water bottle, dietary objects and all objects. Players who played in games had less mouthing events per hour with water bottle, dietary objects and all objects than other players who played in practices. There were significant differences in hourly contact duration between players during games and practices with water bottle, dietary objects, non-dietary and all objects. Players who played in games had shorter hourly mouthing duration with water bottle, dietary objects, non-dietary and all objects than other players who played in practices. Players had significantly longer median mouthing duration with all objects during games than during practices.

Actions. There were no significant differences in frequency of specific actions between players who played in games and players who played in practices while on the field.

Macro-Activities. There was a significant difference in hourly duration between players who played in games and players who played in practices. Players who played in games spent more minutes per hour stretching than players during practices while on the field.

Intensity. There were no significant differences in hourly duration of intensity between players who played in games and players who played in practices while on the field.

Off Field (Supplemental Material Section S3.6.3.2):

Hands to Object Contacts. There was a significant difference ($p < 0.05$) in contact frequency (event/hour) between players playing games and practices with body. Players

who played in games had more contacts per hour with body than those during practice. There were significant differences in hand contact hourly duration (min/hour) between players playing games and practices for contacts with body and head/face/hair. Players who played in games had longer hourly duration with body and head/face/hair than players during practices. There were no significant differences in contact median duration (second) between players playing games and practices.

Mouthing Events. There were no significant differences in mouthing frequency and median duration between players during games and practices. Players during games had significantly less hourly mouthing duration with water bottle.

Actions. There were no significant differences in frequency of specific actions between players who played in games and players who played in practices while off the field.

Macro-Activities. There was a significant difference in hourly duration between players who played in games and players who played in practices. Players who played in games spent more minutes per hour stretching than players who played in practices.

Intensity. There were no significant differences in hourly duration of intensity between players who played in games and players who played in practices.

Gloves On (Supplemental Material Section S3.6.4.1):

Hands to Object Contacts. There were no significant differences in contact frequency, hourly duration and median duration between players playing games and practices with gloves on.

Mouthing Events. There were no significant differences in mouthing frequency and hourly duration between players playing games and practices with glove on. There was a significant difference in median duration between players playing games and practices with water bottle and dietary objects. Players who played in games had less mouthing time with water bottles and dietary objects than players who played in practices.

Gloves Off (Supplemental Material Section S3.6.4.2):

Hands to Object Contacts. There was a significant difference ($p < 0.05$) in contact frequency (event/hour) between players playing games and practices with non-dietary objects and all objects. Players who played in games had less contacts per hour with these objects. There were no significant differences in contact hourly duration and median duration between players playing games and practices.

Mouthing Events. There were no significant differences in mouthing frequency and median mouthing duration between players during games and practices. There was a significant difference in hourly mouthing duration between players playing games and practices with dietary objects while gloves were off. Players who played in games had less mouthing minutes per hour with dietary objects than players during practice while gloves were off.

F.3.4. References

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F.4. Adjustment Factors for Inhalation Exposure (AF_{inh}) and Inhalation Exposure Concentration (C_{inh})

This section presents:

- the acute inhalation exposure concentration (Acute C_{inh}) for exposure to chemicals with available acute inhalation toxicity criteria (Acute TC_{inh}).
- the adjustment factors of chronic inhalation exposure to general chemicals (AF_{inh}) and one-day inhalation exposure to developmental and reproductive toxicants (DARTs, $AF_{inh\text{-}DART}$).
- the one-day inhalation exposure concentration of DARTs ($C_{inh\text{-}DART}$), the chronic inhalation exposure concentration of general chemicals (Chronic C_{inh}) and sensory irritants (Chronic $C_{inh\text{-}sensory}$) for chemicals with available inhalation toxicity criteria (DART TC_{inh}, TC_{inh}, and Sensory TC_{inh}).

Acute C_{inh} values are used to assess acute non-cancer hazard, while $C_{inh\text{-}DART}$, Chronic C_{inh}, and Chronic $C_{inh\text{-}sensory}$ values are used to assess one-day or chronic non-cancer hazards from inhalation exposure to the three groups of chemicals on synthetic turf fields. The receptor- and age-specific $AF_{inh\text{-}DART}$ addresses a less than 24 hours per day exposure of DARTs at the fields, whereas the receptor- and age-specific AF_{inh} addresses a less than 365 days per year and a less than 24 hours per day exposure of general chemicals at synthetic turf fields. These adjustment factors are used to derive the values of $C_{inh\text{-}DART}$ and Chronic C_{inh}, respectively, by modifying the field-specific average concentrations ($C_{air\text{-}field}$) of DARTs detected in air on each synthetic turf field and the mean of the 35 individual field average concentrations ($C_{air\text{-}avg}$) of general chemicals. No adjustment factor is applied to modify the $C_{air\text{-}avg}$ in the calculation of Chronic $C_{inh\text{-}sensory}$. Details of how to calculate the $AF_{inh\text{-}DART}$, AF_{inh}, $C_{inh\text{-}DART}$, Chronic C_{inh}, and Chronic $C_{inh\text{-}sensory}$ are presented in Main Report Section 5.4 and Appendix B Section B.3.4. An example calculation is presented in Appendix Section G.1.

F.4.1. Acute Inhalation Exposure Concentration (Acute C_{inh}) for Non-Cancer Hazard Assessment of Chemicals with Available Acute Inhalation Toxicity Criteria

Table F-96. Acute Inhalation Exposure Concentration[a] (Acute C_{inh}, nanograms per cubic meter) for Exposure to Chemicals[b] with Available Acute Inhalation Toxicity Criteria—Combined Gender and **All Receptor Categories**

Chemical[a]	CASRN	Acute C_{inh}[b]	
		On Field	On Field
Field-Related Chemical			
Styrene	100-42-5	1600	1400
Non-Field-Related Chemicals			
Acetaldehyde	75-07-0	9700	not sampled
Benzene	71-43-2	3700	3500
2-Butanone	78-93-3	1900	not sampled
2-Butoxyethanol	111-76-2	1000	480
Formaldehyde	50-00-0	17000	not sampled
Phenol	108-95-2	210	210

Chemical[a]	CASRN	Acute C_{inh}[b]	
		On Field	On Field
Tetrachloroethylene	127-18-4	420	420
Toluene	108-88-3	12000	10000
m/p-Xylene	106-42-3	5200	5200
o-Xylene	95-47-6	2100	2000

[a] Only chemicals with available acute toxicity criteria for inhalation are shown in the table.
[b] On-field Acute C_{inh} equals the maximum concentration of a chemical detected in air on the 35 synthetic turf fields. Off-field Acute C_{inh} equals the maximum concentration of a chemical detected in air off the 35 synthetic turf fields.
[c] Selected carbonyls, collected using 2,4-dinitrophenylhydrazine-cartiridges, were not sampled at off the field locations during the statewide sample collections.
CASRN: Chemical Abstracts Service Registry Number. Values are rounded to two significant figures.

F.4.2. Adjustment Factor for One-Day Inhalation Exposure for Non-Cancer Hazard Assessment of DARTs ($AF_{inh\text{-}DART}$).

Table F-97. Values of Adjustment Factor of One-Day Inhalation Exposure to DARTs ($AF_{inh\text{-}DART}$, unitless)—Combined Gender and **All Receptor Categories**

Age Group, years	$AF_{inh\text{-}DART}$			
	Athletes	Coaches	Referees	Spectators
Third Trimester Fetus	Not applicable	Not applicable	Not applicable	0.049
0<2	Not applicable	Not applicable	Not applicable	0.40
2<6	0.73	Not applicable	Not applicable	0.21
6<11	0.55	Not applicable	Not applicable	0.20
11<16	0.46	Not applicable	Not applicable	0.086
16<30	0.68	0.29	0.27	0.057
30<40	0.45	0.25	0.23	0.050
40<50	0.45	0.25	0.24	0.050
50<70	0.49	0.25	0.24	0.050

Values are rounded to two significant figures.

Table F-98. Values of Exposure Factors Used to Calculate Adjustment Factors of One-Day Inhalation Exposure to DARTs ($AF_{inh\text{-}DART}$, unitless)–Combined Gender **Athletes**

Age Group, years	Practice BR_{TW}, cubic meters per hour	Practice ET, hours per event	Game BR_{TW}, cubic meters per hour	Game ET, hours per event	V_{event}, cubic meters per event	BW, kilograms	$AF_{inh\text{-}DART}$
2<6	1.4	1.5	1.5	4.3	4.3	20.5	0.73
6<11	2.3	2.1	2.3	2.3	5.1	32.0	0.55
11<16	2.8	2.3	2.9	2.2	6.4	48.7	0.46
16<30	4.2	2.8	4.4	3.1	12.7	65.8	0.68
30<40	3.6	3.1	4.0	2.1	9.8	75.3	0.45
40<50	3.9	2.5	4.0	2.4	9.7	74.5	0.45

Age Group, years	Practice BR_{TW}, cubic meters per hour	Practice ET, hours per event	Game BR_{TW}, cubic meters per hour	Game ET, hours per event	V_{event}, cubic meters per event	BW, kilograms	$AF_{inh\text{-}DART}$
50<70	4.1	2.3	4.4	2.6	10.4	74.3	0.49

$AF_{inh\text{-}DART}$: adjustment factor of chronic exposure to a reproductive or developmental toxicant for a receptor category in an age group, values are rounded to two significant figures; BR_{TW}: time-weighted one-hour breathing rate of a receptor category in an age group for an event type, values are rounded to one decimal place; ET: mean of the maximum time spent on field per event of a receptor category in an age group for an event type, values are rounded to one decimal place; V_{event}: average volume of air a receptor inhales during a soccer event, values are rounded to one decimal place; and BW: receptor category and age-specific bodyweight, values are rounded to one decimal place.

Table F-99. Values of Exposure Factors Used to Calculate Adjustment Factors of One-Day Inhalation Exposure to DARTs ($AF_{inh\text{-}DART}$, unitless)—Combined Gender **Coaches**

Age Group, years	Practice BR_{TW}, cubic meters per hour	Practice ET, hours per event	Game BR_{TW}, cubic meters per hour	Game ET, hours per event	V_{event}, cubic meters per event	BW, kilograms	$AF_{inh\text{-}DART}$
16<30	1.9	3.1	1.6	3.1	5.4	65.8	0.29
30<40	1.9	3.1	1.6	3.1	5.4	75.3	0.25
40<50	1.9	3.1	1.6	3.1	5.4	74.5	0.25
50<70	1.9	3.1	1.6	3.1	5.4	74.3	0.25

$AF_{inh\text{-}DART}$: adjustment factor of chronic exposure to a reproductive or developmental toxicant for a receptor category in an age group, values are rounded to two significant figures; BR_{TW}: time-weighted one-hour breathing rate of a receptor category in an age group for an event type, values are rounded to one decimal place; ET: mean of the maximum time spent on field per event of a receptor category in an age group for an event type, values are rounded to one decimal place; V_{event}: average volume of air a receptor inhales during a soccer event, values are rounded to one decimal place; and BW: receptor category and age-specific bodyweight, values are rounded to one decimal place.

Table F-100. Values of Exposure Factors and Adjustment Factor of One-Day Inhalation Exposure to DARTs ($AF_{inh\text{-}DART}$, unitless)—Combined Gender **Referees**

Age Group, years	Practice BR_{TW}, cubic meters per hour	Practice ET, hours per event	Game BR_{TW}, cubic meters per hour	Game ET, hours per event	V_{event}, cubic meters per event	BW, kilograms	$AF_{inh\text{-}DART}$
16<30	Not applicable	Not applicable	1.6	3.1	5.0	65.8	0.27
30<40	Not applicable	Not applicable	1.6	3.1	5.0	75.3	0.23
40<50	Not applicable	Not applicable	1.6	3.1	5.0	74.5	0.24
50<70	Not applicable	Not applicable	1.6	3.1	5.0	74.3	0.24

$AF_{inh\text{-}DART}$: adjustment factor of chronic exposure to a reproductive or developmental toxicant for a receptor category in an age group, values are rounded to two significant figures; BR_{TW}: time-weighted one-hour breathing rate of a receptor category in an age group for an event type, values are rounded to one decimal place; ET: mean of the maximum time spent on field per event of a receptor category in an age group for an event type, values are rounded to one decimal place; V_{event}: average volume of air a receptor inhales during a soccer event, values are rounded to one decimal place; and BW: receptor category and age-specific bodyweight, values are rounded to one decimal place.

Table F-101. Values of Exposure Factors and Adjustment Factor of One-Day Inhalation Exposure to DARTs ($AF_{inh\text{-}DART}$, unitless)—Combined Gender **Spectators**

Age Group, years	Practice BR_{TW}, cubic meters per hour	Practice ET, hours per event	Game BR_{TW}, cubic meters per hour	Game ET, hours per event	V_{event}, cubic meters per event	BW, kilograms	$AF_{inh\text{-}DART}$
Third Trimester Fetus	0.4	2.1	0.4	3.1	1.1	75.6	0.049
0<2	0.4	2.1	0.4	3.1	1.1	9.4	0.40
2<6	0.5	2.1	0.5	3.1	1.2	20.5	0.21
6<11	0.7	2.1	0.7	3.1	1.8	32.0	0.20
11<16	0.5	2.1	0.5	3.1	1.2	48.7	0.086
16<30	0.4	2.1	0.4	3.1	1.1	65.8	0.057
30<40	0.4	2.1	0.4	3.1	1.1	75.3	0.050
40<50	0.4	2.1	0.4	3.1	1.1	74.5	0.050
50<70	0.4	2.1	0.4	3.1	1.1	74.3	0.050

$AF_{inh\text{-}DART}$: adjustment factor of chronic exposure to a reproductive or developmental toxicant for a receptor category in an age group, values are rounded to two significant figures; BR_{TW}: time-weighted one-hour breathing rate of a receptor category in an age group for an event type, values are rounded to one decimal place; ET: mean of the maximum time spent on field per event of a receptor category in an age group for an event type, values are rounded to one decimal place; V_{event}: average volume of air a receptor inhales during a soccer event, values are rounded to one decimal place; and BW: receptor category and age-specific bodyweight, values are rounded to one decimal place.

F.4.3. Adjustment Factor for Chronic Inhalation Exposure for Non-Cancer Hazard Assessment of General Chemicals (AF_{inh})

Table F-102. Values of Adjustment Factor of Chronic Inhalation Exposure to General Chemicals (AF_{inh}, unitless) for Each Receptor Category—Combined Gender and **All Receptor Categories**

Age Group, years	AF_{inh}			
	Athletes	Coaches	Referees	Spectators
Third Trimester Fetus	Not applicable	Not applicable	Not applicable	0.021
0<2	Not applicable	Not applicable	Not applicable	0.17
2<6	0.16	Not applicable	Not applicable	0.087
6<11	0.20	Not applicable	Not applicable	0.083
11<16	0.20	Not applicable	Not applicable	0.036
16<30	0.37	0.15	0.057	0.024
30<40	0.24	0.13	0.050	0.021
40<50	0.24	0.14	0.050	0.021
50<70	0.23	0.14	0.050	0.021

Values are rounded to two significant figures.

Table F-103. Values of Mean Exposure Parameters and Calculated Adjustment Factor of Chronic Inhalation Exposure to General Chemicals (AF_{inh}, unitless)—Combined Gender **Athletes**

Age Group, years	Practice BR_{TW}, cubic meters per hour	Practice ET, hours per event	Game BR_{TW}, cubic meters per hour	Game ET, hours per event	V_{event}, cubic meters per event	BW, kilograms
2<6	1.4	126	1.5	104	20.5	0.16
6<11	2.3	156	2.3	137	32.0	0.20
11<16	2.8	223	2.9	129	48.7	0.20
16<30	4.2	354	4.4	241	65.8	0.37
30<40	3.6	343	4.0	167	75.3	0.24
40<50	3.9	256	4.0	214	74.5	0.24
50<70	4.1	187	4.4	239	74.3	0.23

AET: mean annual event time spent on the field of a receptor category in an age group for an event type, values are rounded to the nearest whole integers; AF_{inh}: adjustment factor of chronic exposure to a chemical for a receptor category in an age group, values are rounded to two significant figures; BR_{TW}: mean time-weighted one-hour breathing rate of a receptor category in an age group for an event type, values are rounded to one decimal place; and BW: mean study-specific bodyweight of an age group, values are rounded to two decimal places.

Table F-104. Values of Mean Exposure Factors and Calculated Adjustment Factor of Chronic Inhalation Exposure to General Chemicals (AF_{inh}, unitless)—Combined Gender **Coaches**

Age Group, years	Practice BR_{TW}, cubic meters per hour	Practice AET, hours per year	Game BR_{TW}, cubic meters per hour	Game AET, hours per year	BW, kilograms	AF_{inh}
16<30	1.9	354	1.6	241	65.8	0.15
30<40	1.9	354	1.6	241	75.3	0.13
40<50	1.9	354	1.6	241	74.5	0.14
50<70	1.9	354	1.6	241	74.3	0.14

AET: mean annual event time spent on the field of a receptor category in an age group for an event type, values are rounded to the nearest whole integers; AF_{inh}: adjustment factor of chronic exposure to a chemical for a receptor category in an age group, values are rounded to two significant figures; BR_{TW}: mean time-weighted one-hour breathing rate of a receptor category in an age group for an event type, values are rounded to one decimal place; and BW: mean study-specific bodyweight of an age group, values are rounded to one decimal place.

Table F-105. Values of Mean Exposure Parameters and Calculated Adjustment Factor of Chronic Inhalation Exposure to General Chemicals (AF_{inh}unitless)—Combined Gender **Referees**

Age Group, years	Practice BR_{TW}, cubic meters per hour	Practice AET, hours per year	Game BR_{TW}, cubic meters per hour	Game AET, hours per year	BW, kilograms	AF_{inh}
16<30	Not applicable	Not applicable	1.6	241	65.8	0.057
30<40	Not applicable	Not applicable	1.6	241	75.3	0.050
40<50	Not applicable	Not applicable	1.6	241	74.5	0.050
50<70	Not applicable	Not applicable	1.6	241	74.3	0.050

AET: mean annual event time spent on the field of a receptor category in an age group for an event type, values are rounded to the nearest whole integers; AF_{inh}: adjustment factor of chronic exposure to a chemical for a receptor category in an age group, values are rounded to two significant figures; BR_{TW}: mean time-weighted one-hour breathing rate of a receptor category in an age group for an event type, values are rounded to one decimal place; and BW: mean study-specific bodyweight of an age group, values are rounded to one decimal place.

Table F-106. Values of Mean Exposure Factors and Calculated Adjustment Factor of Chronic Inhalation Exposure to General Chemicals (AF_{inh}, unitless)—Combined Gender **Spectators**

Age Group, years	Practice BR_{TW}, cubic meters per hour	Practice AET, hours per year	Game BR_{TW}, cubic meters per hour	Game AET, hours per year	BW, kilograms	AF_{inh}
3rd Trimester Fetus	0.4	156	0.4	241	75.6	0.021
0<2	0.4	156	0.4	241	9.4	0.17
2<6	0.5	156	0.5	241	20.5	0.087
6<11	0.7	156	0.7	241	32.0	0.083
11<16	0.5	156	0.5	241	48.7	0.036
16<30	0.4	156	0.4	241	65.8	0.024
30<40	0.4	156	0.4	241	75.3	0.021
40<50	0.4	156	0.4	241	74.5	0.021
50<70	0.4	156	0.4	241	74.3	0.021

AET: mean annual event time spent on the field of a receptor category in an age group for an event type, values are rounded to the nearest whole integers; AF_{inh}: adjustment factor of chronic exposure to a chemical for a receptor category in an age group, values are rounded to two significant figures; BR_{TW}: mean time-weighted one-hour breathing rate of a receptor category in an age group for an event type, values are rounded to one decimal places; and BW: mean study-specific bodyweight of an age group, values are rounded to one decimal place.

F.4.4. One-Day Field-Specific Inhalation Exposure Concentration for DARTs ($C_{inh\text{-}DART\text{-}field}$)

INDIVIDUAL FIELD ASSESSMENT (Table F-107 to Table F-139)

Table F-107. **On-Field** One-Day Field-Specific[a] Inhalation Exposure Concentration[b] ($C_{inh\text{-}DART\text{-}field}$, nanograms per cubic meter) for **DARTs**—Combined Gender **Athletes 2<6 Years**

Chemical	CASRN	Detection	$C_{inh\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Non-Field Related Chemical								
2-Butanone	78-93-3	30	0	420	300	330	890	1000
Field-Related Chemicals								
Benzo[a]pyrene	50-32-8	28	0	0.83	0.88	0.45	2.2	3.4

Chemical	CASRN	Detection	$C_{inh\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Benzo[e]pyrene	192-97-2	6	0	0.014	0.031	0	0.093	0.093
Benzo[g,h,i]perylene	191-24-2	19	0	0.095	0.14	0.036	0.38	0.55
n-Caproic acid vinyl ester	3050-69-9	1	0	4.9	29	0	0	170
Chrysene	218-01-9	13	0	0.15	0.23	0	0.56	0.96
Coronene	191-07-1	10	0	0.062	0.12	0	0.22	0.53
Cyclohexanamine, N-cyclohexyl-	101-83-7	19	0	0.25	0.42	0.17	0.75	2.2
Cyclohexylamine	108-91-8	4	0	1.7	4.9	0	11	23
Cyclopenta[cd]pyrene	27208-37-3	28	0	0.053	0.064	0.02	0.15	0.3
N,N-Dicyclohexylmethylamine	7560-83-0	18	0	0.24	0.34	0.18	1	1.5
Dimethyl phthalate	131-11-3	4	0	2.6	8.7	0	18	45
Bis(2-Ethylhexyl)adipate	103-23-1	1	0	16	92	0	0	540
Indeno[1,2,3-cd]pyrene	193-39-5	3	0	0.078	0.26	0	0.89	0.89
Methyl stearate	112-61-8	10	0	4	8.5	0	27	32
4-tert-Octylphenol	140-66-9	10	0	1.3	2.8	0	7.5	10
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	2	0	0.013	0.053	0	0.077	0.22
Phenol, 4-(1-phenylethyl)-	1988-89-2	9	0	0.32	0.87	0	1.5	4.6

[a] 34 field-specific $C_{inh\text{-}DART\text{-}field}$ values are included in the table.
[b] On-field field-specific $C_{inh\text{-}DART\text{-}field}$ equals the modified field-specific average concentration of a field ($C_{air\text{-}field}$ x $AF_{inh\text{-}DART}$) of a DART (see Appendix Section F.4.2).
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-108. **On-Field** Field-Specific[a] One-Day Inhalation Exposure Concentration[b] ($C_{inh\text{-}DART\text{-}field}$, nanograms per cubic meter air) for **DARTs**—Combined Gender **Athletes 6<11 Years**

Chemical	CASRN	Detection	$C_{inh\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Non-Field Related Chemical								
2-Butanone	78-93-3	30	0	320	230	250	670	780
Field-Related Chemicals								

Chemical	CASRN	Detection	$C_{inh\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Benzo[a]pyrene	50-32-8	28	0	0.63	0.66	0.34	1.7	2.6
Benzo[e]pyrene	192-97-2	6	0	0.01	0.024	0	0.07	0.07
Benzo[g,h,i]perylene	191-24-2	19	0	0.072	0.11	0.028	0.29	0.42
n-Caproic acid vinyl ester	3050-69-9	1	0	3.8	22	0	0	130
Chrysene	218-01-9	13	0	0.11	0.18	0	0.42	0.73
Coronene	191-07-1	10	0	0.047	0.089	0	0.17	0.4
Cyclohexanamine, N-cyclohexyl-	101-83-7	19	0	0.19	0.32	0.13	0.57	1.7
Cyclohexylamine	108-91-8	4	0	1.3	3.7	0	8.5	17
Cyclopenta[cd]pyrene	27208-37-3	28	0	0.04	0.049	0.015	0.12	0.23
N,N-Dicyclohexylmethylamine	7560-83-0	18	0	0.18	0.26	0.14	0.77	1.1
Dimethyl phthalate	131-11-3	4	0	2.0	6.6	0	13	34
Bis(2-Ethylhexyl)adipate	103-23-1	1	0	12	70	0	0	410
Indeno[1,2,3-cd]pyrene	193-39-5	3	0	0.059	0.19	0	0.67	0.67
Methyl stearate	112-61-8	10	0	3.1	6.5	0	21	25
4-tert-Octylphenol	140-66-9	10	0	1.0	2.1	0	5.7	7.7
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	2	0	0.0098	0.04	0	0.058	0.17
Phenol, 4-(1-phenylethyl)-	1988-89-2	9	0	0.24	0.66	0	1.1	3.5

[a] 34 field-specific $C_{inh\text{-}DART\text{-}field}$ values are included in the table.
[b] On-field field-specific $C_{inh\text{-}DART\text{-}field}$ equals the modified field-specific average concentration of a field ($C_{air\text{-}field}$ x $AF_{inh\text{-}DART}$) of a DART (see Appendix Section F.4.2).
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-109. **On-Field** Field-Specific[a] One-Day Inhalation Exposure Concentration[b] ($C_{inh\text{-}DART\text{-}field}$, nanograms per cubic meter air) for **DARTs**—Combined Gender **Athletes 11<16 Years**

Chemical	CASRN	Detection	$C_{inh\text{-}DART}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Non-Field Related Chemical								
2-Butanone	78-93-3	30	0	260	190	210	560	650

Chemical	CASRN	Detection	$C_{inh\text{-}DART}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals								
Benzo[a]pyrene	50-32-8	28	0	0.52	0.55	0.28	1.4	2.2
Benzo[e]pyrene	192-97-2	6	0	0.0086	0.02	0	0.059	0.059
Benzo[g,h,i]perylene	191-24-2	19	0	0.06	0.089	0.023	0.24	0.35
n-Caproic acid vinyl ester	3050-69-9	1	0	3.1	18	0	0	110
Chrysene	218-01-9	13	0	0.094	0.15	0	0.35	0.61
Coronene	191-07-1	10	0	0.039	0.074	0	0.14	0.34
Cyclohexanamine, N-cyclohexyl-	101-83-7	19	0	0.16	0.26	0.11	0.47	1.4
Cyclohexylamine	108-91-8	4	0	1	3.1	0	7.1	14
Cyclopenta[cd]pyrene	27208-37-3	28	0	0.033	0.041	0.012	0.097	0.19
N,N-Dicyclohexylmethylamine	7560-83-0	18	0	0.15	0.22	0.12	0.64	0.92
Dimethyl phthalate	131-11-3	4	0	1.7	5.5	0	11	29
Bis(2-Ethylhexyl)adipate	103-23-1	1	0	10	58	0	0	340
Indeno[1,2,3-cd]pyrene	193-39-5	3	0	0.05	0.16	0	0.56	0.56
Methyl stearate	112-61-8	10	0	2.6	5.4	0	17	20
4-tert-Octylphenol	140-66-9	10	0	0.8	1.7	0	4.7	6.4
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	2	0	0.0082	0.033	0	0.049	0.14
Phenol, 4-(1-phenylethyl)-	1988-89-2	9	0	0.2	0.55	0	0.95	2.9

[a] 34 field-specific $C_{inh\text{-}DART\text{-}field}$ values are included in the table.
[b] On-field field-specific $C_{inh\text{-}DART\text{-}field}$ equals the modified field-specific average concentration of a field ($C_{air\text{-}field}$ x $AF_{inh\text{-}DART}$) of a DART (see Appendix Section F.4.2).
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-110. **On-Field** Field-Specific[a] One-Day Inhalation Exposure Concentration[b] ($C_{inh\text{-}DART\text{-}field}$, nanograms per cubic meter air) for **DARTs**—Combined Gender **Athletes 16<30 Years**

Chemical	CASRN	Detection	$C_{inh\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Non-Field Related Chemical								

Chemical	CASRN	Detection	$C_{inh\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
2-Butanone	78-93-3	30	0	390	280	310	820	950
Field-Related Chemicals								
Benzo[a]pyrene	50-32-8	28	0	0.77	0.81	0.41	2.1	3.2
Benzo[e]pyrene	192-97-2	6	0	0.013	0.029	0	0.086	0.086
Benzo[g,h,i]perylene	191-24-2	19	0	0.088	0.13	0.034	0.35	0.51
n-Caproic acid vinyl ester	3050-69-9	1	0	4.6	27	0	0	160
Chrysene	218-01-9	13	0	0.14	0.21	0	0.52	0.89
Coronene	191-07-1	10	0	0.058	0.11	0	0.2	0.49
Cyclohexanamine, N-cyclohexyl-	101-83-7	19	0	0.23	0.38	0.16	0.69	2.1
Cyclohexylamine	108-91-8	4	0	1.5	4.5	0	10	21
Cyclopenta[cd]pyrene	27208-37-3	28	0	0.049	0.06	0.018	0.14	0.28
N,N-Dicyclohexylmethylamine	7560-83-0	18	0	0.22	0.32	0.17	0.93	1.3
Dimethyl phthalate	131-11-3	4	0	2.4	8.1	0	16	42
Bis(2-Ethylhexyl)adipate	103-23-1	1	0	15	85	0	0	500
Indeno[1,2,3-cd]pyrene	193-39-5	3	0	0.073	0.24	0	0.82	0.82
Methyl stearate	112-61-8	10	0	3.7	7.9	0	25	30
4-tert-Octylphenol	140-66-9	10	0	1.2	2.6	0	7	9.5
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	2	0	0.012	0.049	0	0.071	0.2
Phenol, 4-(1-phenylethyl)-	1988-89-2	9	0	0.3	0.8	0	1.4	4.2

[a] 34 field-specific $C_{inh\text{-}DART\text{-}field}$ values are included in the table.
[b] On-field field-specific $C_{inh\text{-}field\text{-}DART}$ equals the modified field-specific average concentration of a field ($C_{air\text{-}field}$ x $AF_{inh\text{-}DART}$) of a DART (see Appendix Section F.4.2).
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-111. **On-Field** Field-Specific[a] One-Day Inhalation Exposure Concentration[b] ($C_{inh\text{-}DART\text{-}field}$, nanograms per cubic meter air) for **DARTs**—Combined Gender **Athletes 30<40 Years**

Chemical	CASRN	Detection	$C_{inh\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Non-Field Related Chemical								
2-Butanone	78-93-3	30	0	260	190	210	550	640
Field-Related Chemicals								
Benzo[a]pyrene	50-32-8	28	0	0.52	0.55	0.28	1.4	2.1
Benzo[e]pyrene	192-97-2	6	0	0.0085	0.02	0	0.058	0.058
Benzo[g,h,i]perylene	191-24-2	19	0	0.059	0.088	0.023	0.23	0.34
n-Caproic acid vinyl ester	3050-69-9	1	0	3.1	18	0	0	100
Chrysene	218-01-9	13	0	0.093	0.14	0	0.35	0.6
Coronene	191-07-1	10	0	0.039	0.073	0	0.14	0.33
Cyclohexanamine, N-cyclohexyl-	101-83-7	19	0	0.15	0.26	0.1	0.47	1.4
Cyclohexylamine	108-91-8	4	0	1	3.1	0	7	14
Cyclopenta[cd]pyrene	27208-37-3	28	0	0.033	0.04	0.012	0.095	0.19
N,N-Dicyclohexylmethylamine	7560-83-0	18	0	0.15	0.21	0.11	0.63	0.9
Dimethyl phthalate	131-11-3	4	0	1.6	5.4	0	11	28
Bis(2-Ethylhexyl)adipate	103-23-1	1	0	9.8	57	0	0	330
Indeno[1,2,3-cd]pyrene	193-39-5	3	0	0.049	0.16	0	0.55	0.55
Methyl stearate	112-61-8	10	0	2.5	5.3	0	17	20
4-tert-Octylphenol	140-66-9	10	0	0.8	1.7	0	4.7	6.4
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	2	0	0.0081	0.033	0	0.048	0.14
Phenol, 4-(1-phenylethyl)-	1988-89-2	9	0	0.2	0.54	0	0.94	2.9

[a] 34 field-specific $C_{inh\text{-}DART\text{-}field}$ values are included in the table.
[b] On-field field-specific $C_{inh\text{-}DART\text{-}field}$ equals the modified field-specific average concentration of a field ($C_{air\text{-}field}$ x $AF_{inh\text{-}DART}$) of a DART (see Appendix Section F.4.2).
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-112. **On-Field** Field-Specific[a] One-Day Inhalation Exposure Concentration[b] ($C_{inh\text{-}DART\text{-}field}$, nanograms per cubic meter air) for **DARTs**—Combined Gender **Athletes 40<50 Years**

Chemical	CASRN	Detection	$C_{inh\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Non-Field Related Chemical								
2-Butanone	78-93-3	30	0	260	190	210	550	640
Field-Related Chemicals								
Benzo[a]pyrene	50-32-8	28	0	0.52	0.55	0.28	1.4	2.1
Benzo[e]pyrene	192-97-2	6	0	0.0085	0.02	0	0.058	0.058
Benzo[g,h,i]perylene	191-24-2	19	0	0.059	0.088	0.023	0.23	0.34
n-Caproic acid vinyl ester	3050-69-9	1	0	3.1	18	0	0	100
Chrysene	218-01-9	13	0	0.093	0.14	0	0.35	0.6
Coronene	191-07-1	10	0	0.039	0.073	0	0.14	0.33
Cyclohexanamine, N-cyclohexyl-	101-83-7	19	0	0.15	0.26	0.1	0.47	1.4
Cyclohexylamine	108-91-8	4	0	1	3.1	0	7	14
Cyclopenta[cd]pyrene	27208-37-3	28	0	0.033	0.04	0.012	0.095	0.19
N,N-Dicyclohexylmethylamine	7560-83-0	18	0	0.15	0.21	0.11	0.63	0.9
Dimethyl phthalate	131-11-3	4	0	1.6	5.4	0	11	28
Bis(2-Ethylhexyl)adipate	103-23-1	1	0	9.8	57	0	0	330
Indeno[1,2,3-cd]pyrene	193-39-5	3	0	0.049	0.16	0	0.55	0.55
Methyl stearate	112-61-8	10	0	2.5	5.3	0	17	20
4-tert-Octylphenol	140-66-9	10	0	0.8	1.7	0	4.7	6.4
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	2	0	0.0081	0.033	0	0.048	0.14
Phenol, 4-(1-phenylethyl)-	1988-89-2	9	0	0.2	0.54	0	0.94	2.9

[a] 34 field-specific $C_{inh\text{-}DART\text{-}field}$ values are included in the table.
[b] On-field field-specific $C_{inh\text{-}DART\text{-}field}$ equals the modified field-specific average concentration of a field ($C_{air\text{-}field}$ x $AF_{inh\text{-}DART}$) of a DART (see Appendix Section F.4.2).
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-113. **On-Field** Field-Specific[a] One-Day Inhalation Exposure Concentration[b] ($C_{inh\text{-}DART\text{-}field}$, nanograms per cubic meter air) for **DARTs**—Combined Gender **Athletes 50<70 Years**

Chemical	CASRN	Detection	$C_{inh\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Non-Field Related Chemical								
2-Butanone	78-93-3	30	0	280	200	220	600	690
Field-Related Chemicals								
Benzo[a]pyrene	50-32-8	28	0	0.56	0.59	0.3	1.5	2.3
Benzo[e]pyrene	192-97-2	6	0	0.0092	0.021	0	0.062	0.062
Benzo[g,h,i]perylene	191-24-2	19	0	0.064	0.095	0.024	0.25	0.37
n-Caproic acid vinyl ester	3050-69-9	1	0	3.3	19	0	0	110
Chrysene	218-01-9	13	0	0.1	0.16	0	0.38	0.65
Coronene	191-07-1	10	0	0.042	0.079	0	0.15	0.36
Cyclohexanamine, N-cyclohexyl-	101-83-7	19	0	0.17	0.28	0.11	0.5	1.5
Cyclohexylamine	108-91-8	4	0	1.1	3.3	0	7.6	15
Cyclopenta[cd]pyrene	27208-37-3	28	0	0.036	0.043	0.013	0.1	0.2
N,N-Dicyclohexylmethylamine	7560-83-0	18	0	0.16	0.23	0.12	0.68	0.98
Dimethyl phthalate	131-11-3	4	0	1.8	5.9	0	12	30
Bis(2-Ethylhexyl)adipate	103-23-1	1	0	11	62	0	0	360
Indeno[1,2,3-cd]pyrene	193-39-5	3	0	0.053	0.17	0	0.6	0.6
Methyl stearate	112-61-8	10	0	2.7	5.7	0	18	22
4-tert-Octylphenol	140-66-9	10	0	0.9	1.9	0	5.1	6.9
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	2	0	0.0087	0.035	0	0.052	0.15
Phenol, 4-(1-phenylethyl)-	1988-89-2	9	0	0.22	0.58	0	1	3.1

[a] 34 field-specific $C_{inh\text{-}DART\text{-}field}$ values are included in the table.

[b] On-field field-specific $C_{inh\text{-}DART\text{-}field}$ equals the modified field-specific average concentration of a field ($C_{air\text{-}field}$ x $AF_{inh\text{-}DART}$) of a DART (see Appendix Section F.4.2).

CASRN: Chemical Abstracts Service Registry Number

Values are rounded to two significant figures.

Table F-114. **On-Field** Field-Specific[a] One-Day Inhalation Exposure Concentration[b] ($C_{inh\text{-}DART\text{-}field}$, nanograms per cubic meter air) for **DARTs**—Combined Gender **Coaches 16<30 Years**

Chemical	CASRN	Detection	$C_{inh\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Non-Field Related Chemical								
2-Butanone	78-93-3	30	0	170	120	130	350	410
Field-Related Chemicals								
Benzo[a]pyrene	50-32-8	28	0	0.33	0.35	0.18	0.88	1.4
Benzo[e]pyrene	192-97-2	6	0	0.0054	0.012	0	0.037	0.037
Benzo[g,h,i]perylene	191-24-2	19	0	0.037	0.055	0.014	0.15	0.22
n-Caproic acid vinyl ester	3050-69-9	1	0	1.9	11	0	0	66
Chrysene	218-01-9	13	0	0.059	0.091	0	0.22	0.38
Coronene	191-07-1	10	0	0.025	0.046	0	0.087	0.21
Cyclohexanamine, N-cyclohexyl-	101-83-7	19	0	0.097	0.16	0.066	0.29	0.88
Cyclohexylamine	108-91-8	4	0	0.65	1.9	0	4.4	8.9
Cyclopenta[cd]pyrene	27208-37-3	28	0	0.021	0.025	0.0078	0.06	0.12
N,N-Dicyclohexylmethylamine	7560-83-0	18	0	0.096	0.13	0.072	0.4	0.57
Dimethyl phthalate	131-11-3	4	0	1.0	3.4	0	7	18
Bis(2-Ethylhexyl)adipate	103-23-1	1	0	6.2	36	0	0	210
Indeno[1,2,3-cd]pyrene	193-39-5	3	0	0.031	0.1	0	0.35	0.35
Methyl stearate	112-61-8	10	0	1.6	3.4	0	11	13
4-tert-Octylphenol	140-66-9	10	0	0.5	1.1	0	3	4
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	2	0	0.0051	0.021	0	0.03	0.087
Phenol, 4-(1-phenylethyl)-	1988-89-2	9	0	0.13	0.34	0	0.59	1.8

[a] 34 field-specific $C_{inh\text{-}DART\text{-}field}$ values are included in the table.

[b] On-field field-specific $C_{inh\text{-}DART\text{-}field}$ equals the modified field-specific average concentration of a field ($C_{air\text{-}field}$ x $AF_{inh\text{-}DART}$) of a DART (see Appendix Section F.4.2).

CASRN: Chemical Abstracts Service Registry Number

Values are rounded to two significant figures.

Table F-115. **On-Field** Field-Specific[a] One-Day Inhalation Exposure Concentration[b] ($C_{inh\text{-}DART\text{-}field}$, nanograms per cubic meter air) for **DARTs**—Combined Gender **Coaches 30<40 Years**

Chemical	CASRN	Detection	$C_{inh\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Non-Field Related Chemical								
2-Butanone	78-93-3	30	0	140	100	110	310	350
Field-Related Chemicals								
Benzo[a]pyrene	50-32-8	28	0	0.29	0.3	0.15	0.77	1.2
Benzo[e]pyrene	192-97-2	6	0	0.0047	0.011	0	0.032	0.032
Benzo[g,h,i]perylene	191-24-2	19	0	0.033	0.048	0.013	0.13	0.19
n-Caproic acid vinyl ester	3050-69-9	1	0	1.7	9.9	0	0	58
Chrysene	218-01-9	13	0	0.051	0.08	0	0.19	0.33
Coronene	191-07-1	10	0	0.021	0.04	0	0.076	0.18
Cyclohexanamine, N-cyclohexyl-	101-83-7	19	0	0.085	0.14	0.058	0.26	0.77
Cyclohexylamine	108-91-8	4	0	0.57	1.7	0	3.9	7.8
Cyclopenta[cd]pyrene	27208-37-3	28	0	0.018	0.022	0.0068	0.053	0.1
N,N-Dicyclohexylmethylamine	7560-83-0	18	0	0.084	0.12	0.063	0.35	0.5
Dimethyl phthalate	131-11-3	4	0	0.9	3	0	6.1	16
Bis(2-Ethylhexyl)adipate	103-23-1	1	0	5.4	32	0	0	180
Indeno[1,2,3-cd]pyrene	193-39-5	3	0	0.027	0.088	0	0.31	0.31
Methyl stearate	112-61-8	10	0	1.4	2.9	0	9.4	11
4-tert-Octylphenol	140-66-9	10	0	0.5	0.95	0	2.6	3.5
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	2	0	0.0045	0.018	0	0.027	0.076
Phenol, 4-(1-phenylethyl)-	1988-89-2	9	0	0.11	0.3	0	0.52	1.6

[a] 34 field-specific $C_{inh\text{-}DART\text{-}field}$ values are included in the table.
[b] On-field field-specific $C_{inh\text{-}DART\text{-}field}$ equals the modified field-specific average concentration of a field ($C_{air\text{-}field}$ x $AF_{inh\text{-}DART}$) of a DART (see Appendix Section F.4.2).
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-116. **On-Field** Field-Specific[a] One-Day Inhalation Exposure Concentration[b] ($C_{inh\text{-}DART\text{-}field}$, nanograms per cubic meter air) for **DARTs**—Combined Gender **Coaches 40<50 Years**

Chemical	CASRN	Detection	$C_{inh\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Non-Field Related Chemical								
2-Butanone	78-93-3	30	0	150	100	120	310	360
Field-Related Chemicals								
Benzo[a]pyrene	50-32-8	28	0	0.29	0.3	0.15	0.78	1.2
Benzo[e]pyrene	192-97-2	6	0	0.0048	0.011	0	0.032	0.032
Benzo[g,h,i]perylene	191-24-2	19	0	0.033	0.049	0.013	0.13	0.19
n-Caproic acid vinyl ester	3050-69-9	1	0	1.7	10	0	0	59
Chrysene	218-01-9	13	0	0.052	0.081	0	0.2	0.34
Coronene	191-07-1	10	0	0.022	0.041	0	0.076	0.19
Cyclohexanamine, N-cyclohexyl-	101-83-7	19	0	0.086	0.14	0.059	0.26	0.78
Cyclohexylamine	108-91-8	4	0	0.58	1.7	0	3.9	7.8
Cyclopenta[cd]pyrene	27208-37-3	28	0	0.018	0.022	0.0069	0.053	0.1
N,N-Dicyclohexylmethylamine	7560-83-0	18	0	0.085	0.12	0.064	0.35	0.51
Dimethyl phthalate	131-11-3	4	0	0.9	3	0	6.2	16
Bis(2-Ethylhexyl)adipate	103-23-1	1	0	5.5	32	0	0	190
Indeno[1,2,3-cd]pyrene	193-39-5	3	0	0.027	0.089	0	0.31	0.31
Methyl stearate	112-61-8	10	0	1.4	3	0	9.5	11
4-tert-Octylphenol	140-66-9	10	0	0.5	0.96	0	2.6	3.6
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	2	0	0.0045	0.018	0	0.027	0.077
Phenol, 4-(1-phenylethyl)-	1988-89-2	9	0	0.11	0.3	0	0.52	1.6

[a] 34 field-specific $C_{inh\text{-}DART\text{-}field}$ values are included in the table.

[b] On-field field-specific $C_{inh\text{-}DART\text{-}field}$ equals the modified field-specific average concentration of a field ($C_{air\text{-}field}$ x $AF_{inh\text{-}DART}$) of a DART (see Appendix Section F.4.2).

CASRN: Chemical Abstracts Service Registry Number

Values are rounded to two significant figures.

Table F-117. **On-Field** Field-Specific[a] One-Day Inhalation Exposure Concentration[b] ($C_{inh\text{-}DART\text{-}field}$, nanograms per cubic meter air) for **DARTs**—Combined Gender **Coaches 50<70 Years**

Chemical	CASRN	Detection	$C_{inh\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Non-Field Related Chemical								
2-Butanone	78-93-3	30	0	150	110	120	310	360
Field-Related Chemicals								
Benzo[a]pyrene	50-32-8	28	0	0.29	0.31	0.16	0.78	1.2
Benzo[e]pyrene	192-97-2	6	0	0.0048	0.011	0	0.032	0.032
Benzo[g,h,i]perylene	191-24-2	19	0	0.033	0.049	0.013	0.13	0.19
n-Caproic acid vinyl ester	3050-69-9	1	0	1.7	10	0	0	59
Chrysene	218-01-9	13	0	0.052	0.081	0	0.2	0.34
Coronene	191-07-1	10	0	0.022	0.041	0	0.077	0.19
Cyclohexanamine, N-cyclohexyl-	101-83-7	19	0	0.086	0.15	0.059	0.26	0.78
Cyclohexylamine	108-91-8	4	0	0.58	1.7	0	3.9	7.9
Cyclopenta[cd]pyrene	27208-37-3	28	0	0.018	0.022	0.0069	0.054	0.11
N,N-Dicyclohexylmethylamine	7560-83-0	18	0	0.085	0.12	0.064	0.35	0.51
Dimethyl phthalate	131-11-3	4	0	0.9	3	0	6.2	16
Bis(2-Ethylhexyl)adipate	103-23-1	1	0	5.5	32	0	0	190
Indeno[1,2,3-cd]pyrene	193-39-5	3	0	0.027	0.089	0	0.31	0.31
Methyl stearate	112-61-8	10	0	1.4	3	0	9.5	11
4-tert-Octylphenol	140-66-9	10	0	0.5	0.97	0	2.6	3.6
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	2	0	0.0045	0.018	0	0.027	0.077
Phenol, 4-(1-phenylethyl)-	1988-89-2	9	0	0.11	0.3	0	0.52	1.6

[a] 34 field-specific $C_{inh\text{-}DART\text{-}field}$ values are included in the table.

[b] On-field field-specific $C_{inh\text{-}DART\text{-}field}$ equals the modified field-specific average concentration of a field ($C_{air\text{-}field}$ x $AF_{inh\text{-}DART}$) of a DART (see Appendix Section F.4.2).

CASRN: Chemical Abstracts Service Registry Number

Values are rounded to two significant figures.

Table F-118. **On-Field** Field-Specific[a] One-Day Inhalation Exposure Concentration[b] ($C_{inh\text{-}DART\text{-}field}$, nanograms per cubic meter air) for **DARTs**—Combined Gender **Referees 16<30 Years**

Chemical	CASRN	Detection	$C_{inh\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Non-Field Related Chemical								
2-Butanone	78-93-3	30	0	150	110	120	320	380
Field-Related Chemicals								
Benzo[a]pyrene	50-32-8	28	0	0.3	0.32	0.16	0.82	1.3
Benzo[e]pyrene	192-97-2	6	0	0.005	0.011	0	0.034	0.034
Benzo[g,h,i]perylene	191-24-2	19	0	0.035	0.052	0.013	0.14	0.2
n-Caproic acid vinyl ester	3050-69-9	1	0	1.8	11	0	0	62
Chrysene	218-01-9	13	0	0.055	0.085	0	0.21	0.35
Coronene	191-07-1	10	0	0.023	0.043	0	0.08	0.19
Cyclohexanamine, N-cyclohexyl-	101-83-7	19	0	0.09	0.15	0.062	0.27	0.82
Cyclohexylamine	108-91-8	4	0	0.61	1.8	0	4.1	8.3
Cyclopenta[cd]pyrene	27208-37-3	28	0	0.019	0.024	0.0072	0.056	0.11
N,N-Dicyclohexylmethylamine	7560-83-0	18	0	0.089	0.13	0.067	0.37	0.53
Dimethyl phthalate	131-11-3	4	0	1.0	3.2	0	6.5	17
Bis(2-Ethylhexyl)adipate	103-23-1	1	0	5.8	34	0	0	200
Indeno[1,2,3-cd]pyrene	193-39-5	3	0	0.029	0.094	0	0.33	0.33
Methyl stearate	112-61-8	10	0	1.5	3.1	0	9.9	12
4-tert-Octylphenol	140-66-9	10	0	0.5	1	0	2.7	3.7
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	2	0	0.0047	0.019	0	0.028	0.081
Phenol, 4-(1-phenylethyl)-	1988-89-2	9	0	0.12	0.32	0	0.55	1.7

[a] 34 field-specific $C_{inh\text{-}DART\text{-}field}$ values are included in the table.

[b] On-field field-specific $C_{inh\text{-}DART\text{-}field}$ equals the modified field-specific average concentration of a field ($C_{air\text{-}field}$ x $AF_{inh\text{-}DART}$) of a DART (see Appendix Section F.4.2).

CASRN: Chemical Abstracts Service Registry Number

Values are rounded to two significant figures.

Table F-119. **On-Field** Field-Specific[a] One-Day Inhalation Exposure Concentration[b] ($C_{inh\text{-}DART\text{-}field}$, nanograms per cubic meter air) for **DARTs**—Combined Gender **Referees 30<40 Years**

Chemical	CASRN	Detection	$C_{inh\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Non-Field Related Chemical								
2-Butanone	78-93-3	30	0	130	96	110	280	330
Field-Related Chemicals								
Benzo[a]pyrene	50-32-8	28	0	0.27	0.28	0.14	0.72	1.1
Benzo[e]pyrene	192-97-2	6	0	0.0044	0.01	0	0.03	0.03
Benzo[g,h,i]perylene	191-24-2	19	0	0.03	0.045	0.012	0.12	0.18
n-Caproic acid vinyl ester	3050-69-9	1	0	1.6	9.2	0	0	54
Chrysene	218-01-9	13	0	0.048	0.074	0	0.18	0.31
Coronene	191-07-1	10	0	0.02	0.038	0	0.07	0.17
Cyclohexanamine, N-cyclohexyl-	101-83-7	19	0	0.079	0.13	0.054	0.24	0.72
Cyclohexylamine	108-91-8	4	0	0.53	1.6	0	3.6	7.2
Cyclopenta[cd]pyrene	27208-37-3	28	0	0.017	0.021	0.0063	0.049	0.096
N,N-Dicyclohexylmethylamine	7560-83-0	18	0	0.078	0.11	0.059	0.32	0.46
Dimethyl phthalate	131-11-3	4	0	0.8	2.8	0	5.7	14
Bis(2-Ethylhexyl)adipate	103-23-1	1	0	5	29	0	0	170
Indeno[1,2,3-cd]pyrene	193-39-5	3	0	0.025	0.082	0	0.28	0.28
Methyl stearate	112-61-8	10	0	1.3	2.7	0	8.7	10
4-tert-Octylphenol	140-66-9	10	0	0.4	0.89	0	2.4	3.3
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	2	0	0.0041	0.017	0	0.025	0.07
Phenol, 4-(1-phenylethyl)-	1988-89-2	9	0	0.1	0.28	0	0.48	1.5

[a] 34 field-specific $C_{inh\text{-}DART\text{-}field}$ values are included in the table.

[b] On-field field-specific $C_{inh\text{-}DART\text{-}field}$ equals the modified field-specific average concentration of a field ($C_{air\text{-}field}$ x $AF_{inh\text{-}DART}$) of a DART (see Appendix Section F.4.2).

CASRN: Chemical Abstracts Service Registry Number

Values are rounded to two significant figures.

Table F-120. **On-Field** Field-Specific[a] One-Day Inhalation Exposure Concentration[b] ($C_{inh\text{-}DART\text{-}field}$, nanograms per cubic meter air) for **DARTs**—Combined Gender **Referees 40<50 Years**

Chemical	CASRN	Detection	$C_{inh\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Non-Field Related Chemical								
2-Butanone	78-93-3	30	0	140	97	110	290	330
Field-Related Chemicals								
Benzo[a]pyrene	50-32-8	28	0	0.27	0.28	0.14	0.72	1.1
Benzo[e]pyrene	192-97-2	6	0	0.0044	0.01	0	0.03	0.03
Benzo[g,h,i]perylene	191-24-2	19	0	0.031	0.045	0.012	0.12	0.18
n-Caproic acid vinyl ester	3050-69-9	1	0	1.6	9.3	0	0	54
Chrysene	218-01-9	13	0	0.048	0.075	0	0.18	0.31
Coronene	191-07-1	10	0	0.02	0.038	0	0.071	0.17
Cyclohexanamine, N-cyclohexyl-	101-83-7	19	0	0.08	0.13	0.054	0.24	0.73
Cyclohexylamine	108-91-8	4	0	0.54	1.6	0	3.6	7.3
Cyclopenta[cd]pyrene	27208-37-3	28	0	0.017	0.021	0.0064	0.05	0.097
N,N-Dicyclohexylmethylamine	7560-83-0	18	0	0.078	0.11	0.059	0.33	0.47
Dimethyl phthalate	131-11-3	4	0	0.9	2.8	0	5.7	15
Bis(2-Ethylhexyl)adipate	103-23-1	1	0	5.1	30	0	0	170
Indeno[1,2,3-cd]pyrene	193-39-5	3	0	0.025	0.083	0	0.29	0.29
Methyl stearate	112-61-8	10	0	1.3	2.8	0	8.8	10
4-tert-Octylphenol	140-66-9	10	0	0.4	0.9	0	2.4	3.3
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	2	0	0.0042	0.017	0	0.025	0.071
Phenol, 4-(1-phenylethyl)-	1988-89-2	9	0	0.1	0.28	0	0.49	1.5

[a] 34 field-specific $C_{inh\text{-}DART\text{-}field}$ values are included in the table.
[b] On-field field-specific $C_{inh\text{-}DART\text{-}field}$ equals the modified field-specific average concentration of a field ($C_{air\text{-}field}$ x $AF_{inh\text{-}DART}$) of a DART (see Appendix Section F.4.2).
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-121. **On-Field** Field-Specific[a] One-Day Inhalation Exposure Concentration[b] ($C_{inh\text{-}DART\text{-}field}$, nanograms per cubic meter air) for **DARTs**—Combined Gender **Referees 50<70 Years**

Chemical	CASRN	Detection	$C_{inh\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Non-Field Related Chemical								
2-Butanone	78-93-3	30	0	140	98	110	290	330
Field-Related Chemicals								
Benzo[a]pyrene	50-32-8	28	0	0.27	0.28	0.14	0.73	1.1
Benzo[e]pyrene	192-97-2	6	0	0.0044	0.01	0	0.03	0.03
Benzo[g,h,i]perylene	191-24-2	19	0	0.031	0.046	0.012	0.12	0.18
n-Caproic acid vinyl ester	3050-69-9	1	0	1.6	9.3	0	0	55
Chrysene	218-01-9	13	0	0.048	0.075	0	0.18	0.31
Coronene	191-07-1	10	0	0.02	0.038	0	0.071	0.17
Cyclohexanamine, N-cyclohexyl-	101-83-7	19	0	0.08	0.13	0.055	0.24	0.73
Cyclohexylamine	108-91-8	4	0	0.54	1.6	0	3.7	7.3
Cyclopenta[cd]pyrene	27208-37-3	28	0	0.017	0.021	0.0064	0.05	0.097
N,N-Dicyclohexylmethylamine	7560-83-0	18	0	0.079	0.11	0.059	0.33	0.47
Dimethyl phthalate	131-11-3	4	0	0.9	2.8	0	5.8	15
Bis(2-Ethylhexyl)adipate	103-23-1	1	0	5.1	30	0	0	170
Indeno[1,2,3-cd]pyrene	193-39-5	3	0	0.025	0.083	0	0.29	0.29
Methyl stearate	112-61-8	10	0	1.3	2.8	0	8.8	10
4-tert-Octylphenol	140-66-9	10	0	0.4	0.9	0	2.4	3.3
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	2	0	0.0042	0.017	0	0.025	0.071
Phenol, 4-(1-phenylethyl)-	1988-89-2	9	0	0.1	0.28	0	0.49	1.5

[a] 34 field-specific $C_{inh\text{-}DART\text{-}field}$ values are included in the table.
[b] On-field field-specific $C_{inh\text{-}DART\text{-}field}$ equals the modified field-specific average concentration of a field ($C_{air\text{-}field}$ x $AF_{inh\text{-}DART}$) of a DART (see Appendix Section F.4.2).
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-122. **On-Field** Field-Specific[a] One-Day Inhalation Exposure Concentration[b] ($C_{inh\text{-}DART\text{-}field}$, nanograms per cubic meter air) for **DARTs**—Combined Gender
Spectators Third Trimester Fetus<0 Years

Chemical	CASRN	Detection	$C_{inh\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Non-Field Related Chemical								
2-Butanone	78-93-3	30	0	28	20	22	60	70
Field-Related Chemicals								
Benzo[a]pyrene	50-32-8	28	0	0.056	0.059	0.03	0.15	0.23
Benzo[e]pyrene	192-97-2	6	0	0.00092	0.0021	0	0.0063	0.0063
Benzo[g,h,i]perylene	191-24-2	19	0	0.0064	0.0095	0.0025	0.025	0.037
n-Caproic acid vinyl ester	3050-69-9	1	0	0.33	2	0	0	11
Chrysene	218-01-9	13	0	0.01	0.016	0	0.038	0.065
Coronene	191-07-1	10	0	0.0042	0.0079	0	0.015	0.036
Cyclohexanamine, N-cyclohexyl-	101-83-7	19	0	0.017	0.028	0.011	0.051	0.15
Cyclohexylamine	108-91-8	4	0	0.11	0.33	0	0.76	1.5
Cyclopenta[cd]pyrene	27208-37-3	28	0	0.0036	0.0044	0.0013	0.01	0.02
N,N-Dicyclohexylmethylamine	7560-83-0	18	0	0.016	0.023	0.012	0.068	0.098
Dimethyl phthalate	131-11-3	4	0	0.2	0.59	0	1.2	3.1
Bis(2-Ethylhexyl)adipate	103-23-1	1	0	1.1	6.2	0	0	36
Indeno[1,2,3-cd]pyrene	193-39-5	3	0	0.0053	0.017	0	0.06	0.06
Methyl stearate	112-61-8	10	0	0.27	0.58	0	1.8	2.2
4-tert-Octylphenol	140-66-9	10	0	0.1	0.19	0	0.51	0.69
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	2	0	0.00088	0.0036	0	0.0052	0.015
Phenol, 4-(1-phenylethyl)-	1988-89-2	9	0	0.022	0.059	0	0.1	0.31

[a] 34 field-specific $C_{inh\text{-}DART\text{-}field}$ values are included in the table.
[b] On-field field-specific $C_{inh\text{-}DART\text{-}field}$ equals the modified field-specific average concentration of a field ($C_{air\text{-}field}$ x $AF_{inh\text{-}DART}$) of a DART (see Appendix Section F.4.2).
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-123. **On-Field** Field-Specific[a] One-Day Inhalation Exposure Concentration[b] ($C_{inh\text{-}DART\text{-}field}$, nanograms per cubic meter air) for **DARTs**—Combined Gender
Spectators 0<2 Years

Chemical	CASRN	Detection	$C_{inh\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Non-Field Related Chemical								
2-Butanone	78-93-3	30	0	230	160	180	480	560
Field-Related Chemicals								
Benzo[a]pyrene	50-32-8	28	0	0.45	0.48	0.24	1.2	1.9
Benzo[e]pyrene	192-97-2	6	0	0.0074	0.017	0	0.05	0.05
Benzo[g,h,i]perylene	191-24-2	19	0	0.052	0.077	0.02	0.21	0.3
n-Caproic acid vinyl ester	3050-69-9	1	0	2.7	16	0	0	91
Chrysene	218-01-9	13	0	0.081	0.13	0	0.3	0.52
Coronene	191-07-1	10	0	0.034	0.064	0	0.12	0.29
Cyclohexanamine, N-cyclohexyl-	101-83-7	19	0	0.13	0.23	0.092	0.41	1.2
Cyclohexylamine	108-91-8	4	0	0.9	2.7	0	6.1	12
Cyclopenta[cd]pyrene	27208-37-3	28	0	0.029	0.035	0.011	0.083	0.16
N,N-Dicyclohexylmethylamine	7560-83-0	18	0	0.13	0.19	0.1	0.55	0.79
Dimethyl phthalate	131-11-3	4	0	1.4	4.7	0	9.7	25
Bis(2-Ethylhexyl)adipate	103-23-1	1	0	8.6	50	0	0	290
Indeno[1,2,3-cd]pyrene	193-39-5	3	0	0.043	0.14	0	0.48	0.48
Methyl stearate	112-61-8	10	0	2.2	4.6	0	15	18
4-tert-Octylphenol	140-66-9	10	0	0.7	1.5	0	4.1	5.6
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	2	0	0.007	0.029	0	0.042	0.12
Phenol, 4-(1-phenylethyl)-	1988-89-2	9	0	0.18	0.47	0	0.82	2.5

[a] 34 field-specific $C_{inh\text{-}DART\text{-}field}$ values are included in the table.
[b] On-field field-specific $C_{inh\text{-}DART\text{-}field}$ equals the modified field-specific average concentration of a field ($C_{air\text{-}field}$ x $AF_{inh\text{-}DART}$) of a DART (see Appendix Section F.4.2).
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-124. **On-Field** Field-Specific[a] One-Day Inhalation Exposure Concentration[b] ($C_{inh\text{-}DART\text{-}field}$, nanograms per cubic meter air) for **DARTs**—Combined Gender

Spectators 2<6 Years

Chemical	CASRN	Detection	$C_{inh\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Non-Field Related Chemical								
2-Butanone	78-93-3	30	0	120	86	95	250	290
Field-Related Chemicals								
Benzo[a]pyrene	50-32-8	28	0	0.24	0.25	0.13	0.64	0.98
Benzo[e]pyrene	192-97-2	6	0	0.0039	0.009	0	0.027	0.027
Benzo[g,h,i]perylene	191-24-2	19	0	0.027	0.04	0.01	0.11	0.16
n-Caproic acid vinyl ester	3050-69-9	1	0	1.4	8.2	0	0	48
Chrysene	218-01-9	13	0	0.043	0.066	0	0.16	0.28
Coronene	191-07-1	10	0	0.018	0.034	0	0.063	0.15
Cyclohexanamine, N-cyclohexyl-	101-83-7	19	0	0.071	0.12	0.048	0.21	0.64
Cyclohexylamine	108-91-8	4	0	0.47	1.4	0	3.2	6.4
Cyclopenta[cd]pyrene	27208-37-3	28	0	0.015	0.018	0.0056	0.044	0.086
N,N-Dicyclohexylmethylamine	7560-83-0	18	0	0.069	0.098	0.052	0.29	0.42
Dimethyl phthalate	131-11-3	4	0	0.8	2.5	0	5.1	13
Bis(2-Ethylhexyl)adipate	103-23-1	1	0	4.5	26	0	0	150
Indeno[1,2,3-cd]pyrene	193-39-5	3	0	0.022	0.073	0	0.25	0.25
Methyl stearate	112-61-8	10	0	1.2	2.4	0	7.8	9.3
4-tert-Octylphenol	140-66-9	10	0	0.4	0.79	0	2.1	2.9
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	2	0	0.0037	0.015	0	0.022	0.063
Phenol, 4-(1-phenylethyl)-	1988-89-2	9	0	0.092	0.25	0	0.43	1.3

[a] 34 field-specific $C_{inh\text{-}DART\text{-}field}$ values are included in the table.

[b] On-field field-specific $C_{inh\text{-}DART\text{-}field}$ equals the modified field-specific average concentration of a field ($C_{air\text{-}field}$ x $AF_{inh\text{-}DART}$) of a DART (see Appendix Section F.4.2).

CASRN: Chemical Abstracts Service Registry Number

Values are rounded to two significant figures.

Table F-125. **On-Field** Field-Specific[a] One-Day Inhalation Exposure Concentration[b] ($C_{inh\text{-}DART\text{-}field}$, nanograms per cubic meter air) for **DARTs**—Combined Gender

Spectators 6<11 Years

Chemical	CASRN	Detection	$C_{inh\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Non-Field Related Chemical								
2-Butanone	78-93-3	30	0	110	82	91	240	280
Field-Related Chemicals								
Benzo[a]pyrene	50-32-8	28	0	0.23	0.24	0.12	0.61	0.94
Benzo[e]pyrene	192-97-2	6	0	0.0037	0.0085	0	0.025	0.025
Benzo[g,h,i]perylene	191-24-2	19	0	0.026	0.038	0.0099	0.1	0.15
n-Caproic acid vinyl ester	3050-69-9	1	0	1.3	7.9	0	0	46
Chrysene	218-01-9	13	0	0.041	0.063	0	0.15	0.26
Coronene	191-07-1	10	0	0.017	0.032	0	0.06	0.15
Cyclohexanamine, N-cyclohexyl-	101-83-7	19	0	0.067	0.11	0.046	0.2	0.61
Cyclohexylamine	108-91-8	4	0	0.45	1.3	0	3.1	6.1
Cyclopenta[cd]pyrene	27208-37-3	28	0	0.014	0.018	0.0054	0.042	0.082
N,N-Dicyclohexylmethylamine	7560-83-0	18	0	0.066	0.093	0.05	0.28	0.4
Dimethyl phthalate	131-11-3	4	0	0.7	2.4	0	4.8	12
Bis(2-Ethylhexyl)adipate	103-23-1	1	0	4.3	25	0	0	150
Indeno[1,2,3-cd]pyrene	193-39-5	3	0	0.021	0.07	0	0.24	0.24
Methyl stearate	112-61-8	10	0	1.1	2.3	0	7.4	8.8
4-tert-Octylphenol	140-66-9	10	0	0.4	0.76	0	2	2.8
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	2	0	0.0035	0.014	0	0.021	0.06
Phenol, 4-(1-phenylethyl)-	1988-89-2	9	0	0.088	0.24	0	0.41	1.2

[a] 34 field-specific $C_{inh\text{-}DART\text{-}field}$ values are included in the table.

[b] On-field field-specific $C_{inh\text{-}DART\text{-}field}$ equals the modified field-specific average concentration of a field ($C_{air\text{-}field}$ x $AF_{inh\text{-}DART}$) of a DART (see Appendix Section F.4.2).

CASRN: Chemical Abstracts Service Registry Number

Values are rounded to two significant figures.

Table F-126. **On-Field** Field-Specific[a] One-Day Inhalation Exposure Concentration[b] ($C_{inh\text{-}DART\text{-}field}$, nanograms per cubic meter air) for **DARTs**—Combined Gender
Spectators 11<16 Years

Chemical	CASRN	Detection	$C_{inh\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Non-Field Related Chemical								
2-Butanone	78-93-3	30	0	49	35	39	100	120
Field-Related Chemicals								
Benzo[a]pyrene	50-32-8	28	0	0.098	0.1	0.052	0.26	0.41
Benzo[e]pyrene	192-97-2	6	0	0.0016	0.0037	0	0.011	0.011
Benzo[g,h,i]perylene	191-24-2	19	0	0.011	0.017	0.0043	0.044	0.065
n-Caproic acid vinyl ester	3050-69-9	1	0	0.58	3.4	0	0	20
Chrysene	218-01-9	13	0	0.018	0.027	0	0.066	0.11
Coronene	191-07-1	10	0	0.0073	0.014	0	0.026	0.063
Cyclohexanamine, N-cyclohexyl-	101-83-7	19	0	0.029	0.049	0.02	0.088	0.26
Cyclohexylamine	108-91-8	4	0	0.2	0.58	0	1.3	2.7
Cyclopenta[cd]pyrene	27208-37-3	28	0	0.0062	0.0076	0.0023	0.018	0.035
N,N-Dicyclohexylmethylamine	7560-83-0	18	0	0.029	0.04	0.022	0.12	0.17
Dimethyl phthalate	131-11-3	4	0	0.3	1	0	2.1	5.3
Bis(2-Ethylhexyl)adipate	103-23-1	1	0	1.9	11	0	0	63
Indeno[1,2,3-cd]pyrene	193-39-5	3	0	0.0092	0.03	0	0.1	0.1
Methyl stearate	112-61-8	10	0	0.48	1	0	3.2	3.8
4-tert-Octylphenol	140-66-9	10	0	0.2	0.33	0	0.88	1.2
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	2	0	0.0015	0.0062	0	0.0091	0.026
Phenol, 4-(1-phenylethyl)-	1988-89-2	9	0	0.038	0.1	0	0.18	0.54

[a] 34 field-specific $C_{inh\text{-}DART\text{-}field}$ values are included in the table.
[b] On-field field-specific $C_{inh\text{-}DART\text{-}field}$ equals the modified field-specific average concentration of a field ($C_{air\text{-}field}$ x $AF_{inh\text{-}DART}$) of a DART (see Appendix Section F.4.2).
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-127. **On-Field** Field-Specific[a] One-Day Inhalation Exposure Concentration[b] ($C_{inh\text{-}DART\text{-}field}$, nanograms per cubic meter air) for **DARTs**—Combined Gender
Spectators 16<30 Years

Chemical	CASRN	Detection	$C_{inh\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Non-Field Related Chemical								
2-Butanone	78-93-3	30	0	33	23	26	69	80
Field-Related Chemicals								
Benzo[a]pyrene	50-32-8	28	0	0.065	0.068	0.035	0.17	0.27
Benzo[e]pyrene	192-97-2	6	0	0.0011	0.0024	0	0.0072	0.0072
Benzo[g,h,i]perylene	191-24-2	19	0	0.0074	0.011	0.0028	0.029	0.043
n-Caproic acid vinyl ester	3050-69-9	1	0	0.38	2.2	0	0	13
Chrysene	218-01-9	13	0	0.012	0.018	0	0.044	0.075
Coronene	191-07-1	10	0	0.0048	0.0091	0	0.017	0.041
Cyclohexanamine, N-cyclohexyl-	101-83-7	19	0	0.019	0.032	0.013	0.058	0.17
Cyclohexylamine	108-91-8	4	0	0.13	0.38	0	0.88	1.8
Cyclopenta[cd]pyrene	27208-37-3	28	0	0.0041	0.005	0.0015	0.012	0.023
N,N-Dicyclohexylmethylamine	7560-83-0	18	0	0.019	0.027	0.014	0.078	0.11
Dimethyl phthalate	131-11-3	4	0	0.2	0.68	0	1.4	3.5
Bis(2-Ethylhexyl)adipate	103-23-1	1	0	1.2	7.1	0	0	42
Indeno[1,2,3-cd]pyrene	193-39-5	3	0	0.0061	0.02	0	0.069	0.069
Methyl stearate	112-61-8	10	0	0.31	0.66	0	2.1	2.5
4-tert-Octylphenol	140-66-9	10	0	0.1	0.22	0	0.58	0.79
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	2	0	0.001	0.0041	0	0.006	0.017
Phenol, 4-(1-phenylethyl)-	1988-89-2	9	0	0.025	0.067	0	0.12	0.36

[a] 34 field-specific $C_{inh\text{-}DART\text{-}field}$ values are included in the table.
[b] On-field field-specific $C_{inh\text{-}DART\text{-}field}$ equals the modified field-specific average concentration of a field ($C_{air\text{-}field}$ x $AF_{inh\text{-}DART}$) of a DART (see Appendix Section F.4.2).
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-128. **On-Field** Field-Specific[a] One-Day Inhalation Exposure Concentration[b] ($C_{inh\text{-}DART\text{-}field}$, nanograms per cubic meter air) for **DARTs**—Combined Gender
Spectators 30<40 Years

Chemical	CASRN	Detection	$C_{inh\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Non-Field Related Chemical								
2-Butanone	78-93-3	30	0	28	20	23	60	70
Field-Related Chemicals								
Benzo[a]pyrene	50-32-8	28	0	0.056	0.059	0.03	0.15	0.23
Benzo[e]pyrene	192-97-2	6	0	0.00093	0.0021	0	0.0063	0.0063
Benzo[g,h,i]perylene	191-24-2	19	0	0.0065	0.0096	0.0025	0.026	0.038
n-Caproic acid vinyl ester	3050-69-9	1	0	0.34	2	0	0	11
Chrysene	218-01-9	13	0	0.01	0.016	0	0.038	0.065
Coronene	191-07-1	10	0	0.0042	0.008	0	0.015	0.036
Cyclohexanamine, N-cyclohexyl-	101-83-7	19	0	0.017	0.028	0.011	0.051	0.15
Cyclohexylamine	108-91-8	4	0	0.11	0.33	0	0.77	1.5
Cyclopenta[cd]pyrene	27208-37-3	28	0	0.0036	0.0044	0.0013	0.01	0.02
N,N-Dicyclohexylmethylamine	7560-83-0	18	0	0.016	0.023	0.012	0.069	0.099
Dimethyl phthalate	131-11-3	4	0	0.2	0.59	0	1.2	3.1
Bis(2-Ethylhexyl)adipate	103-23-1	1	0	1.1	6.2	0	0	36
Indeno[1,2,3-cd]pyrene	193-39-5	3	0	0.0053	0.017	0	0.06	0.06
Methyl stearate	112-61-8	10	0	0.27	0.58	0	1.8	2.2
4-tert-Octylphenol	140-66-9	10	0	0.1	0.19	0	0.51	0.69
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	2	0	0.00088	0.0036	0	0.0052	0.015
Phenol, 4-(1-phenylethyl)-	1988-89-2	9	0	0.022	0.059	0	0.1	0.31

[a] 34 field-specific $C_{inh\text{-}DART\text{-}field}$ values are included in the table.
[b] On-field field-specific $C_{inh\text{-}DART\text{-}field}$ equals the modified field-specific average concentration of a field ($C_{air\text{-}field}$ x $AF_{inh\text{-}DART}$) of a DART (see Appendix Section F.4.2).
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-129. **On-Field** Field-Specific[a] One-Day Inhalation Exposure Concentration[b] ($C_{inh\text{-}DART\text{-}field}$, nanograms per cubic meter air) for **DARTs**—Combined Gender
Spectators 40<50 Years

Chemical	CASRN	Detection	$C_{inh\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Non-Field Related Chemical								
2-Butanone	78-93-3	30	0	29	21	23	61	71
Field-Related Chemicals								
Benzo[a]pyrene	50-32-8	28	0	0.057	0.06	0.031	0.15	0.24
Benzo[e]pyrene	192-97-2	6	0	0.00094	0.0022	0	0.0064	0.0064
Benzo[g,h,i]perylene	191-24-2	19	0	0.0065	0.0097	0.0025	0.026	0.038
n-Caproic acid vinyl ester	3050-69-9	1	0	0.34	2	0	0	12
Chrysene	218-01-9	13	0	0.01	0.016	0	0.038	0.066
Coronene	191-07-1	10	0	0.0043	0.0081	0	0.015	0.037
Cyclohexanamine, N-cyclohexyl-	101-83-7	19	0	0.017	0.029	0.012	0.051	0.15
Cyclohexylamine	108-91-8	4	0	0.11	0.34	0	0.77	1.5
Cyclopenta[cd]pyrene	27208-37-3	28	0	0.0036	0.0044	0.0014	0.011	0.021
N,N-Dicyclohexylmethylamine	7560-83-0	18	0	0.017	0.023	0.013	0.069	0.1
Dimethyl phthalate	131-11-3	4	0	0.2	0.6	0	1.2	3.1
Bis(2-Ethylhexyl)adipate	103-23-1	1	0	1.1	6.3	0	0	37
Indeno[1,2,3-cd]pyrene	193-39-5	3	0	0.0054	0.018	0	0.061	0.061
Methyl stearate	112-61-8	10	0	0.28	0.58	0	1.9	2.2
4-tert-Octylphenol	140-66-9	10	0	0.1	0.19	0	0.52	0.7
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	2	0	0.00089	0.0036	0	0.0053	0.015
Phenol, 4-(1-phenylethyl)-	1988-89-2	9	0	0.022	0.06	0	0.1	0.31

[a] 34 field-specific $C_{inh\text{-}DART\text{-}field}$ values are included in the table.
[b] On-field field-specific $C_{inh\text{-}DART\text{-}field}$ equals the modified field-specific average concentration of a field ($C_{air\text{-}field}$ x $AF_{inh\text{-}DART}$) of a DART (see Appendix Section F.4.2).
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-130. **On-Field** Field-Specific[a] One-Day Inhalation Exposure Concentration[b] ($C_{inh\text{-}DART\text{-}field}$, nanograms per cubic meter air) for **DARTs**—Combined Gender
Spectators 50<70 Years

Chemical	CASRN	Detection	$C_{inh\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Non-Field Related Chemical								
2-Butanone	78-93-3	30	0	29	21	23	61	71
Field-Related Chemicals								
Benzo[a]pyrene	50-32-8	28	0	0.057	0.06	0.031	0.15	0.24
Benzo[e]pyrene	192-97-2	6	0	0.00094	0.0022	0	0.0064	0.0064
Benzo[g,h,i]perylene	191-24-2	19	0	0.0065	0.0097	0.0025	0.026	0.038
n-Caproic acid vinyl ester	3050-69-9	1	0	0.34	2	0	0	12
Chrysene	218-01-9	13	0	0.01	0.016	0	0.039	0.066
Coronene	191-07-1	10	0	0.0043	0.0081	0	0.015	0.037
Cyclohexanamine, N-cyclohexyl-	101-83-7	19	0	0.017	0.029	0.012	0.051	0.15
Cyclohexylamine	108-91-8	4	0	0.11	0.34	0	0.78	1.6
Cyclopenta[cd]pyrene	27208-37-3	28	0	0.0036	0.0044	0.0014	0.011	0.021
N,N-Dicyclohexylmethylamine	7560-83-0	18	0	0.017	0.024	0.013	0.069	0.1
Dimethyl phthalate	131-11-3	4	0	0.2	0.6	0	1.2	3.1
Bis(2-Ethylhexyl)adipate	103-23-1	1	0	1.1	6.3	0	0	37
Indeno[1,2,3-cd]pyrene	193-39-5	3	0	0.0054	0.018	0	0.061	0.061
Methyl stearate	112-61-8	10	0	0.28	0.59	0	1.9	2.2
4-tert-Octylphenol	140-66-9	10	0	0.1	0.19	0	0.52	0.7
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	2	0	0.00089	0.0036	0	0.0053	0.015
Phenol, 4-(1-phenylethyl)-	1988-89-2	9	0	0.022	0.06	0	0.1	0.32

[a] 34 field-specific $C_{inh\text{-}DART\text{-}field}$ values are included in the table.
[b] On-field field-specific $C_{inh\text{-}DART\text{-}field}$ equals the modified field-specific average concentration of a field ($C_{air\text{-}field}$ x $AF_{inh\text{-}DART}$) of a DART (see Appendix Section F.4.2).
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-131. **Off-Field** Field-Specific[a] One-Day Inhalation Exposure Concentration[b] ($C_{inh\text{-}DART\text{-}field}$, nanograms per cubic meter air) for **Field-Related[c] DARTs**—Combined Gender **Spectators Third Trimester Fetus<0 Years**

Chemical	CASRN	Detection	$C_{inh\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Benzo[a]pyrene	50-32-8	24	0	0.069	0.11	0.029	0.25	0.49
Benzo[e]pyrene	192-97-2	6	0	0.0013	0.003	0	0.0063	0.013
Benzo[g,h,i]perylene	191-24-2	16	0	0.0066	0.011	0	0.024	0.049
n-Caproic acid vinyl ester	3050-69-9	3	0	0.65	2.6	0	3.4	15
Chrysene	218-01-9	7	0	0.0052	0.011	0	0.021	0.046
Coronene	191-07-1	7	0	0.0033	0.0075	0	0.013	0.035
Cyclohexanamine, N-cyclohexyl-	101-83-7	10	0	0.0099	0.017	0	0.052	0.061
Cyclohexylamine	108-91-8	1	0	0.046	0.27	0	0	1.5
Cyclopenta[cd]pyrene	27208-37-3	22	0	0.0031	0.004	0.0013	0.011	0.013
N,N-Dicyclohexylmethylamine	7560-83-0	12	0	0.017	0.026	0	0.066	0.089
Dimethyl phthalate	131-11-3	3	0	0.2	0.58	0	1.2	2.9
Bis(2-Ethylhexyl)adipate	103-23-1	2	0	0.84	3.4	0	5.6	14
Indeno[1,2,3-cd]pyrene	193-39-5	2	0	0.0036	0.015	0	0.024	0.06
Methyl stearate	112-61-8	8	0	0.27	0.59	0	1.7	2.2
4-tert-Octylphenol	140-66-9	7	0	0.0	0.063	0	0.15	0.28
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	0	0	0	0	0	0	0
Phenol, 4-(1-phenylethyl)-	1988-89-2	9	0	0.032	0.07	0	0.13	0.34

[a] 33 field-specific $C_{inh\text{-}DART\text{-}field}$ values are included in the table.
[b] Off-Field field-specific $C_{inh\text{-}DART\text{-}field}$ equals the modified field-specific average concentration of a field ($C_{air\text{-}field}$ x $AF_{inh\text{-}DART}$) of a DART (see Appendix Section F.4.2).
[c] Non-field DART, 2-butanone, was not sampled off-field. Selected carbonyls, collected using 2,4-dinitrophenylhydrazine-cartiridges, were not sampled at off the field locations during the statewide sample collections.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures

Table F-132. **Off-Field** Field-Specific[a] One-Day Inhalation Exposure Concentration[b] ($C_{inh\text{-}DART\text{-}field}$, nanograms per cubic meter air) for **Field-Related[c] DARTs**—Combined Gender **Spectators 0<2 Years**

Chemical	CASRN	Detection	$C_{inh\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Benzo[a]pyrene	50-32-8	24	0	0.56	0.86	0.23	2	3.9
Benzo[e]pyrene	192-97-2	6	0	0.011	0.025	0	0.05	0.1
Benzo[g,h,i]perylene	191-24-2	16	0	0.053	0.086	0	0.19	0.39
n-Caproic acid vinyl ester	3050-69-9	3	0	5.2	21	0	28	120
Chrysene	218-01-9	7	0	0.042	0.088	0	0.17	0.37
Coronene	191-07-1	7	0	0.027	0.06	0	0.1	0.28
Cyclohexanamine, N-cyclohexyl-	101-83-7	10	0	0.08	0.14	0	0.42	0.49
Cyclohexylamine	108-91-8	1	0	0.37	2.1	0	0	12
Cyclopenta[cd]pyrene	27208-37-3	22	0	0.025	0.032	0.011	0.089	0.1
N,N-Dicyclohexylmethylamine	7560-83-0	12	0	0.14	0.21	0	0.53	0.72
Dimethyl phthalate	131-11-3	3	0	1.3	4.7	0	9.7	24
Bis(2-Ethylhexyl)adipate	103-23-1	2	0	6.8	27	0	45	110
Indeno[1,2,3-cd]pyrene	193-39-5	2	0	0.029	0.12	0	0.19	0.48
Methyl stearate	112-61-8	8	0	2.2	4.7	0	14	17
4-tert-Octylphenol	140-66-9	7	0	0.2	0.5	0	1.2	2.3
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	0	0	0	0	0	0	0
Phenol, 4-(1-phenylethyl)-	1988-89-2	9	0	0.26	0.56	0	1.1	2.8

[a] 33 field-specific $C_{inh\text{-}DART\text{-}field}$ values are included in the table.
[b] Off-Field field-specific $C_{inh\text{-}DART\text{-}field}$ equals the modified field-specific average concentration of a field ($C_{air\text{-}field}$ x $AF_{inh\text{-}DART}$) of a DART (see Appendix Section F.4.2).
[c] Non-field DART, 2-butanone, was not sampled off-field. Selected carbonyls, collected using 2,4-dinitrophenylhydrazine-cartiridges, were not sampled at off the field locations during the statewide sample collections.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures

Table F-133. **Off-Field** Field-Specific[a] One-Day Inhalation Exposure Concentration[b] ($C_{inh\text{-}DART\text{-}field}$, nanograms per cubic meter air) for **Field-Related[c] DARTs**—Combined Gender **Spectators 2<6 Years**

Chemical	CASRN	Detection	$C_{inh\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Benzo[a]pyrene	50-32-8	24	0	0.29	0.45	0.12	1	2.1
Benzo[e]pyrene	192-97-2	6	0	0.0056	0.013	0	0.027	0.053
Benzo[g,h,i]perylene	191-24-2	16	0	0.028	0.045	0	0.1	0.21
n-Caproic acid vinyl ester	3050-69-9	3	0	2.8	11	0	15	62
Chrysene	218-01-9	7	0	0.022	0.046	0	0.088	0.19
Coronene	191-07-1	7	0	0.014	0.032	0	0.053	0.15
Cyclohexanamine, N-cyclohexyl-	101-83-7	10	0	0.042	0.074	0	0.22	0.26
Cyclohexylamine	108-91-8	1	0	0.2	1.1	0	0	6.4
Cyclopenta[cd]pyrene	27208-37-3	22	0	0.013	0.017	0.0056	0.047	0.054
N,N-Dicyclohexylmethylamine	7560-83-0	12	0	0.073	0.11	0	0.28	0.38
Dimethyl phthalate	131-11-3	3	0	0.7	2.4	0	5.1	12
Bis(2-Ethylhexyl)adipate	103-23-1	2	0	3.6	14	0	23	59
Indeno[1,2,3-cd]pyrene	193-39-5	2	0	0.015	0.062	0	0.1	0.25
Methyl stearate	112-61-8	8	0	1.1	2.5	0	7.4	9.1
4-tert-Octylphenol	140-66-9	7	0	0.1	0.26	0	0.64	1.2
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	0	0	0	0	0	0	0
Phenol, 4-(1-phenylethyl)-	1988-89-2	9	0	0.13	0.3	0	0.55	1.5

[a] 33 field-specific $C_{inh\text{-}DART\text{-}field}$ values are included in the table.
[b] Off-Field field-specific $C_{inh\text{-}DART\text{-}field}$ equals the modified field-specific average concentration of a field ($C_{air\text{-}field}$ x $AF_{inh\text{-}DART}$) of a DART (see Appendix Section F.4.2).
[c] Non-field DART, 2-butanone, was not sampled off-field. Selected carbonyls, collected using 2,4-dinitrophenylhydrazine-cartiridges, were not sampled at off the field locations during the statewide sample collections.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures

Table F-134. **Off-Field** Field-Specific[a] One-Day Inhalation Exposure Concentration[b] ($C_{inh\text{-}DART\text{-}field}$, nanograms per cubic meter air) for **Field-Related[c] DARTs**—Combined Gender **Spectators 6<11 Years**

Chemical	CASRN	Detection	$C_{inh\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Benzo[a]pyrene	50-32-8	24	0	0.28	0.43	0.12	1	2
Benzo[e]pyrene	192-97-2	6	0	0.0054	0.012	0	0.025	0.051
Benzo[g,h,i]perylene	191-24-2	16	0	0.026	0.043	0	0.096	0.2
n-Caproic acid vinyl ester	3050-69-9	3	0	2.6	11	0	14	59
Chrysene	218-01-9	7	0	0.021	0.044	0	0.084	0.18
Coronene	191-07-1	7	0	0.013	0.03	0	0.051	0.14
Cyclohexanamine, N-cyclohexyl-	101-83-7	10	0	0.04	0.071	0	0.21	0.25
Cyclohexylamine	108-91-8	1	0	0.19	1.1	0	0	6.1
Cyclopenta[cd]pyrene	27208-37-3	22	0	0.013	0.016	0.0054	0.045	0.052
N,N-Dicyclohexylmethylamine	7560-83-0	12	0	0.069	0.11	0	0.27	0.36
Dimethyl phthalate	131-11-3	3	0	0.7	2.3	0	4.8	12
Bis(2-Ethylhexyl)adipate	103-23-1	2	0	3.4	14	0	22	56
Indeno[1,2,3-cd]pyrene	193-39-5	2	0	0.015	0.059	0	0.097	0.24
Methyl stearate	112-61-8	8	0	1.1	2.4	0	7	8.7
4-tert-Octylphenol	140-66-9	7	0	0.1	0.25	0	0.61	1.1
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	0	0	0	0	0	0	0
Phenol, 4-(1-phenylethyl)-	1988-89-2	9	0	0.13	0.28	0	0.53	1.4

[a] 33 field-specific $C_{inh\text{-}DART\text{-}field}$ values are included in the table.
[b] Off-Field field-specific $C_{inh\text{-}DART\text{-}field}$ equals the modified field-specific average concentration of a field ($C_{air\text{-}field}$ x $AF_{inh\text{-}DART}$) of a DART (see Appendix Section F.4.2).
[c] Non-field DART, 2-butanone, was not sampled off-field. Selected carbonyls, collected using 2,4-dinitrophenylhydrazine-cartiridges, were not sampled at off the field locations during the statewide sample collections.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures

Table F-135. **Off-Field** Field-Specific[a] One-Day Inhalation Exposure Concentration[b] ($C_{inh\text{-}DART\text{-}field}$, nanograms per cubic meter air) for **Field-Related[c] DARTs**—Combined Gender **Spectators 11<16 Years**

Chemical	CASRN	Detection	$C_{inh\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Benzo[a]pyrene	50-32-8	24	0	0.12	0.19	0.05	0.43	0.85
Benzo[e]pyrene	192-97-2	6	0	0.0023	0.0053	0	0.011	0.022
Benzo[g,h,i]perylene	191-24-2	16	0	0.011	0.019	0	0.042	0.085
n-Caproic acid vinyl ester	3050-69-9	3	0	1.1	4.6	0	6	26
Chrysene	218-01-9	7	0	0.009	0.019	0	0.036	0.08
Coronene	191-07-1	7	0	0.0058	0.013	0	0.022	0.061
Cyclohexanamine, N-cyclohexyl-	101-83-7	10	0	0.017	0.03	0	0.091	0.11
Cyclohexylamine	108-91-8	1	0	0.08	0.46	0	0	2.7
Cyclopenta[cd]pyrene	27208-37-3	22	0	0.0055	0.007	0.0023	0.019	0.022
N,N-Dicyclohexylmethylamine	7560-83-0	12	0	0.03	0.046	0	0.12	0.15
Dimethyl phthalate	131-11-3	3	0	0.3	1	0	2.1	5.1
Bis(2-Ethylhexyl)adipate	103-23-1	2	0	1.5	5.9	0	9.7	24
Indeno[1,2,3-cd]pyrene	193-39-5	2	0	0.0063	0.025	0	0.042	0.1
Methyl stearate	112-61-8	8	0	0.47	1	0	3	3.8
4-tert-Octylphenol	140-66-9	7	0	0.0	0.11	0	0.26	0.5
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	0	0	0	0	0	0	0
Phenol, 4-(1-phenylethyl)-	1988-89-2	9	0	0.055	0.12	0	0.23	0.6

[a] 33 field-specific $C_{inh\text{-}DART\text{-}field}$ values are included in the table.
[b] Off-Field field-specific $C_{inh\text{-}DART\text{-}field}$ equals the modified field-specific average concentration of a field ($C_{air\text{-}field}$ x $AF_{inh\text{-}DART}$) of a DART (see Appendix Section F.4.2).
[c] Non-field DART, 2-butanone, was not sampled off-field. Selected carbonyls, collected using 2,4-dinitrophenylhydrazine-cartiridges, were not sampled at off the field locations during the statewide sample collections.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures

Table F-136. **Off-Field** Field-Specific[a] One-Day Inhalation Exposure Concentration[b] ($C_{inh\text{-}DART\text{-}field}$, nanograms per cubic meter air) for **Field-Related[c] DARTs**—Combined Gender **Spectators 16<30 Years**

Chemical	CASRN	Detection	$C_{inh\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Benzo[a]pyrene	50-32-8	24	0	0.079	0.12	0.033	0.28	0.56
Benzo[e]pyrene	192-97-2	6	0	0.0015	0.0035	0	0.0072	0.015
Benzo[g,h,i]perylene	191-24-2	16	0	0.0075	0.012	0	0.027	0.056
n-Caproic acid vinyl ester	3050-69-9	3	0	0.75	3	0	4	17
Chrysene	218-01-9	7	0	0.006	0.013	0	0.024	0.053
Coronene	191-07-1	7	0	0.0038	0.0086	0	0.014	0.04
Cyclohexanamine, N-cyclohexyl-	101-83-7	10	0	0.011	0.02	0	0.06	0.071
Cyclohexylamine	108-91-8	1	0	0.053	0.3	0	0	1.8
Cyclopenta[cd]pyrene	27208-37-3	22	0	0.0036	0.0046	0.0015	0.013	0.015
N,N-Dicyclohexylmethylamine	7560-83-0	12	0	0.02	0.03	0	0.076	0.1
Dimethyl phthalate	131-11-3	3	0	0.2	0.66	0	1.4	3.4
Bis(2-Ethylhexyl)adipate	103-23-1	2	0	0.97	3.9	0	6.4	16
Indeno[1,2,3-cd]pyrene	193-39-5	2	0	0.0042	0.017	0	0.028	0.069
Methyl stearate	112-61-8	8	0	0.31	0.67	0	2	2.5
4-tert-Octylphenol	140-66-9	7	0	0.0	0.072	0	0.17	0.33
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	0	0	0	0	0	0	0
Phenol, 4-(1-phenylethyl)-	1988-89-2	9	0	0.037	0.081	0	0.15	0.39

[a] 33 field-specific $C_{inh\text{-}DART\text{-}field}$ values are included in the table.
[b] Off-Field field-specific $C_{inh\text{-}DART\text{-}field}$ equals the modified field-specific average concentration of a field ($C_{air\text{-}field}$ x $AF_{inh\text{-}DART}$) of a DART (see Appendix Section F.4.2).
[c] Non-field DART, 2-butanone, was not sampled off-field. Selected carbonyls, collected using 2,4-dinitrophenylhydrazine-cartiridges, were not sampled at off the field locations during the statewide sample collections.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures

Table F-137. **Off-Field** Field-Specific[a] One-Day Inhalation Exposure Concentration[b] ($C_{inh\text{-}DART\text{-}field}$, nanograms per cubic meter air) for **Field-Related[c] DARTs**—Combined Gender **Spectators 30<40 Years**

Chemical	CASRN	Detection	$C_{inh\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Benzo[a]pyrene	50-32-8	24	0	0.069	0.11	0.029	0.25	0.49
Benzo[e]pyrene	192-97-2	6	0	0.0013	0.0031	0	0.0063	0.013
Benzo[g,h,i]perylene	191-24-2	16	0	0.0066	0.011	0	0.024	0.049
n-Caproic acid vinyl ester	3050-69-9	3	0	0.65	2.7	0	3.5	15
Chrysene	218-01-9	7	0	0.0052	0.011	0	0.021	0.046
Coronene	191-07-1	7	0	0.0034	0.0075	0	0.013	0.035
Cyclohexanamine, N-cyclohexyl-	101-83-7	10	0	0.0099	0.018	0	0.052	0.062
Cyclohexylamine	108-91-8	1	0	0.046	0.27	0	0	1.5
Cyclopenta[cd]pyrene	27208-37-3	22	0	0.0031	0.004	0.0013	0.011	0.013
N,N-Dicyclohexylmethylamine	7560-83-0	12	0	0.017	0.027	0	0.067	0.089
Dimethyl phthalate	131-11-3	3	0	0.2	0.58	0	1.2	3
Bis(2-Ethylhexyl)adipate	103-23-1	2	0	0.85	3.4	0	5.6	14
Indeno[1,2,3-cd]pyrene	193-39-5	2	0	0.0037	0.015	0	0.024	0.06
Methyl stearate	112-61-8	8	0	0.27	0.59	0	1.7	2.2
4-tert-Octylphenol	140-66-9	7	0	0.0	0.063	0	0.15	0.29
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	0	0	0	0	0	0	0
Phenol, 4-(1-phenylethyl)-	1988-89-2	9	0	0.032	0.07	0	0.13	0.35

[a] 33 field-specific $C_{inh\text{-}DART\text{-}field}$ values are included in the table.
[b] Off-Field field-specific $C_{inh\text{-}DART\text{-}field}$ equals the modified field-specific average concentration of a field ($C_{air\text{-}field}$ x $AF_{inh\text{-}DART}$) of a DART (see Appendix Section F.4.2).
[c] Non-field DART, 2-butanone, was not sampled off-field. Selected carbonyls, collected using 2,4-dinitrophenylhydrazine-cartiridges, were not sampled at off the field locations during the statewide sample collections.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures

Table F-138. **Off-Field** Field-Specific[a] One-Day Inhalation Exposure Concentration[b] ($C_{inh\text{-}DART\text{-}field}$, nanograms per cubic meter air) for **Field-Related[c] DARTs**—Combined Gender **Spectators 40<50 Years**

Chemical	CASRN	Detection	$C_{inh\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Benzo[a]pyrene	50-32-8	24	0	0.07	0.11	0.029	0.25	0.5
Benzo[e]pyrene	192-97-2	6	0	0.0014	0.0031	0	0.0064	0.013
Benzo[g,h,i]perylene	191-24-2	16	0	0.0067	0.011	0	0.024	0.05
n-Caproic acid vinyl ester	3050-69-9	3	0	0.66	2.7	0	3.5	15
Chrysene	218-01-9	7	0	0.0053	0.011	0	0.021	0.047
Coronene	191-07-1	7	0	0.0034	0.0076	0	0.013	0.035
Cyclohexanamine, N-cyclohexyl-	101-83-7	10	0	0.01	0.018	0	0.053	0.062
Cyclohexylamine	108-91-8	1	0	0.047	0.27	0	0	1.5
Cyclopenta[cd]pyrene	27208-37-3	22	0	0.0032	0.0041	0.0014	0.011	0.013
N,N-Dicyclohexylmethylamine	7560-83-0	12	0	0.017	0.027	0	0.067	0.09
Dimethyl phthalate	131-11-3	3	0	0.2	0.59	0	1.2	3
Bis(2-Ethylhexyl)adipate	103-23-1	2	0	0.85	3.4	0	5.6	14
Indeno[1,2,3-cd]pyrene	193-39-5	2	0	0.0037	0.015	0	0.024	0.061
Methyl stearate	112-61-8	8	0	0.27	0.59	0	1.8	2.2
4-tert-Octylphenol	140-66-9	7	0	0.0	0.063	0	0.15	0.29
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	0	0	0	0	0	0	0
Phenol, 4-(1-phenylethyl)-	1988-89-2	9	0	0.032	0.071	0	0.13	0.35

[a] 33 field-specific $C_{inh\text{-}DART\text{-}field}$ values are included in the table.
[b] Off-Field field-specific $C_{inh\text{-}DART\text{-}field}$ equals the modified field-specific average concentration of a field ($C_{air\text{-}field}$ x $AF_{inh\text{-}DART}$) of a DART (see Appendix Section F.4.2).
[c] Non-field DART, 2-butanone, was not sampled off-field. Selected carbonyls, collected using 2,4-dinitrophenylhydrazine-cartiridges, were not sampled at off the field locations during the statewide sample collections.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures

Table F-139. **Off-Field** Field-Specific[a] One-Day Inhalation Exposure Concentration[b] ($C_{inh\text{-}DART\text{-}field}$, nanograms per cubic meter air) for **Field-Related[c] DARTs**—Combined Gender **Spectators 50<70 Years**

Chemical	CASRN	Detection	$C_{inh\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Benzo[a]pyrene	50-32-8	24	0	0.07	0.11	0.029	0.25	0.5
Benzo[e]pyrene	192-97-2	6	0	0.0014	0.0031	0	0.0064	0.013
Benzo[g,h,i]perylene	191-24-2	16	0	0.0067	0.011	0	0.024	0.05
n-Caproic acid vinyl ester	3050-69-9	3	0	0.66	2.7	0	3.5	15
Chrysene	218-01-9	7	0	0.0053	0.011	0	0.021	0.047
Coronene	191-07-1	7	0	0.0034	0.0076	0	0.013	0.035
Cyclohexanamine, N-cyclohexyl-	101-83-7	10	0	0.01	0.018	0	0.053	0.063
Cyclohexylamine	108-91-8	1	0	0.047	0.27	0	0	1.6
Cyclopenta[cd]pyrene	27208-37-3	22	0	0.0032	0.0041	0.0014	0.011	0.013
N,N-Dicyclohexylmethylamine	7560-83-0	12	0	0.017	0.027	0	0.068	0.09
Dimethyl phthalate	131-11-3	3	0	0.2	0.59	0	1.2	3
Bis(2-Ethylhexyl)adipate	103-23-1	2	0	0.86	3.4	0	5.7	14
Indeno[1,2,3-cd]pyrene	193-39-5	2	0	0.0037	0.015	0	0.024	0.061
Methyl stearate	112-61-8	8	0	0.27	0.6	0	1.8	2.2
4-tert-Octylphenol	140-66-9	7	0	0.0	0.064	0	0.15	0.29
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	0	0	0	0	0	0	0
Phenol, 4-(1-phenylethyl)-	1988-89-2	9	0	0.032	0.071	0	0.13	0.35

[a] 33 field-specific $C_{inh\text{-}DART\text{-}field}$ values are included in the table.
[b] Off-Field field-specific $C_{inh\text{-}DART\text{-}field}$ equals the modified field-specific average concentration of a field ($C_{air\text{-}field}$ x $AF_{inh\text{-}DART}$) of a DART (see Appendix Section F.4.2).
[c] Non-field DART, 2-butanone, was not sampled off-field. Selected carbonyls, collected using 2,4-dinitrophenylhydrazine-cartiridges, were not sampled at off the field locations during the statewide sample collections.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures

F.4.5. Chronic Inhalation Exposure Concentration for Sensory Irritants (Chronic $C_{inh\text{-}sensory}$)

Table F-140. Chronic Inhalation Exposure Concentration[a] (Chronic $C_{inh\text{-}sensory}$, nanograms per cubic meter air) for **Sensory Irritants—All Receptor Categories**

Chemical	CASRN	Chronic $C_{inh\text{-}sensory}$	
		On-Field	Off-Field
Field-Related Chemical			
Styrene	100-42-5	59	60
Non-Field-Related Chemicals			
Acetaldehyde	75-07-0	2500	Not measured
Formaldehyde	50-00-0	3800	Not measured

[a] On-Field Chronic $C_{inh\text{-}sensory}$ equals to mean of the 35 individual field average concentrations ($C_{air\text{-}avg}$) of a chemical detected in air on the fields. Off-Field Chronic $C_{inh\text{-}sensory}$ equals to mean of the 35 individual field average concentrations ($C_{air\text{-}avg}$) of a chemical detected in air off the fields.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

INDIVIDUAL FIELD ASSESSMENT (Table F-141)

Table F-141. Field-Specific Chronic Inhalation Exposure Concentration (Chronic $C_{inh\text{-}sensory\text{-}field}$, nanograms per cubic meter air) for **Sensory Irritants—All Receptor Categories**

Location	Chemical	CASRN	Detection	Chronic $C_{inh\text{-}sensory\text{-}field}$					
				Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
On Field[a]	Field Related Chemical								
	Styrene	100-42-5	17	0	59	120	0	200	660
	Non-Field-Related Chemicals								
	Acetaldehyde	75-07-0	34	260	2500	1900	1900	4800	9600
	Formaldehyde	50-00-0	34	810	3800	2900	3200	6400	16000
Off Field[b]	Field Related Chemical								
	Styrene	100-42-5	13	0	60	130	0	220	670

[a] 35 field-specific on-field $C_{inh\text{-}sensory\text{-}field}$ values are included in the table.
[b] 34 field-specific off-field $C_{inh\text{-}sensory\text{-}field}$ values are included in the table. Selected carbonyls, collected using 2,4-dinitrophenylhydrazine-cartiridges, were not sampled at off the field locations during the statewide sample collections.

F.4.6. Chronic Inhalation Exposure Concentration for General Chemicals (Chronic C_{inh})

Table F-142. **On-Field** Chronic Inhalation Exposure Concentration[a] for **All General Chemicals** (Chronic C_{inh}, nanograms per cubic meter)—Combined Gender **Athletes**

Chemical	CASRN	Chronic C_{inh}						
		2<6 years	6<11 years	11<16 years	16<30 years	30<40 years	40<50 years	50<70 years
Field-Related Chemicals								
Acenaphthylene	208-96-8	0.16	0.2	0.2	0.37	0.24	0.24	0.24
Acetone	67-64-1	3000	3900	3800	7300	4700	4700	4600
Aniline	62-53-3	1	1.3	1.3	2.4	1.6	1.5	1.5
Anthracene	120-12-7	0.051	0.066	0.064	0.12	0.079	0.078	0.077
Anthracene, 2-methyl-	613-12-7	0.013	0.017	0.017	0.032	0.021	0.02	0.02
Anthracene, 9,10-dimethyl	781-43-1	0.015	0.02	0.019	0.036	0.024	0.023	0.023
Anthracene, 9-phenyl	602-55-1	0.0014	0.0018	0.0018	0.0033	0.0022	0.0022	0.0021
Benz[a]anthracene	56-55-3	0.00076	0.00099	0.00097	0.0018	0.0012	0.0012	0.0012
Benzaldehyde	100-52-7	14	18	18	33	22	21	21
Benzene, 1,2,3-trimethyl-	526-73-8	2	2.7	2.6	4.9	3.2	3.1	3.1
Benzene, 1,2,4,5-tetramethyl-	95-93-2	0.39	0.5	0.49	0.93	0.61	0.6	0.59
Benzene, 1,2,4-trimethyl-	95-63-6	18	24	23	44	28	28	28
Benzene, 1-ethyl-2,4-dimethyl-	874-41-9	0.82	1.1	1	1.9	1.3	1.3	1.2
Benzene, 2-ethyl-1,4-dimethyl-	1758-88-9	1.2	1.5	1.5	2.8	1.8	1.8	1.8
Benzene, butyl-	104-51-8	0.41	0.53	0.52	0.97	0.63	0.63	0.61
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	0.58	0.75	0.73	1.4	0.9	0.89	0.87
Benzo[b]fluoranthene	205-99-2	0.0038	0.005	0.0048	0.0091	0.006	0.0059	0.0058
7H-Benzo[c]fluorene	205-12-9	0.0084	0.011	0.011	0.02	0.013	0.013	0.013
Benzo[k]fluoranthene	207-08-9	0.0048	0.0062	0.006	0.011	0.0074	0.0073	0.0072
Benzothiazole	95-16-9	5.7	7.4	7.3	14	9	8.8	8.7
Benzothiazole, 2-phenyl-	883-93-2	0.46	0.59	0.58	1.1	0.71	0.7	0.69
2-Benzothiazolone	934-34-9	0.72	0.93	0.91	1.7	1.1	1.1	1.1
Benzyl butyl phthalate	85-68-7	0.53	0.69	0.67	1.3	0.83	0.82	0.8
Butanal	123-72-8	47	62	60	110	74	73	72
Cyclopentasiloxane, decamethyl-	541-02-6	25	32	32	60	39	38	38
Cyclotetrasiloxane, octamethyl-	556-67-2	9	12	11	21	14	14	14
p-Cymene	99-87-6	3.9	5	4.9	9.3	6.1	6	5.9
Decane	124-18-5	8.4	11	11	20	13	13	13
Dibenz[a,h]anthracene	53-70-3	0.022	0.029	0.028	0.053	0.035	0.034	0.034
Dibenzothiophene	132-65-0	0.19	0.25	0.24	0.46	0.3	0.29	0.29
Dibutyl phthalate	84-74-2	58	76	74	140	91	90	88
Diethyl phthalate	84-66-2	0.41	0.53	0.52	0.97	0.64	0.63	0.62
Diisobutyl phthalate	84-69-5	2.2	2.9	2.8	5.3	3.4	3.4	3.3

Chemical	CASRN	Chronic C_{inh}						
		2<6 years	6<11 years	11<16 years	16<30 years	30<40 years	40<50 years	50<70 years
Diisooctylphthalate	27554-26-3	7.7	9.9	9.7	18	12	12	12
Di-n-octyl phthalate	117-84-0	0.015	0.019	0.019	0.036	0.023	0.023	0.023
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	5	6.5	6.4	12	7.8	7.7	7.6
3,5-di-tert-Butyl-4-hydroxybenzaldehyde	1620-98-0	2.6	3.4	3.3	6.3	4.1	4	4
Dodecane	112-40-3	1	1.4	1.3	2.5	1.6	1.6	1.6
Fluoranthene	206-44-0	0.59	0.76	0.74	1.4	0.91	0.9	0.88
Fluorene	86-73-7	0.93	1.2	1.2	2.2	1.4	1.4	1.4
Furan, 2-methyl	534-22-5	17	21	21	39	26	25	25
Heptanal	111-71-7	2.3	3	2.9	5.5	3.6	3.5	3.4
Hexadecane	544-76-3	4.9	6.4	6.2	12	7.7	7.6	7.4
2,5-Hexanedione	110-13-4	4.2	5.5	5.3	10	6.6	6.5	6.4
Indan	496-11-7	2.1	2.7	2.7	5	3.3	3.3	3.2
Mesitylene	108-67-8	4.3	5.6	5.4	10	6.7	6.6	6.5
Methacrolein	78-85-3	12	15	15	28	18	18	18
Methyl Isobutyl Ketone	108-10-1	2.4	3.1	3.1	5.8	3.8	3.7	3.7
Naphthalene	91-20-3	4.1	5.4	5.2	9.9	6.4	6.3	6.2
Naphthalene, 1,2-dimethyl-	573-98-8	0.058	0.075	0.073	0.14	0.09	0.089	0.087
Naphthalene, 1,6-dimethyl-	575-43-9	0.41	0.54	0.52	0.99	0.64	0.63	0.62
Naphthalene, 1-methyl-	90-12-0	3.4	4.4	4.3	8	5.2	5.2	5.1
Naphthalene, 2-(bromomethyl)-	939-26-4	0.11	0.15	0.15	0.27	0.18	0.18	0.17
Naphthalene, 2,3-dimethyl-	581-40-8	0.31	0.4	0.39	0.74	0.48	0.48	0.47
Naphthalene, 2-methyl-	91-57-6	5.1	6.7	6.5	12	8	7.9	7.8
1-Octadecene	112-88-9	0.68	0.89	0.87	1.6	1.1	1.1	1
Octanal	124-13-0	6.9	9	8.8	17	11	11	10
Octane	111-65-9	9.4	12	12	22	15	14	14
17-Pentatriacontene	6971-40-0	0.11	0.15	0.14	0.27	0.18	0.17	0.17
N-Phenylbenzamide	93-98-1	1.4	1.8	1.8	3.3	2.2	2.1	2.1
Phenanthrene	85-01-8	2	2.6	2.6	4.8	3.1	3.1	3
Phenanthrene, 1-methyl	832-69-9	0.13	0.17	0.16	0.3	0.2	0.2	0.19
Phenanthrene, 2-methyl-	2531-84-2	0.23	0.3	0.29	0.55	0.36	0.36	0.35
Phenanthrene, 3-methyl	832-71-3	0.28	0.36	0.35	0.66	0.43	0.42	0.42
Propionaldehyde	123-38-6	29	37	36	68	45	44	43
Pyrene	129-00-0	0.5	0.64	0.63	1.2	0.77	0.76	0.75
Pyridine, 2-(4-methylphenyl)-	4467-06-5	0.0055	0.0071	0.007	0.013	0.0086	0.0084	0.0083
Resorcinol	108-46-3	2.9	3.8	3.7	7	4.5	4.5	4.4
m-Tolualdehyde	620-23-5	42	54	53	100	65	64	63
TXIB "Kodaflex"	6846-50-0	0.31	0.4	0.39	0.73	0.48	0.47	0.46
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	0.59	0.76	0.74	1.4	0.92	0.9	0.89
Undecane	1120-21-4	2	2.6	2.6	4.9	3.2	3.1	3.1

Chemical	CASRN	Chronic C_{inh}						
		2<6 years	6<11 years	11<16 years	16<30 years	30<40 years	40<50 years	50<70 years
Valeraldehyde	110-62-3	140	190	180	350	230	220	220
Non-Field-Related Chemicals								
Benzene	71-43-2	94	120	120	220	150	140	140
Benzene, 1,4-dichloro	106-46-7	3	3.9	3.8	7.1	4.6	4.6	4.5
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	89	120	110	210	140	140	130
2-Butoxyethanol	111-76-2	0.77	1	0.97	1.8	1.2	1.2	1.2
Cyclotrisiloxane, hexamethyl-	541-05-9	11	15	14	27	18	17	17
Decanal	112-31-2	4.4	5.6	5.5	10	6.8	6.7	6.6
Ethylbenzene	100-41-4	27	35	34	64	42	41	40
Heptane	142-82-5	36	46	45	85	56	55	54
Hexanal	66-25-1	120	160	150	290	190	190	180
Hexane	110-54-3	100	130	130	250	160	160	160
1-Hexanol, 2-ethyl-	104-76-7	1.2	1.6	1.5	2.9	1.9	1.9	1.8
Nonanal	124-19-6	1.2	1.6	1.5	2.9	1.9	1.9	1.8
Phenol	108-95-2	9.1	12	11	22	14	14	14
Tetrachloroethylene	127-18-4	7.4	9.6	9.4	18	12	11	11
Tetradecane	629-59-4	1.3	1.6	1.6	3	2	1.9	1.9
Texanol, TXIB (mono-isomer)	25265-77-4	16	21	20	39	25	25	24
Toluene	108-88-3	210	270	270	500	330	320	320
Trichloroethylene	79-01-6	1.5	2	1.9	3.6	2.4	2.3	2.3
Trichloromethane	67-66-3	5.9	7.7	7.5	14	9.2	9.1	8.9
m/p-Xylene	106-42-3	90	120	110	210	140	140	140
o-Xylene	95-47-6	30	39	38	72	47	46	45

[a] On-Field Chronic C_{inh} equals the modified mean of the 35 individual field average concentrations ($C_{air\text{-}avg}$ x AF_{inh}) of a chemical detected in air on the fields (see Section F.4.3 of this Appendix F).
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-143. **On-Field** Chronic Inhalation Exposure Concentration[a] for **All General Chemicals** (Chronic C_{inh}, nanograms per cubic meter)—Combined Gender **Coaches**

Chemical	CASRN	Chronic C_{inh}			
		16<30 years	30<40 years	40<50 years	50<70 years
Field-Related Chemicals					
Acenaphthylene	208-96-8	0.15	0.13	0.14	0.14
Acetone	67-64-1	3000	2600	2600	2700
Aniline	62-53-3	0.99	0.87	0.88	0.88
Anthracene	120-12-7	0.05	0.044	0.044	0.044
Anthracene, 2-methyl-	613-12-7	0.013	0.011	0.012	0.012
Anthracene, 9,10-dimethyl	781-43-1	0.015	0.013	0.013	0.013
Anthracene, 9-phenyl	602-55-1	0.0014	0.0012	0.0012	0.0012

Chemical	CASRN	Chronic C_{inh}			
		16<30 years	30<40 years	40<50 years	50<70 years
Benz[a]anthracene	56-55-3	0.00075	0.00066	0.00067	0.00067
Benzaldehyde	100-52-7	14	12	12	12
Benzene, 1,2,3-trimethyl-	526-73-8	2	1.8	1.8	1.8
Benzene, 1,2,4,5-tetramethyl-	95-93-2	0.38	0.33	0.34	0.34
Benzene, 1,2,4-trimethyl-	95-63-6	18	16	16	16
Benzene, 1-ethyl-2,4-dimethyl-	874-41-9	0.81	0.7	0.71	0.71
Benzene, 2-ethyl-1,4-dimethyl-	1758-88-9	1.1	1	1	1
Benzene, butyl-	104-51-8	0.4	0.35	0.35	0.36
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	0.57	0.5	0.5	0.51
Benzo[b]fluoranthene	205-99-2	0.0038	0.0033	0.0033	0.0033
7H-Benzo[c]fluorene	205-12-9	0.0083	0.0072	0.0073	0.0073
Benzo[k]fluoranthene	207-08-9	0.0047	0.0041	0.0041	0.0042
Benzothiazole	95-16-9	5.7	4.9	5	5
Benzothiazole, 2-phenyl-	883-93-2	0.45	0.39	0.4	0.4
2-Benzothiazolone	934-34-9	0.71	0.62	0.62	0.63
Benzyl butyl phthalate	85-68-7	0.53	0.46	0.46	0.46
Butanal	123-72-8	47	41	41	41
Cyclopentasiloxane, decamethyl-	541-02-6	25	22	22	22
Cyclotetrasiloxane, octamethyl-	556-67-2	8.9	7.8	7.8	7.9
p-Cymene	99-87-6	3.8	3.3	3.4	3.4
Decane	124-18-5	8.3	7.2	7.3	7.3
Dibenz[a,h]anthracene	53-70-3	0.022	0.019	0.019	0.019
Dibenzothiophene	132-65-0	0.19	0.17	0.17	0.17
Dibutyl phthalate	84-74-2	57	50	51	51
Diethyl phthalate	84-66-2	0.4	0.35	0.36	0.36
Diisobutyl phthalate	84-69-5	2.2	1.9	1.9	1.9
Diisooctylphthalate	27554-26-3	7.6	6.6	6.7	6.7
Di-n-octyl phthalate	117-84-0	0.015	0.013	0.013	0.013
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	5	4.3	4.4	4.4
3,5-di-tert-Butyl-4-hydroxybenzaldehyde	1620-98-0	2.6	2.3	2.3	2.3
Dodecane	112-40-3	1	0.9	0.91	0.92
Fluoranthene	206-44-0	0.58	0.5	0.51	0.51
Fluorene	86-73-7	0.91	0.8	0.81	0.81
Furan, 2-methyl	534-22-5	16	14	14	14
Heptanal	111-71-7	2.3	2	2	2
Hexadecane	544-76-3	4.9	4.2	4.3	4.3
2,5-Hexanedione	110-13-4	4.2	3.6	3.7	3.7
Indan	496-11-7	2.1	1.8	1.8	1.8
Mesitylene	108-67-8	4.2	3.7	3.7	3.7
Methacrolein	78-85-3	12	10	10	10

Chemical	CASRN	Chronic C_{inh}			
		16<30 years	30<40 years	40<50 years	50<70 years
Methyl Isobutyl Ketone	108-10-1	2.4	2.1	2.1	2.1
Naphthalene	91-20-3	4.1	3.6	3.6	3.6
Naphthalene, 1,2-dimethyl-	573-98-8	0.057	0.05	0.05	0.05
Naphthalene, 1,6-dimethyl-	575-43-9	0.41	0.36	0.36	0.36
Naphthalene, 1-methyl-	90-12-0	3.3	2.9	2.9	2.9
Naphthalene, 2-(bromomethyl)-	939-26-4	0.11	0.099	0.1	0.1
Naphthalene, 2,3-dimethyl-	581-40-8	0.31	0.27	0.27	0.27
Naphthalene, 2-methyl-	91-57-6	5.1	4.4	4.5	4.5
1-Octadecene	112-88-9	0.68	0.59	0.6	0.6
Octanal	124-13-0	6.9	6	6.1	6.1
Octane	111-65-9	9.3	8.1	8.2	8.2
17-Pentatriacontene	6971-40-0	0.11	0.098	0.099	0.099
N-Phenylbenzamide	93-98-1	1.4	1.2	1.2	1.2
Phenanthrene	85-01-8	2	1.7	1.8	1.8
Phenanthrene, 1-methyl	832-69-9	0.13	0.11	0.11	0.11
Phenanthrene, 2-methyl-	2531-84-2	0.23	0.2	0.2	0.2
Phenanthrene, 3-methyl	832-71-3	0.27	0.24	0.24	0.24
Propionaldehyde	123-38-6	28	25	25	25
Pyrene	129-00-0	0.49	0.43	0.43	0.43
Pyridine, 2-(4-methylphenyl)-	4467-06-5	0.0054	0.0047	0.0048	0.0048
Resorcinol	108-46-3	2.9	2.5	2.5	2.5
m-Tolualdehyde	620-23-5	41	36	36	37
TXIB "Kodaflex"	6846-50-0	0.3	0.26	0.27	0.27
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	0.58	0.51	0.51	0.51
Undecane	1120-21-4	2	1.8	1.8	1.8
Valeraldehyde	110-62-3	140	120	130	130
Non-Field-Related Chemicals					
Benzene	71-43-2	93	81	82	82
Benzene, 1,4-dichloro	106-46-7	2.9	2.6	2.6	2.6
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	88	77	78	78
2-Butoxyethanol	111-76-2	0.76	0.66	0.67	0.67
Cyclotrisiloxane, hexamethyl-	541-05-9	11	9.8	9.9	9.9
Decanal	112-31-2	4.3	3.8	3.8	3.8
Ethylbenzene	100-41-4	26	23	23	23
Heptane	142-82-5	35	31	31	31
Hexanal	66-25-1	120	110	110	110
Hexane	110-54-3	100	90	91	91
1-Hexanol, 2-ethyl-	104-76-7	1.2	1	1.1	1.1
Nonanal	124-19-6	1.2	1	1.1	1.1
Phenol	108-95-2	8.9	7.8	7.9	7.9

Chemical	CASRN	Chronic C_{inh}			
		16<30 years	30<40 years	40<50 years	50<70 years
Tetrachloroethylene	127-18-4	7.3	6.4	6.5	6.5
Tetradecane	629-59-4	1.2	1.1	1.1	1.1
Texanol, TXIB (mono-isomer)	25265-77-4	16	14	14	14
Toluene	108-88-3	210	180	180	180
Trichloroethylene	79-01-6	1.5	1.3	1.3	1.3
Trichloromethane	67-66-3	5.8	5.1	5.1	5.2
m/p-Xylene	106-42-3	88	77	78	78
o-Xylene	95-47-6	30	26	26	26

[a] On-Field Chronic C_{inh} equals the modified mean of the 35 individual field average concentrations ($C_{air\text{-}avg}$ x AF_{inh}) of a chemical detected in air on the fields (see Section F.4.3 of this Appendix F).
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-144. **On-Field** Chronic Inhalation Exposure Concentration[a] for **All General Chemicals** (Chronic C_{inh}, nanograms per cubic meter)—Combined Gender **Referees**

Chemical	CASRN	Chronic C_{inh}			
		16<30 years	30<40 years	40<50 years	50<70 years
Field-Related Chemicals					
Acenaphthylene	208-96-8	0.057	0.05	0.05	0.05
Acetone	67-64-1	1100	970	980	990
Aniline	62-53-3	0.37	0.32	0.33	0.33
Anthracene	120-12-7	0.019	0.016	0.016	0.016
Anthracene, 2-methyl-	613-12-7	0.0049	0.0042	0.0043	0.0043
Anthracene, 9,10-dimethyl	781-43-1	0.0055	0.0048	0.0049	0.0049
Anthracene, 9-phenyl	602-55-1	0.00051	0.00045	0.00045	0.00045
Benz[a]anthracene	56-55-3	0.00028	0.00024	0.00025	0.00025
Benzaldehyde	100-52-7	5.1	4.4	4.5	4.5
Benzene, 1,2,3-trimethyl-	526-73-8	0.75	0.65	0.66	0.66
Benzene, 1,2,4,5-tetramethyl-	95-93-2	0.14	0.12	0.13	0.13
Benzene, 1,2,4-trimethyl-	95-63-6	6.7	5.8	5.9	5.9
Benzene, 1-ethyl-2,4-dimethyl-	874-41-9	0.3	0.26	0.26	0.26
Benzene, 2-ethyl-1,4-dimethyl-	1758-88-9	0.42	0.37	0.37	0.38
Benzene, butyl-	104-51-8	0.15	0.13	0.13	0.13
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	0.21	0.19	0.19	0.19
Benzo[b]fluoranthene	205-99-2	0.0014	0.0012	0.0012	0.0012
7H-Benzo[c]fluorene	205-12-9	0.0031	0.0027	0.0027	0.0027
Benzo[k]fluoranthene	207-08-9	0.0017	0.0015	0.0015	0.0015
Benzothiazole	95-16-9	2.1	1.8	1.9	1.9
Benzothiazole, 2-phenyl-	883-93-2	0.17	0.15	0.15	0.15
2-Benzothiazolone	934-34-9	0.26	0.23	0.23	0.23

Chemical	CASRN	Chronic C_{inh}			
		16<30 years	30<40 years	40<50 years	50<70 years
Benzyl butyl phthalate	85-68-7	0.19	0.17	0.17	0.17
Butanal	123-72-8	17	15	15	15
Cyclopentasiloxane, decamethyl-	541-02-6	9.1	8	8.1	8.1
Cyclotetrasiloxane, octamethyl-	556-67-2	3.3	2.9	2.9	2.9
p-Cymene	99-87-6	1.4	1.2	1.3	1.3
Decane	124-18-5	3.1	2.7	2.7	2.7
Dibenz[a,h]anthracene	53-70-3	0.0081	0.0071	0.0072	0.0072
Dibenzothiophene	132-65-0	0.07	0.061	0.062	0.062
Dibutyl phthalate	84-74-2	21	19	19	19
Diethyl phthalate	84-66-2	0.15	0.13	0.13	0.13
Diisobutyl phthalate	84-69-5	0.81	0.71	0.72	0.72
Diisooctylphthalate	27554-26-3	2.8	2.5	2.5	2.5
Di-n-octyl phthalate	117-84-0	0.0055	0.0048	0.0048	0.0049
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	1.8	1.6	1.6	1.6
3,5-di-tert-Butyl-4-hydroxybenzaldehyde	1620-98-0	0.96	0.84	0.85	0.85
Dodecane	112-40-3	0.38	0.34	0.34	0.34
Fluoranthene	206-44-0	0.21	0.19	0.19	0.19
Fluorene	86-73-7	0.34	0.3	0.3	0.3
Furan, 2-methyl	534-22-5	6.1	5.3	5.3	5.4
Heptanal	111-71-7	0.84	0.73	0.74	0.74
Hexadecane	544-76-3	1.8	1.6	1.6	1.6
2,5-Hexanedione	110-13-4	1.5	1.3	1.4	1.4
Indan	496-11-7	0.77	0.68	0.68	0.69
Mesitylene	108-67-8	1.6	1.4	1.4	1.4
Methacrolein	78-85-3	4.3	3.8	3.8	3.8
Methyl Isobutyl Ketone	108-10-1	0.89	0.78	0.79	0.79
Naphthalene	91-20-3	1.5	1.3	1.3	1.3
Naphthalene, 1,2-dimethyl-	573-98-8	0.021	0.018	0.019	0.019
Naphthalene, 1,6-dimethyl-	575-43-9	0.15	0.13	0.13	0.13
Naphthalene, 1-methyl-	90-12-0	1.2	1.1	1.1	1.1
Naphthalene, 2-(bromomethyl)-	939-26-4	0.042	0.037	0.037	0.037
Naphthalene, 2,3-dimethyl-	581-40-8	0.11	0.099	0.1	0.1
Naphthalene, 2-methyl-	91-57-6	1.9	1.6	1.7	1.7
1-Octadecene	112-88-9	0.25	0.22	0.22	0.22
Octanal	124-13-0	2.5	2.2	2.2	2.3
Octane	111-65-9	3.4	3	3	3
17-Pentatriacontene	6971-40-0	0.042	0.036	0.037	0.037
N-Phenylbenzamide	93-98-1	0.51	0.45	0.45	0.45
Phenanthrene	85-01-8	0.74	0.64	0.65	0.65
Phenanthrene, 1-methyl	832-69-9	0.047	0.041	0.041	0.041

Chemical	CASRN	Chronic C_{inh}			
		16<30 years	30<40 years	40<50 years	50<70 years
Phenanthrene, 2-methyl-	2531-84-2	0.085	0.074	0.075	0.075
Phenanthrene, 3-methyl	832-71-3	0.1	0.088	0.089	0.09
Propionaldehyde	123-38-6	10	9.1	9.2	9.3
Pyrene	129-00-0	0.18	0.16	0.16	0.16
Pyridine, 2-(4-methylphenyl)-	4467-06-5	0.002	0.0018	0.0018	0.0018
Resorcinol	108-46-3	1.1	0.93	0.94	0.94
m-Tolualdehyde	620-23-5	15	13	14	14
TXIB "Kodaflex"	6846-50-0	0.11	0.098	0.099	0.099
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	0.21	0.19	0.19	0.19
Undecane	1120-21-4	0.75	0.65	0.66	0.66
Valeraldehyde	110-62-3	53	46	47	47
Non-Field-Related Chemicals					
Benzene	71-43-2	34	30	30	30
Benzene, 1,4-dichloro	106-46-7	1.1	0.95	0.96	0.97
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	33	29	29	29
2-Butoxyethanol	111-76-2	0.28	0.25	0.25	0.25
Cyclotrisiloxane, hexamethyl-	541-05-9	4.2	3.6	3.7	3.7
Decanal	112-31-2	1.6	1.4	1.4	1.4
Ethylbenzene	100-41-4	9.8	8.5	8.6	8.6
Heptane	142-82-5	13	11	12	12
Hexanal	66-25-1	45	39	40	40
Hexane	110-54-3	38	33	34	34
1-Hexanol, 2-ethyl-	104-76-7	0.44	0.39	0.39	0.39
Nonanal	124-19-6	0.44	0.39	0.39	0.39
Phenol	108-95-2	3.3	2.9	2.9	2.9
Tetrachloroethylene	127-18-4	2.7	2.4	2.4	2.4
Tetradecane	629-59-4	0.46	0.4	0.41	0.41
Texanol, TXIB (mono-isomer)	25265-77-4	5.9	5.2	5.2	5.2
Toluene	108-88-3	77	67	68	68
Trichloroethylene	79-01-6	0.55	0.48	0.49	0.49
Trichloromethane	67-66-3	2.2	1.9	1.9	1.9
m/p-Xylene	106-42-3	33	29	29	29
o-Xylene	95-47-6	11	9.6	9.7	9.7

[a] On-Field Chronic C_{inh} equals the modified mean of the 35 individual field average concentrations ($C_{air\text{-}avg}$ x AF_{inh}) of a chemical detected in air on the fields (see Section F.4.3 of this Appendix F).
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-145. **On-Field** Chronic Inhalation Exposure Concentration[a] for **All General Chemicals** (Chronic C_{inh}, nanograms per cubic meter)—Combined Gender **Spectators**

Chemical	CASRN	Chronic C_{inh}								
		Third trimester fetus	0<2 years	2<6 years	6<11 years	11<16 years	16<30 years	30<40 years	40<50 years	50<70 years
Field-Related Chemicals										
Acenaphthylene	208-96-8	0.021	0.17	0.087	0.083	0.036	0.024	0.021	0.021	0.021
Acetone	67-64-1	400	3200	1700	1600	700	460	400	410	410
Aniline	62-53-3	0.13	1.1	0.56	0.54	0.23	0.15	0.13	0.14	0.14
Anthracene	120-12-7	0.0067	0.054	0.028	0.027	0.012	0.0077	0.0068	0.0068	0.0069
Anthracene, 2-methyl-	613-12-7	0.0018	0.014	0.0074	0.0071	0.0031	0.002	0.0018	0.0018	0.0018
Anthracene, 9,10-dimethyl	781-43-1	0.002	0.016	0.0085	0.0081	0.0035	0.0023	0.002	0.002	0.002
Anthracene, 9-phenyl	602-55-1	0.00019	0.0015	0.00079	0.00075	0.00032	0.00021	0.00019	0.00019	0.00019
Benz[a]anthracene	56-55-3	0.0001	0.00082	0.00043	0.00041	0.00018	0.00012	0.0001	0.0001	0.0001
Benzaldehyde	100-52-7	1.8	15	7.8	7.4	3.2	2.1	1.8	1.9	1.9
Benzene, 1,2,3-trimethyl-	526-73-8	0.27	2.2	1.1	1.1	0.47	0.31	0.27	0.28	0.28
Benzene, 1,2,4,5-tetramethyl-	95-93-2	0.052	0.41	0.22	0.21	0.09	0.059	0.052	0.052	0.052
Benzene, 1,2,4-trimethyl-	95-63-6	2.4	19	10	9.8	4.2	2.8	2.4	2.5	2.5
Benzene, 1-ethyl-2,4-dimethyl-	874-41-9	0.11	0.87	0.46	0.44	0.19	0.12	0.11	0.11	0.11
Benzene, 2-ethyl-1,4-dimethyl-	1758-88-9	0.15	1.2	0.65	0.62	0.27	0.18	0.15	0.16	0.16
Benzene, butyl-	104-51-8	0.054	0.43	0.23	0.22	0.094	0.062	0.054	0.055	0.055
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	0.077	0.62	0.33	0.31	0.13	0.088	0.077	0.078	0.078
Benzo[b]fluoranthene	205-99-2	0.00051	0.0041	0.0021	0.002	0.00088	0.00058	0.00051	0.00052	0.00052
7H-Benzo[c]fluorene	205-12-9	0.0011	0.0089	0.0047	0.0045	0.0019	0.0013	0.0011	0.0011	0.0011
Benzo[k]fluoranthene	207-08-9	0.00063	0.0051	0.0027	0.0025	0.0011	0.00073	0.00063	0.00064	0.00064
Benzothiazole	95-16-9	0.76	6.1	3.2	3.1	1.3	0.88	0.77	0.77	0.78
Benzothiazole, 2-phenyl-	883-93-2	0.061	0.49	0.26	0.24	0.11	0.07	0.061	0.062	0.062
2-Benzothiazolone	934-34-9	0.095	0.76	0.4	0.38	0.17	0.11	0.095	0.096	0.097
Benzyl butyl phthalate	85-68-7	0.071	0.57	0.3	0.29	0.12	0.081	0.071	0.072	0.072

Chemical	CASRN	Chronic C_{inh}								
		Third trimester fetus	0<2 years	2<6 years	6<11 years	11<16 years	16<30 years	30<40 years	40<50 years	50<70 years
Butanal	123-72-8	6.3	51	27	25	11	7.2	6.3	6.4	6.4
Cyclopentasiloxane, decamethyl-	541-02-6	3.3	27	14	13	5.8	3.8	3.3	3.4	3.4
Cyclotetrasiloxane, octamethyl-	556-67-2	1.2	9.6	5	4.8	2.1	1.4	1.2	1.2	1.2
p-Cymene	99-87-6	0.52	4.2	2.2	2.1	0.9	0.59	0.52	0.52	0.53
Decane	124-18-5	1.1	9	4.7	4.5	1.9	1.3	1.1	1.1	1.1
Dibenz[a,h]anthracene	53-70-3	0.003	0.024	0.012	0.012	0.0051	0.0034	0.003	0.003	0.003
Dibenzothiophene	132-65-0	0.025	0.2	0.11	0.1	0.044	0.029	0.026	0.026	0.026
Dibutyl phthalate	84-74-2	7.7	62	33	31	13	8.9	7.8	7.9	7.9
Diethyl phthalate	84-66-2	0.054	0.44	0.23	0.22	0.094	0.062	0.054	0.055	0.055
Diisobutyl phthalate	84-69-5	0.29	2.4	1.2	1.2	0.51	0.34	0.29	0.3	0.3
Diisooctylphthalate	27554-26-3	1	8.2	4.3	4.1	1.8	1.2	1	1	1
Di-n-octyl phthalate	117-84-0	0.002	0.016	0.0084	0.008	0.0035	0.0023	0.002	0.002	0.002
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	0.67	5.4	2.8	2.7	1.2	0.77	0.67	0.68	0.68
3,5-di-tert-Butyl-4-hydroxybenzaldehyde	1620-98-0	0.35	2.8	1.5	1.4	0.61	0.4	0.35	0.35	0.36
Dodecane	112-40-3	0.14	1.1	0.59	0.56	0.24	0.16	0.14	0.14	0.14
Fluoranthene	206-44-0	0.078	0.63	0.33	0.31	0.14	0.089	0.078	0.079	0.079
Fluorene	86-73-7	0.12	0.99	0.52	0.5	0.21	0.14	0.12	0.12	0.13
Furan, 2-methyl	534-22-5	2.2	18	9.3	8.9	3.8	2.5	2.2	2.2	2.2
Heptanal	111-71-7	0.3	2.4	1.3	1.2	0.53	0.35	0.3	0.31	0.31
Hexadecane	544-76-3	0.65	5.3	2.8	2.6	1.1	0.75	0.66	0.66	0.67
2,5-Hexanedione	110-13-4	0.56	4.5	2.4	2.3	0.97	0.64	0.56	0.57	0.57
Indan	496-11-7	0.28	2.3	1.2	1.1	0.49	0.32	0.28	0.28	0.29
Mesitylene	108-67-8	0.57	4.6	2.4	2.3	0.99	0.65	0.57	0.58	0.58
Methacrolein	78-85-3	1.6	13	6.6	6.3	2.7	1.8	1.6	1.6	1.6
Methyl Isobutyl Ketone	108-10-1	0.32	2.6	1.4	1.3	0.56	0.37	0.32	0.33	0.33
Naphthalene	91-20-3	0.55	4.4	2.3	2.2	0.95	0.63	0.55	0.56	0.56
Naphthalene, 1,2-dimethyl-	573-98-8	0.0077	0.062	0.032	0.031	0.013	0.0088	0.0077	0.0078	0.0078

Chemical	CASRN	Chronic C_{inh}								
		Third trimester fetus	0<2 years	2<6 years	6<11 years	11<16 years	16<30 years	30<40 years	40<50 years	50<70 years
Naphthalene, 1,6-dimethyl-	575-43-9	0.055	0.44	0.23	0.22	0.095	0.063	0.055	0.056	0.056
Naphthalene, 1-methyl-	90-12-0	0.45	3.6	1.9	1.8	0.78	0.51	0.45	0.45	0.45
Naphthalene, 2-(bromomethyl)-	939-26-4	0.015	0.12	0.064	0.061	0.026	0.017	0.015	0.015	0.015
Naphthalene, 2,3-dimethyl-	581-40-8	0.041	0.33	0.17	0.17	0.072	0.047	0.041	0.042	0.042
Naphthalene, 2-methyl-	91-57-6	0.68	5.5	2.9	2.8	1.2	0.78	0.68	0.69	0.69
1-Octadecene	112-88-9	0.091	0.73	0.38	0.37	0.16	0.1	0.091	0.092	0.093
Octanal	124-13-0	0.92	7.4	3.9	3.7	1.6	1.1	0.93	0.94	0.94
Octane	111-65-9	1.2	10	5.3	5	2.2	1.4	1.3	1.3	1.3
17-Pentatriacontene	6971-40-0	0.015	0.12	0.064	0.061	0.026	0.017	0.015	0.015	0.015
N-Phenylbenzamide	93-98-1	0.18	1.5	0.78	0.75	0.32	0.21	0.19	0.19	0.19
Phenanthrene	85-01-8	0.27	2.2	1.1	1.1	0.47	0.31	0.27	0.27	0.27
Phenanthrene, 1-methyl	832-69-9	0.017	0.14	0.072	0.068	0.029	0.019	0.017	0.017	0.017
Phenanthrene, 2-methyl-	2531-84-2	0.031	0.25	0.13	0.12	0.054	0.035	0.031	0.031	0.031
Phenanthrene, 3-methyl	832-71-3	0.037	0.3	0.16	0.15	0.064	0.042	0.037	0.037	0.037
Propionaldehyde	123-38-6	3.8	31	16	15	6.6	4.4	3.8	3.9	3.9
Pyrene	129-00-0	0.066	0.53	0.28	0.27	0.11	0.076	0.066	0.067	0.067
Pyridine, 2-(4-methylphenyl)-	4467-06-5	0.00073	0.0059	0.0031	0.0029	0.0013	0.00084	0.00073	0.00074	0.00074
Resorcinol	108-46-3	0.39	3.1	1.6	1.6	0.67	0.44	0.39	0.39	0.39
m-Tolualdehyde	620-23-5	5.6	45	23	22	9.7	6.4	5.6	5.6	5.7
TXIB "Kodaflex"	6846-50-0	0.041	0.33	0.17	0.16	0.071	0.047	0.041	0.041	0.041
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	0.078	0.63	0.33	0.31	0.14	0.09	0.078	0.079	0.079
Undecane	1120-21-4	0.27	2.2	1.1	1.1	0.47	0.31	0.27	0.27	0.28
Valeraldehyde	110-62-3	19	150	81	78	33	22	19	20	20
Non-Field-Related Chemicals										
Benzene	71-43-2	12	100	53	50	22	14	13	13	13
Benzene, 1,4-dichloro	106-46-7	0.4	3.2	1.7	1.6	0.69	0.45	0.4	0.4	0.4

Chemical	CASRN	Chronic C_{inh}								
		Third trimester fetus	0<2 years	2<6 years	6<11 years	11<16 years	16<30 years	30<40 years	40<50 years	50<70 years
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	12	95	50	48	21	14	12	12	12
2-Butoxyethanol	111-76-2	0.1	0.82	0.43	0.41	0.18	0.12	0.1	0.1	0.1
Cyclotrisiloxane, hexamethyl-	541-05-9	1.5	12	6.4	6.1	2.6	1.7	1.5	1.5	1.5
Decanal	112-31-2	0.58	4.6	2.4	2.3	1	0.66	0.58	0.59	0.59
Ethylbenzene	100-41-4	3.5	28	15	14	6.2	4.1	3.6	3.6	3.6
Heptane	142-82-5	4.8	38	20	19	8.3	5.5	4.8	4.8	4.8
Hexanal	66-25-1	16	130	69	65	28	19	16	16	17
Hexane	110-54-3	14	110	58	56	24	16	14	14	14
1-Hexanol, 2-ethyl-	104-76-7	0.16	1.3	0.68	0.65	0.28	0.18	0.16	0.16	0.16
Nonanal	124-19-6	0.16	1.3	0.68	0.65	0.28	0.18	0.16	0.16	0.16
Phenol	108-95-2	1.2	9.7	5.1	4.9	2.1	1.4	1.2	1.2	1.2
Tetrachloroethylene	127-18-4	0.98	7.9	4.2	4	1.7	1.1	0.99	1	1
Tetradecane	629-59-4	0.17	1.3	0.71	0.67	0.29	0.19	0.17	0.17	0.17
Texanol, TXIB (mono-isomer)	25265-77-4	2.1	17	9.1	8.7	3.7	2.5	2.2	2.2	2.2
Toluene	108-88-3	28	220	120	110	49	32	28	28	28
Trichloroethylene	79-01-6	0.2	1.6	0.85	0.81	0.35	0.23	0.2	0.2	0.2
Trichloromethane	67-66-3	0.78	6.3	3.3	3.2	1.4	0.9	0.79	0.8	0.8
m/p-Xylene	106-42-3	12	96	50	48	21	14	12	12	12
o-Xylene	95-47-6	4	32	17	16	6.9	4.6	4	4	4.1

[a] On-Field Chronic C_{inh} equals the modified mean of the 35 individual field average concentrations ($C_{air\text{-}avg}$ x AF_{inh}) of a chemical detected in air on the fields (see Section F.4.3 of this Appendix F).
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-146. **Off-Field** Chronic Inhalation Exposure Concentration[a] for **All General Chemicals** (Chronic C_{inh}, nanograms per cubic meter)—Combined Gender **Spectators**

Chemical	CASRN	Chronic C_{inh}								
		Third trimester fetus	0<2 years	2<6 years	6<11 years	11<16 years	16<30 years	30<40 years	40<50 years	50<70 years
Field-Related Chemicals										
Acenaphthylene	208-96-8	0.022	0.18	0.092	0.088	0.038	0.025	0.022	0.022	0.022

Chemical	CASRN	Chronic C_{inh}								
		Third trimester fetus	0<2 years	2<6 years	6<11 years	11<16 years	16<30 years	30<40 years	40<50 years	50<70 years
Aniline	62-53-3	0.15	1.2	0.62	0.6	0.26	0.17	0.15	0.15	0.15
Anthracene	120-12-7	0.0041	0.033	0.018	0.017	0.0072	0.0048	0.0042	0.0042	0.0042
Anthracene, 2-methyl-	613-12-7	0.0011	0.0087	0.0046	0.0044	0.0019	0.0012	0.0011	0.0011	0.0011
Anthracene, 9,10-dimethyl	781-43-1	0.0017	0.014	0.0073	0.007	0.003	0.002	0.0017	0.0017	0.0018
Anthracene, 9-phenyl	602-55-1	0.00077	0.0062	0.0032	0.0031	0.0013	0.00088	0.00077	0.00078	0.00078
Benz[a]anthracene	56-55-3	0	0	0	0	0	0	0	0	0
Benzaldehyde	100-52-7	2	16	8.5	8.1	3.5	2.3	2	2	2
Benzene, 1,2,3-trimethyl-	526-73-8	0.34	2.8	1.5	1.4	0.6	0.4	0.35	0.35	0.35
Benzene, 1,2,4,5-tetramethyl-	95-93-2	0.066	0.53	0.28	0.26	0.11	0.075	0.066	0.067	0.067
Benzene, 1,2,4-trimethyl-	95-63-6	2.6	21	11	11	4.6	3	2.6	2.7	2.7
Benzene, 1-ethyl-2,4-dimethyl-	874-41-9	0.12	0.99	0.52	0.5	0.21	0.14	0.12	0.12	0.12
Benzene, 2-ethyl-1,4-dimethyl-	1758-88-9	0.17	1.4	0.73	0.7	0.3	0.2	0.17	0.18	0.18
Benzene, butyl-	104-51-8	0.089	0.72	0.38	0.36	0.16	0.1	0.089	0.09	0.091
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	0.087	0.7	0.37	0.35	0.15	0.099	0.087	0.088	0.088
Benzo[b]fluoranthene	205-99-2	0.00079	0.0063	0.0033	0.0032	0.0014	0.0009	0.00079	0.0008	0.0008
7H-Benzo[c]fluorene	205-12-9	0.00065	0.0052	0.0027	0.0026	0.0011	0.00074	0.00065	0.00066	0.00066
Benzo[k]fluoranthene	207-08-9	0.00065	0.0052	0.0028	0.0026	0.0011	0.00075	0.00065	0.00066	0.00066
Benzothiazole	95-16-9	0.1	0.8	0.42	0.4	0.17	0.11	0.1	0.1	0.1
Benzothiazole, 2-phenyl-	883-93-2	0.0089	0.071	0.037	0.036	0.015	0.01	0.0089	0.009	0.009
2-Benzothiazolone	934-34-9	0.084	0.67	0.35	0.34	0.15	0.096	0.084	0.085	0.085
Benzyl butyl phthalate	85-68-7	0.09	0.73	0.38	0.36	0.16	0.1	0.091	0.092	0.092
Butanal	123-72-8	5.9	47	25	24	10	6.7	5.9	6	6
Cyclopentasiloxane, decamethyl-	541-02-6	3.1	25	13	12	5.3	3.5	3.1	3.1	3.1
Cyclotetrasiloxane, octamethyl-	556-67-2	1.1	8.6	4.5	4.3	1.9	1.2	1.1	1.1	1.1
p-Cymene	99-87-6	0.54	4.3	2.3	2.2	0.94	0.62	0.54	0.55	0.55
Decane	124-18-5	1.2	10	5.2	5	2.2	1.4	1.2	1.3	1.3

Chemical	CASRN	Chronic C_{inh}								
		Third trimester fetus	0<2 years	2<6 years	6<11 years	11<16 years	16<30 years	30<40 years	40<50 years	50<70 years
Dibenz[a,h]anthracene	53-70-3	0.0019	0.015	0.0078	0.0075	0.0032	0.0021	0.0019	0.0019	0.0019
Dibenzothiophene	132-65-0	0.024	0.19	0.1	0.098	0.042	0.028	0.024	0.025	0.025
Dibutyl phthalate	84-74-2	6.2	50	26	25	11	7.2	6.3	6.3	6.3
Diethyl phthalate	84-66-2	0.22	1.8	0.94	0.9	0.39	0.26	0.22	0.23	0.23
Diisobutyl phthalate	84-69-5	0.32	2.5	1.3	1.3	0.55	0.36	0.32	0.32	0.32
Diisooctylphthalate	27554-26-3	0.3	2.4	1.3	1.2	0.53	0.35	0.31	0.31	0.31
Di-n-octyl phthalate	117-84-0	0.002	0.016	0.0087	0.0083	0.0036	0.0024	0.0021	0.0021	0.0021
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	0.81	6.5	3.4	3.3	1.4	0.93	0.81	0.82	0.83
3,5-di-tert-Butyl-4-hydroxybenzaldehyde	1620-98-0	0.23	1.8	0.96	0.91	0.4	0.26	0.23	0.23	0.23
Dodecane	112-40-3	0.18	1.4	0.76	0.72	0.31	0.21	0.18	0.18	0.18
Fluoranthene	206-44-0	0.046	0.37	0.19	0.19	0.08	0.053	0.046	0.047	0.047
Fluorene	86-73-7	0.1	0.83	0.43	0.41	0.18	0.12	0.1	0.1	0.1
Furan, 2-methyl	534-22-5	0.78	6.3	3.3	3.2	1.4	0.9	0.79	0.79	0.8
Heptanal	111-71-7	0.31	2.5	1.3	1.3	0.54	0.36	0.31	0.32	0.32
Hexadecane	544-76-3	0.94	7.6	4	3.8	1.6	1.1	0.94	0.95	0.96
2,5-Hexanedione	110-13-4	0.73	5.9	3.1	2.9	1.3	0.84	0.73	0.74	0.74
Indan	496-11-7	0.28	2.2	1.2	1.1	0.48	0.32	0.28	0.28	0.28
Mesitylene	108-67-8	0.59	4.7	2.5	2.4	1	0.67	0.59	0.59	0.6
Methacrolein	78-85-3	1.4	12	6.1	5.8	2.5	1.6	1.4	1.5	1.5
Methyl Isobutyl Ketone	108-10-1	0.074	0.59	0.31	0.3	0.13	0.085	0.074	0.075	0.075
Naphthalene	91-20-3	0.6	4.8	2.5	2.4	1	0.69	0.6	0.61	0.61
Naphthalene, 1,2-dimethyl-	573-98-8	0.016	0.13	0.068	0.065	0.028	0.018	0.016	0.016	0.016
Naphthalene, 1,6-dimethyl-	575-43-9	0.057	0.46	0.24	0.23	0.099	0.066	0.057	0.058	0.058
Naphthalene, 1-methyl-	90-12-0	0.44	3.6	1.9	1.8	0.77	0.51	0.45	0.45	0.45
Naphthalene, 2-(bromomethyl)-	939-26-4	0.016	0.13	0.067	0.064	0.028	0.018	0.016	0.016	0.016
Naphthalene, 2,3-dimethyl-	581-40-8	0.043	0.34	0.18	0.17	0.075	0.049	0.043	0.043	0.044
Naphthalene, 2-methyl-	91-57-6	0.73	5.8	3.1	2.9	1.3	0.83	0.73	0.74	0.74
1-Octadecene	112-88-9	0.084	0.67	0.35	0.34	0.15	0.096	0.084	0.085	0.085
Octanal	124-13-0	0.9	7.2	3.8	3.6	1.6	1	0.9	0.91	0.91
Octane	111-65-9	1.5	12	6.3	6	2.6	1.7	1.5	1.5	1.5

Chemical	CASRN	Chronic C_{inh}								
		Third trimester fetus	0<2 years	2<6 years	6<11 years	11<16 years	16<30 years	30<40 years	40<50 years	50<70 years
17-Pentatriacontene	6971-40-0	0.01	0.083	0.044	0.042	0.018	0.012	0.01	0.011	0.011
N-Phenylbenzamide	93-98-1	0.18	1.5	0.77	0.74	0.32	0.21	0.18	0.19	0.19
Phenanthrene	85-01-8	0.22	1.8	0.94	0.9	0.39	0.26	0.22	0.23	0.23
Phenanthrene, 1-methyl	832-69-9	0.01	0.082	0.043	0.041	0.018	0.012	0.01	0.01	0.01
Phenanthrene, 2-methyl-	2531-84-2	0.02	0.16	0.083	0.08	0.034	0.023	0.02	0.02	0.02
Phenanthrene, 3-methyl	832-71-3	0.023	0.18	0.095	0.091	0.039	0.026	0.023	0.023	0.023
Pyrene	129-00-0	0.033	0.26	0.14	0.13	0.057	0.038	0.033	0.033	0.033
Pyridine, 2-(4-methylphenyl)-	4467-06-5	0.00011	0.00089	0.00047	0.00045	0.00019	0.00013	0.00011	0.00011	0.00011
Resorcinol	108-46-3	0.66	5.3	2.8	2.7	1.2	0.76	0.66	0.67	0.67
TXIB "Kodaflex"	6846-50-0	0.084	0.67	0.35	0.34	0.15	0.096	0.084	0.085	0.085
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	0.056	0.45	0.24	0.22	0.097	0.064	0.056	0.056	0.057
Undecane	1120-21-4	0.37	3	1.6	1.5	0.65	0.43	0.37	0.38	0.38
Non-Field-Related Chemicals										
Benzene	71-43-2	13	110	55	53	23	15	13	13	13
Benzene, 1,4-dichloro	106-46-7	0.36	2.9	1.5	1.4	0.63	0.41	0.36	0.36	0.37
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	12	96	50	48	21	14	12	12	12
2-Butoxyethanol	111-76-2	0.098	0.79	0.41	0.4	0.17	0.11	0.098	0.099	0.1
Cyclotrisiloxane, hexamethyl-	541-05-9	1.6	13	6.8	6.4	2.8	1.8	1.6	1.6	1.6
Decanal	112-31-2	0.35	2.8	1.5	1.4	0.62	0.41	0.35	0.36	0.36
Ethylbenzene	100-41-4	3.7	30	16	15	6.5	4.3	3.8	3.8	3.8
Heptane	142-82-5	4.8	38	20	19	8.3	5.5	4.8	4.8	4.8
Hexanal	66-25-1	18	140	75	72	31	21	18	18	18
Hexane	110-54-3	9.4	76	40	38	16	11	9.4	9.5	9.6
1-Hexanol, 2-ethyl-	104-76-7	0.36	2.9	1.5	1.5	0.63	0.42	0.36	0.37	0.37
Nonanal	124-19-6	0	0	0	0	0	0	0	0	0
Phenol	108-95-2	1.1	8.8	4.6	4.4	1.9	1.3	1.1	1.1	1.1
Tetrachloroethylene	127-18-4	1	8.2	4.3	4.1	1.8	1.2	1	1	1
Tetradecane	629-59-4	0.13	1	0.55	0.52	0.23	0.15	0.13	0.13	0.13
Texanol, TXIB (mono-isomer)	25265-77-4	2.1	17	8.8	8.4	3.6	2.4	2.1	2.1	2.1

Chemical	CASRN	Chronic C_{inh}								
		Third trimester fetus	0<2 years	2<6 years	6<11 years	11<16 years	16<30 years	30<40 years	40<50 years	50<70 years
Toluene	108-88-3	29	230	120	120	50	33	29	29	29
Trichloroethylene	79-01-6	0.2	1.6	0.86	0.82	0.35	0.23	0.2	0.21	0.21
Trichloromethane	67-66-3	0.76	6.1	3.2	3.1	1.3	0.87	0.76	0.77	0.77
m/p-Xylene	106-42-3	13	100	54	51	22	15	13	13	13
o-Xylene	95-47-6	3.9	32	17	16	6.8	4.5	3.9	4	4

[a] Off-Field Chronic C_{inh} equals the modified mean of the 35 individual field average concentrations ($C_{air\text{-}avg}$ x AF_{inh}) of a chemical detected in air off the fields (see Section F.4.3 of this Appendix F).
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

INDIVIDUAL FIELD ASSESSMENT (Table F-147 to Table F-179)

Table F-147. **On-Field** Field-Specific[a] Chronic Inhalation Exposure Concentration[b] for **All General Chemicals** (Chronic $C_{inh\text{-}field}$, nanograms per cubic meter) —Combined Gender **Athletes 2<6 Years**

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals								
Acenaphthylene	208-96-8	11	0	0.16	0.31	0	0.66	1.4
Acetone	67-64-1	34	240	3000	3400	1600	9900	11000
Aniline	62-53-3	10	0	1	1.8	0	3.9	6.8
Anthracene	120-12-7	12	0	0.051	0.095	0	0.22	0.37
Anthracene, 2-methyl-	613-12-7	15	0	0.013	0.019	0	0.051	0.065
Anthracene, 9,10-dimethyl	781-43-1	16	0	0.015	0.027	0	0.042	0.15
Anthracene, 9-phenyl	602-55-1	1	0	0.0014	0.0082	0	0	0.048
Benz[a]anthracene	56-55-3	1	0	0.00076	0.0045	0	0	0.026
Benzaldehyde	100-52-7	15	0	14	21	0	50	84
Benzene, 1,2,3-trimethyl-	526-73-8	6	0	2	6	0	9	32
Benzene, 1,2,4,5-tetramethyl-	95-93-2	5	0	0.39	1	0	2.4	4.2
Benzene, 1,2,4-trimethyl-	95-63-6	13	0	18	32	0	65	150
Benzene, 1-ethyl-2,4-dimethyl-	874-41-9	7	0	0.82	2.1	0	4.2	11
Benzene, 2-ethyl-1,4-dimethyl-	1758-88-9	12	0	1.2	2.3	0	5.1	11
Benzene, butyl-	104-51-8	2	0	0.41	2	0	0.85	11
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	26	0	0.58	0.68	0.35	1.9	2.3
Benzo[b]fluoranthene	205-99-2	2	0	0.0038	0.016	0	0.023	0.065
7H-Benzo[c]fluorene	205-12-9	13	0	0.0084	0.013	0	0.022	0.055

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Benzo[k]fluoranthene	207-08-9	4	0	0.0048	0.014	0	0.036	0.054
Benzothiazole	95-16-9	19	0	5.7	6.6	3.2	19	19
Benzothiazole, 2-phenyl-	883-93-2	27	0	0.46	0.6	0.23	1.6	2.7
2-Benzothiazolone	934-34-9	5	0	0.72	1.9	0	4.7	6.9
Benzyl butyl phthalate	85-68-7	7	0	0.53	1.1	0	3.6	3.6
Butanal	123-72-8	13	0	47	120	0	280	590
Cyclopentasiloxane, decamethyl-	541-02-6	18	0	25	42	7.7	89	200
Cyclotetrasiloxane, octamethyl-	556-67-2	13	0	9	14	0	35	51
p-Cymene	99-87-6	21	0	3.9	4.7	2.5	13	18
Decane	124-18-5	11	0	8.4	15	0	46	47
Dibenz[a,h]anthracene	53-70-3	14	0	0.022	0.044	0	0.11	0.19
Dibenzothiophene	132-65-0	14	0	0.19	0.29	0	0.82	1.1
Dibutyl phthalate	84-74-2	7	0	58	150	0	260	760
Diethyl phthalate	84-66-2	1	0	0.41	2.4	0	0	14
Diisobutyl phthalate	84-69-5	15	0	2.2	4.3	0	7	23
Diisooctylphthalate	27554-26-3	9	0	7.7	26	0	20	150
Di-n-octyl phthalate	117-84-0	5	0	0.015	0.039	0	0.085	0.17
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	26	0	5	6.8	2.6	20	22
3,5-di-tert-Butyl-4-hydroxybenzaldehyde	1620-98-0	8	0	2.6	5.2	0	13	17
Dodecane	112-40-3	4	0	1	3.5	0	6	18
Fluoranthene	206-44-0	21	0	0.59	0.75	0.21	2	2.6
Fluorene	86-73-7	15	0	0.93	1.8	0	3.3	9.5
Furan, 2-methyl	534-22-5	34	0	17	14	12	39	63
Heptanal	111-71-7	7	0	2.3	5.7	0	20	20
Hexadecane	544-76-3	11	0	4.9	9	0	26	35
2,5-Hexanedione	110-13-4	5	0	4.2	11	0	28	41
Indan	496-11-7	12	0	2.1	3.9	0	9.1	17
Mesitylene	108-67-8	15	0	4.3	7.6	0	17	35
Methacrolein	78-85-3	20	0	12	15	6.7	35	67
Methyl Isobutyl Ketone	108-10-1	5	0	2.4	6.6	0	19	28
Naphthalene	91-20-3	9	0	4.1	8.6	0	18	40
Naphthalene, 1,2-dimethyl-	573-98-8	4	0	0.058	0.17	0	0.56	0.56
Naphthalene, 1,6-dimethyl-	575-43-9	14	0	0.41	0.64	0	2	2.3
Naphthalene, 1-methyl-	90-12-0	15	0	3.4	5.8	0	15	23
Naphthalene, 2-(bromomethyl)-	939-26-4	11	0	0.11	0.17	0	0.39	0.39

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Naphthalene, 2,3-dimethyl-	581-40-8	14	0	0.31	0.46	0	1.4	1.6
Naphthalene, 2-methyl-	91-57-6	10	0	5.1	11	0	25	49
1-Octadecene	112-88-9	16	0	0.68	0.88	0	2.4	2.8
Octanal	124-13-0	24	0	6.9	8	4.3	21	32
Octane	111-65-9	10	0	9.4	17	0	39	65
17-Pentatriacontene	6971-40-0	2	0	0.11	0.49	0	0.45	2.6
N-Phenylbenzamide	93-98-1	6	0	1.4	3.1	0	8.6	8.6
Phenanthrene	85-01-8	17	0	2	3.1	1.1	8.8	13
Phenanthrene, 1-methyl	832-69-9	17	0	0.13	0.17	0.057	0.46	0.52
Phenanthrene, 2-methyl-	2531-84-2	18	0	0.23	0.3	0.16	0.85	0.97
Phenanthrene, 3-methyl	832-71-3	18	0	0.28	0.36	0.15	1	1.2
Propionaldehyde	123-38-6	12	0	29	58	0	110	280
Pyrene	129-00-0	20	0	0.5	0.63	0.2	1.8	2.1
Pyridine, 2-(4-methylphenyl)-	4467-06-5	2	0	0.0055	0.028	0	0.0096	0.16
Resorcinol	108-46-3	18	0	2.9	4.2	1.2	9.5	18
m-Tolualdehyde	620-23-5	19	0	42	44	34	110	140
TXIB "Kodaflex"	6846-50-0	1	0	0.31	1.8	0	0	11
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	14	0	0.59	0.82	0	2.1	3
Undecane	1120-21-4	5	0	2	5.3	0	16	20
Valeraldehyde	110-62-3	11	0	140	250	0	650	710
Non-Field-Related Chemicals								
Benzene	71-43-2	35	14	94	76	66	230	380
Benzene, 1,4-dichloro	106-46-7	7	0	3	6.5	0	18	18
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	34	0	89	93	59	270	330
2-Butoxyethanol	111-76-2	1	0	0.77	4.5	0	0	27
Cyclotrisiloxane, hexamethyl-	541-05-9	1	0	11	67	0	0	400
Decanal	112-31-2	7	0	4.4	15	0	16	85
Ethylbenzene	100-41-4	13	0	27	45	0	110	180
Heptane	142-82-5	20	0	36	53	6.9	150	230
Hexanal	66-25-1	30	0	120	160	57	470	620
Hexane	110-54-3	26	0	100	230	46	280	1400
1-Hexanol, 2-ethyl-	104-76-7	6	0	1.2	3.1	0	6.1	14
Nonanal	124-19-6	2	0	1.2	5	0	6.3	21
Phenol	108-95-2	18	0	9.1	11	5.4	32	32
Tetrachloroethylene	127-18-4	7	0	7.4	18	0	50	65
Tetradecane	629-59-4	3	0	1.3	4.4	0	11	22
m/p-Xylene	106-42-3	25	0	90	130	36	310	540

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
o-Xylene	95-47-6	13	0	30	50	0	120	200

[a] 35 field-specific $C_{inh\text{-}field}$ values are included in the table.
[b] On-Field field-specific Chronic $C_{inh\text{-}field}$ equals the modified field-specific average concentration of a field ($C_{air\text{-}field}$ x AF_{inh}) of a general chemical (see Section F.4.3 of this Appendix F).
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-148. **On-Field** Field-Specific[a] Chronic Inhalation Exposure Concentration[b] for **All General Chemicals** (Chronic $C_{inh\text{-}field}$, nanograms per cubic meter) —Combined Gender **Athletes 6<11 Years**

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals								
Acenaphthylene	208-96-8	11	0	0.2	0.41	0	0.85	1.8
Acetone	67-64-1	34	320	3900	4400	2100	13000	14000
Aniline	62-53-3	10	0	1.3	2.3	0	5.1	8.8
Anthracene	120-12-7	12	0	0.066	0.12	0	0.29	0.49
Anthracene, 2-methyl-	613-12-7	15	0	0.017	0.024	0	0.066	0.084
Anthracene, 9,10-dimethyl	781-43-1	16	0	0.02	0.035	0	0.055	0.19
Anthracene, 9-phenyl	602-55-1	1	0	0.0018	0.011	0	0	0.062
Benz[a]anthracene	56-55-3	1	0	0.00099	0.0058	0	0	0.034
Benzaldehyde	100-52-7	15	0	18	28	0	65	110
Benzene, 1,2,3-trimethyl-	526-73-8	6	0	2.7	7.8	0	12	42
Benzene, 1,2,4,5-tetramethyl-	95-93-2	5	0	0.5	1.3	0	3.1	5.4
Benzene, 1,2,4-trimethyl-	95-63-6	13	0	24	42	0	84	190
Benzene, 1-ethyl-2,4-dimethyl-	874-41-9	7	0	1.1	2.8	0	5.4	14
Benzene, 2-ethyl-1,4-dimethyl-	1758-88-9	12	0	1.5	3	0	6.6	14
Benzene, butyl-	104-51-8	2	0	0.53	2.6	0	1.1	15
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	26	0	0.75	0.88	0.45	2.5	3
Benzo[b]fluoranthene	205-99-2	2	0	0.005	0.02	0	0.03	0.084
7H-Benzo[c]fluorene	205-12-9	13	0	0.011	0.016	0	0.028	0.072
Benzo[k]fluoranthene	207-08-9	4	0	0.0062	0.018	0	0.047	0.07
Benzothiazole	95-16-9	19	0	7.4	8.6	4.1	25	25
Benzothiazole, 2-phenyl-	883-93-2	27	0	0.59	0.78	0.3	2	3.5
2-Benzothiazolone	934-34-9	5	0	0.93	2.4	0	6.1	9
Benzyl butyl phthalate	85-68-7	7	0	0.69	1.5	0	4.7	4.7
Butanal	123-72-8	13	0	62	150	0	360	760
Cyclopentasiloxane, decamethyl-	541-02-6	18	0	32	55	10	120	260
Cyclotetrasiloxane, octamethyl-	556-67-2	13	0	12	19	0	46	66

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
p-Cymene	99-87-6	21	0	5	6.1	3.2	17	24
Decane	124-18-5	11	0	11	19	0	60	62
Dibenz[a,h]anthracene	53-70-3	14	0	0.029	0.058	0	0.14	0.24
Dibenzothiophene	132-65-0	14	0	0.25	0.38	0	1.1	1.4
Dibutyl phthalate	84-74-2	7	0	76	190	0	340	990
Diethyl phthalate	84-66-2	1	0	0.53	3.1	0	0	18
Diisobutyl phthalate	84-69-5	15	0	2.9	5.6	0	9	30
Diisooctylphthalate	27554-26-3	9	0	9.9	33	0	26	190
Di-n-octyl phthalate	117-84-0	5	0	0.019	0.05	0	0.11	0.22
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	26	0	6.5	8.8	3.4	26	29
3,5-di-tert-Butyl-4-hydroxybenzaldehyde	1620-98-0	8	0	3.4	6.7	0	17	22
Dodecane	112-40-3	4	0	1.4	4.6	0	7.7	24
Fluoranthene	206-44-0	21	0	0.76	0.97	0.27	2.6	3.4
Fluorene	86-73-7	15	0	1.2	2.3	0	4.2	12
Furan, 2-methyl	534-22-5	34	0	21	18	16	50	82
Heptanal	111-71-7	7	0	3	7.4	0	26	26
Hexadecane	544-76-3	11	0	6.4	12	0	34	46
2,5-Hexanedione	110-13-4	5	0	5.5	14	0	36	53
Indan	496-11-7	12	0	2.7	5.1	0	12	22
Mesitylene	108-67-8	15	0	5.6	9.9	0	22	46
Methacrolein	78-85-3	20	0	15	19	8.7	45	86
Methyl Isobutyl Ketone	108-10-1	5	0	3.1	8.6	0	24	37
Naphthalene	91-20-3	9	0	5.4	11	0	23	52
Naphthalene, 1,2-dimethyl-	573-98-8	4	0	0.075	0.21	0	0.73	0.73
Naphthalene, 1,6-dimethyl-	575-43-9	14	0	0.54	0.82	0	2.5	3
Naphthalene, 1-methyl-	90-12-0	15	0	4.4	7.5	0	20	30
Naphthalene, 2-(bromomethyl)-	939-26-4	11	0	0.15	0.22	0	0.5	0.5
Naphthalene, 2,3-dimethyl-	581-40-8	14	0	0.4	0.6	0	1.8	2.1
Naphthalene, 2-methyl-	91-57-6	10	0	6.7	14	0	32	63
1-Octadecene	112-88-9	16	0	0.89	1.1	0	3.1	3.7
Octanal	124-13-0	24	0	9	10	5.6	27	42
Octane	111-65-9	10	0	12	22	0	51	85
17-Pentatriacontene	6971-40-0	2	0	0.15	0.63	0	0.58	3.3
N-Phenylbenzamide	93-98-1	6	0	1.8	4.1	0	11	11
Phenanthrene	85-01-8	17	0	2.6	4	1.4	11	17
Phenanthrene, 1-methyl	832-69-9	17	0	0.17	0.21	0.075	0.6	0.68
Phenanthrene, 2-methyl-	2531-84-2	18	0	0.3	0.39	0.2	1.1	1.3

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Phenanthrene, 3-methyl	832-71-3	18	0	0.36	0.46	0.19	1.3	1.5
Propionaldehyde	123-38-6	12	0	37	75	0	150	360
Pyrene	129-00-0	20	0	0.64	0.82	0.25	2.3	2.8
Pyridine, 2-(4-methylphenyl)-	4467-06-5	2	0	0.0071	0.036	0	0.013	0.21
Resorcinol	108-46-3	18	0	3.8	5.5	1.5	12	24
m-Tolualdehyde	620-23-5	19	0	54	57	44	150	180
TXIB "Kodaflex"	6846-50-0	1	0	0.4	2.4	0	0	14
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	14	0	0.76	1.1	0	2.7	3.9
Undecane	1120-21-4	5	0	2.6	6.9	0	20	26
Valeraldehyde	110-62-3	11	0	190	320	0	850	920
Non-Field-Related Chemicals								
Benzene	71-43-2	35	18	120	98	86	300	490
Benzene, 1,4-dichloro	106-46-7	7	0	3.9	8.5	0	24	24
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	34	0	120	120	77	340	430
2-Butoxyethanol	111-76-2	1	0	1	5.9	0	0	35
Cyclotrisiloxane, hexamethyl-	541-05-9	1	0	15	87	0	0	520
Decanal	112-31-2	7	0	5.6	19	0	21	110
Ethylbenzene	100-41-4	13	0	35	58	0	140	230
Heptane	142-82-5	20	0	46	69	8.9	190	300
Hexanal	66-25-1	30	0	160	200	74	610	800
Hexane	110-54-3	26	0	130	300	60	360	1800
1-Hexanol, 2-ethyl-	104-76-7	6	0	1.6	4	0	7.9	18
Nonanal	124-19-6	2	0	1.6	6.5	0	8.2	27
Phenol	108-95-2	18	0	12	15	6.9	42	42
Tetrachloroethylene	127-18-4	7	0	9.6	23	0	64	84
Tetradecane	629-59-4	3	0	1.6	5.8	0	14	29
m/p-Xylene	106-42-3	25	0	120	170	47	400	700
o-Xylene	95-47-6	13	0	39	65	0	150	260

[a] 35 field-specific $C_{inh\text{-}field}$ values are included in the table.
[b] On-Field field-specific Chronic $C_{inh\text{-}field}$ equals the modified field-specific average concentration of a field ($C_{air\text{-}field}$ x AF_{inh}) of a general chemical (see Section F.4.3 of this Appendix F).
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-149. **On-Field** Field-Specific[a] Chronic Inhalation Exposure Concentration[b] for **All General Chemicals** (Chronic $C_{inh\text{-}field}$, nanograms per cubic meter) —Combined Gender **Athletes 11<16 Years**

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals								
Acenaphthylene	208-96-8	11	0	0.2	0.4	0	0.83	1.7
Acetone	67-64-1	34	310	3800	4300	2100	13000	14000
Aniline	62-53-3	10	0	1.3	2.2	0	5	8.6
Anthracene	120-12-7	12	0	0.064	0.12	0	0.28	0.47
Anthracene, 2-methyl-	613-12-7	15	0	0.017	0.024	0	0.065	0.082
Anthracene, 9,10-dimethyl	781-43-1	16	0	0.019	0.034	0	0.053	0.19
Anthracene, 9-phenyl	602-55-1	1	0	0.0018	0.01	0	0	0.06
Benz[a]anthracene	56-55-3	1	0	0.00097	0.0057	0	0	0.033
Benzaldehyde	100-52-7	15	0	18	27	0	63	110
Benzene, 1,2,3-trimethyl-	526-73-8	6	0	2.6	7.7	0	11	41
Benzene, 1,2,4,5-tetramethyl-	95-93-2	5	0	0.49	1.3	0	3	5.3
Benzene, 1,2,4-trimethyl-	95-63-6	13	0	23	41	0	82	190
Benzene, 1-ethyl-2,4-dimethyl-	874-41-9	7	0	1	2.7	0	5.3	14
Benzene, 2-ethyl-1,4-dimethyl-	1758-88-9	12	0	1.5	2.9	0	6.5	13
Benzene, butyl-	104-51-8	2	0	0.52	2.5	0	1.1	14
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	26	0	0.73	0.86	0.44	2.4	2.9
Benzo[b]fluoranthene	205-99-2	2	0	0.0048	0.02	0	0.029	0.082
7H-Benzo[c]fluorene	205-12-9	13	0	0.011	0.016	0	0.028	0.07
Benzo[k]fluoranthene	207-08-9	4	0	0.006	0.018	0	0.046	0.068
Benzothiazole	95-16-9	19	0	7.3	8.4	4	24	24
Benzothiazole, 2-phenyl-	883-93-2	27	0	0.58	0.76	0.29	2	3.4
2-Benzothiazolone	934-34-9	5	0	0.91	2.4	0	5.9	8.8
Benzyl butyl phthalate	85-68-7	7	0	0.67	1.4	0	4.6	4.6
Butanal	123-72-8	13	0	60	150	0	350	740
Cyclopentasiloxane, decamethyl-	541-02-6	18	0	32	54	9.7	110	260
Cyclotetrasiloxane, octamethyl-	556-67-2	13	0	11	18	0	45	64
p-Cymene	99-87-6	21	0	4.9	6	3.1	16	23
Decane	124-18-5	11	0	11	19	0	58	60
Dibenz[a,h]anthracene	53-70-3	14	0	0.028	0.056	0	0.14	0.24
Dibenzothiophene	132-65-0	14	0	0.24	0.37	0	1	1.3
Dibutyl phthalate	84-74-2	7	0	74	190	0	330	970
Diethyl phthalate	84-66-2	1	0	0.52	3	0	0	18
Diisobutyl phthalate	84-69-5	15	0	2.8	5.5	0	8.8	30

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Diisooctylphthalate	27554-26-3	9	0	9.7	32	0	25	190
Di-n-octyl phthalate	117-84-0	5	0	0.019	0.049	0	0.11	0.21
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	26	0	6.4	8.6	3.3	25	28
3,5-di-tert-Butyl-4-hydroxybenzaldehyde	1620-98-0	8	0	3.3	6.5	0	17	22
Dodecane	112-40-3	4	0	1.3	4.5	0	7.5	23
Fluoranthene	206-44-0	21	0	0.74	0.95	0.27	2.6	3.4
Fluorene	86-73-7	15	0	1.2	2.3	0	4.1	12
Furan, 2-methyl	534-22-5	34	0	21	18	15	49	80
Heptanal	111-71-7	7	0	2.9	7.3	0	25	25
Hexadecane	544-76-3	11	0	6.2	11	0	33	45
2,5-Hexanedione	110-13-4	5	0	5.3	14	0	35	52
Indan	496-11-7	12	0	2.7	5	0	12	21
Mesitylene	108-67-8	15	0	5.4	9.7	0	22	45
Methacrolein	78-85-3	20	0	15	19	8.5	44	84
Methyl Isobutyl Ketone	108-10-1	5	0	3.1	8.4	0	24	36
Naphthalene	91-20-3	9	0	5.2	11	0	23	51
Naphthalene, 1,2-dimethyl-	573-98-8	4	0	0.073	0.21	0	0.71	0.71
Naphthalene, 1,6-dimethyl-	575-43-9	14	0	0.52	0.81	0	2.5	2.9
Naphthalene, 1-methyl-	90-12-0	15	0	4.3	7.3	0	19	29
Naphthalene, 2-(bromomethyl)-	939-26-4	11	0	0.15	0.22	0	0.49	0.49
Naphthalene, 2,3-dimethyl-	581-40-8	14	0	0.39	0.58	0	1.8	2.1
Naphthalene, 2-methyl-	91-57-6	10	0	6.5	14	0	32	62
1-Octadecene	112-88-9	16	0	0.87	1.1	0	3	3.6
Octanal	124-13-0	24	0	8.8	10	5.4	27	41
Octane	111-65-9	10	0	12	22	0	49	83
17-Pentatriacontene	6971-40-0	2	0	0.14	0.62	0	0.57	3.3
N-Phenylbenzamide	93-98-1	6	0	1.8	4	0	11	11
Phenanthrene	85-01-8	17	0	2.6	4	1.4	11	16
Phenanthrene, 1-methyl	832-69-9	17	0	0.16	0.21	0.073	0.58	0.66
Phenanthrene, 2-methyl-	2531-84-2	18	0	0.29	0.38	0.2	1.1	1.2
Phenanthrene, 3-methyl	832-71-3	18	0	0.35	0.45	0.19	1.3	1.5
Propionaldehyde	123-38-6	12	0	36	73	0	140	350
Pyrene	129-00-0	20	0	0.63	0.8	0.25	2.3	2.7
Pyridine, 2-(4-methylphenyl)-	4467-06-5	2	0	0.007	0.035	0	0.012	0.2
Resorcinol	108-46-3	18	0	3.7	5.3	1.5	12	23
m-Tolualdehyde	620-23-5	19	0	53	56	43	150	180
TXIB "Kodaflex"	6846-50-0	1	0	0.39	2.3	0	0	14

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	14	0	0.74	1	0	2.6	3.8
Undecane	1120-21-4	5	0	2.6	6.7	0	20	26
Valeraldehyde	110-62-3	11	0	180	320	0	830	900
Non-Field-Related Chemicals								
Benzene	71-43-2	35	18	120	96	84	300	480
Benzene, 1,4-dichloro	106-46-7	7	0	3.8	8.3	0	23	23
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	34	0	110	120	75	340	420
2-Butoxyethanol	111-76-2	1	0	0.97	5.8	0	0	34
Cyclotrisiloxane, hexamethyl-	541-05-9	1	0	14	85	0	0	500
Decanal	112-31-2	7	0	5.5	19	0	21	110
Ethylbenzene	100-41-4	13	0	34	57	0	140	230
Heptane	142-82-5	20	0	45	68	8.7	190	290
Hexanal	66-25-1	30	0	150	200	72	600	780
Hexane	110-54-3	26	0	130	290	58	350	1700
1-Hexanol, 2-ethyl-	104-76-7	6	0	1.5	3.9	0	7.8	18
Nonanal	124-19-6	2	0	1.5	6.3	0	8	27
Phenol	108-95-2	18	0	11	15	6.8	41	41
Tetrachloroethylene	127-18-4	7	0	9.4	22	0	63	82
Tetradecane	629-59-4	3	0	1.6	5.6	0	14	28
m/p-Xylene	106-42-3	25	0	110	160	46	390	680
o-Xylene	95-47-6	13	0	38	64	0	150	250

[a] 35 field-specific $C_{inh\text{-}field}$ values are included in the table.
[b] On-Field field-specific Chronic $C_{inh\text{-}field}$ equals the modified field-specific average concentration of a field ($C_{air\text{-}field}$ x AF_{inh}) of a general chemical (see Section F.4.3 of this Appendix F).
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-150. **On-Field** Field-Specific[a] Chronic Inhalation Exposure Concentration[b] for **All General Chemicals** (Chronic $C_{inh\text{-}field}$, nanograms per cubic meter) —Combined Gender **Athletes 16<30 Years**

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals								
Acenaphthylene	208-96-8	11	0	0.37	0.75	0	1.6	3.2
Acetone	67-64-1	34	580	7300	8100	3900	24000	26000
Aniline	62-53-3	10	0	2.4	4.2	0	9.3	16
Anthracene	120-12-7	12	0	0.12	0.23	0	0.53	0.89
Anthracene, 2-methyl-	613-12-7	15	0	0.032	0.045	0	0.12	0.16
Anthracene, 9,10-dimethyl	781-43-1	16	0	0.036	0.065	0	0.1	0.35

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Anthracene, 9-phenyl	602-55-1	1	0	0.0033	0.02	0	0	0.11
Benz[a]anthracene	56-55-3	1	0	0.0018	0.011	0	0	0.062
Benzaldehyde	100-52-7	15	0	33	51	0	120	200
Benzene, 1,2,3-trimethyl-	526-73-8	6	0	4.9	14	0	22	77
Benzene, 1,2,4,5-tetramethyl-	95-93-2	5	0	0.93	2.4	0	5.7	10
Benzene, 1,2,4-trimethyl-	95-63-6	13	0	44	77	0	150	360
Benzene, 1-ethyl-2,4-dimethyl-	874-41-9	7	0	1.9	5.1	0	10	26
Benzene, 2-ethyl-1,4-dimethyl-	1758-88-9	12	0	2.8	5.6	0	12	25
Benzene, butyl-	104-51-8	2	0	0.97	4.7	0	2	27
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	26	0	1.4	1.6	0.83	4.5	5.4
Benzo[b]fluoranthene	205-99-2	2	0	0.0091	0.037	0	0.054	0.16
7H-Benzo[c]fluorene	205-12-9	13	0	0.02	0.03	0	0.052	0.13
Benzo[k]fluoranthene	207-08-9	4	0	0.011	0.034	0	0.087	0.13
Benzothiazole	95-16-9	19	0	14	16	7.6	46	46
Benzothiazole, 2-phenyl-	883-93-2	27	0	1.1	1.4	0.55	3.8	6.5
2-Benzothiazolone	934-34-9	5	0	1.7	4.5	0	11	17
Benzyl butyl phthalate	85-68-7	7	0	1.3	2.7	0	8.6	8.6
Butanal	123-72-8	13	0	110	280	0	670	1400
Cyclopentasiloxane, decamethyl-	541-02-6	18	0	60	100	18	210	480
Cyclotetrasiloxane, octamethyl-	556-67-2	13	0	21	34	0	84	120
p-Cymene	99-87-6	21	0	9.3	11	5.9	31	44
Decane	124-18-5	11	0	20	36	0	110	110
Dibenz[a,h]anthracene	53-70-3	14	0	0.053	0.11	0	0.27	0.45
Dibenzothiophene	132-65-0	14	0	0.46	0.7	0	1.9	2.5
Dibutyl phthalate	84-74-2	7	0	140	360	0	630	1800
Diethyl phthalate	84-66-2	1	0	0.97	5.7	0	0	33
Diisobutyl phthalate	84-69-5	15	0	5.3	10	0	17	56
Diisooctylphthalate	27554-26-3	9	0	18	61	0	48	350
Di-n-octyl phthalate	117-84-0	5	0	0.036	0.093	0	0.2	0.4
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	26	0	12	16	6.2	47	54
3,5-di-tert-Butyl-4-hydroxybenzaldehyde	1620-98-0	8	0	6.3	12	0	31	41
Dodecane	112-40-3	4	0	2.5	8.4	0	14	44
Fluoranthene	206-44-0	21	0	1.4	1.8	0.5	4.9	6.3
Fluorene	86-73-7	15	0	2.2	4.3	0	7.8	23
Furan, 2-methyl	534-22-5	34	0	39	33	29	93	150

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Heptanal	111-71-7	7	0	5.5	14	0	48	48
Hexadecane	544-76-3	11	0	12	21	0	63	84
2,5-Hexanedione	110-13-4	5	0	10	26	0	66	98
Indan	496-11-7	12	0	5	9.4	0	22	40
Mesitylene	108-67-8	15	0	10	18	0	41	84
Methacrolein	78-85-3	20	0	28	36	16	83	160
Methyl Isobutyl Ketone	108-10-1	5	0	5.8	16	0	45	68
Naphthalene	91-20-3	9	0	9.9	21	0	43	96
Naphthalene, 1,2-dimethyl-	573-98-8	4	0	0.14	0.4	0	1.3	1.3
Naphthalene, 1,6-dimethyl-	575-43-9	14	0	0.99	1.5	0	4.7	5.5
Naphthalene, 1-methyl-	90-12-0	15	0	8	14	0	36	55
Naphthalene, 2-(bromomethyl)-	939-26-4	11	0	0.27	0.41	0	0.93	0.93
Naphthalene, 2,3-dimethyl-	581-40-8	14	0	0.74	1.1	0	3.4	3.9
Naphthalene, 2-methyl-	91-57-6	10	0	12	26	0	60	120
1-Octadecene	112-88-9	16	0	1.6	2.1	0	5.7	6.7
Octanal	124-13-0	24	0	17	19	10	50	77
Octane	111-65-9	10	0	22	41	0	93	160
17-Pentatriacontene	6971-40-0	2	0	0.27	1.2	0	1.1	6.1
N-Phenylbenzamide	93-98-1	6	0	3.3	7.5	0	21	21
Phenanthrene	85-01-8	17	0	4.8	7.4	2.6	21	31
Phenanthrene, 1-methyl	832-69-9	17	0	0.3	0.39	0.14	1.1	1.3
Phenanthrene, 2-methyl-	2531-84-2	18	0	0.55	0.72	0.37	2	2.3
Phenanthrene, 3-methyl	832-71-3	18	0	0.66	0.85	0.36	2.4	2.8
Propionaldehyde	123-38-6	12	0	68	140	0	270	660
Pyrene	129-00-0	20	0	1.2	1.5	0.47	4.3	5.1
Pyridine, 2-(4-methylphenyl)-	4467-06-5	2	0	0.013	0.066	0	0.023	0.38
Resorcinol	108-46-3	18	0	7	10	2.8	23	43
m-Tolualdehyde	620-23-5	19	0	100	110	81	270	330
TXIB "Kodaflex"	6846-50-0	1	0	0.73	4.3	0	0	26
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	14	0	1.4	2	0	4.9	7.2
Undecane	1120-21-4	5	0	4.9	13	0	38	48
Valeraldehyde	110-62-3	11	0	350	600	0	1600	1700
Non-Field-Related Chemicals								
Benzene	71-43-2	35	33	220	180	160	560	910
Benzene, 1,4-dichloro	106-46-7	7	0	7.1	16	0	44	44
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	34	0	210	220	140	630	780
2-Butoxyethanol	111-76-2	1	0	1.8	11	0	0	64

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Cyclotrisiloxane, hexamethyl-	541-05-9	1	0	27	160	0	0	950
Decanal	112-31-2	7	0	10	35	0	39	200
Ethylbenzene	100-41-4	13	0	64	110	0	260	430
Heptane	142-82-5	20	0	85	130	16	350	550
Hexanal	66-25-1	30	0	290	370	140	1100	1500
Hexane	110-54-3	26	0	250	550	110	660	3200
1-Hexanol, 2-ethyl-	104-76-7	6	0	2.9	7.4	0	15	34
Nonanal	124-19-6	2	0	2.9	12	0	15	50
Phenol	108-95-2	18	0	22	27	13	77	77
Tetrachloroethylene	127-18-4	7	0	18	42	0	120	150
Tetradecane	629-59-4	3	0	3	11	0	26	53
m/p-Xylene	106-42-3	25	0	210	310	87	730	1300
o-Xylene	95-47-6	13	0	72	120	0	280	470

[a] 35 field-specific $C_{inh\text{-}field}$ values are included in the table.
[b] On-Field field-specific Chronic $C_{inh\text{-}field}$ equals the modified field-specific average concentration of a field ($C_{air\text{-}field}$ x AF_{inh}) of a general chemical (see Section F.4.3 of this Appendix F).
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-151. **On-Field** Field-Specific[a] Chronic Inhalation Exposure Concentration[b] for **All General Chemicals** (Chronic $C_{inh\text{-}field}$, nanograms per cubic meter) —Combined Gender **Athletes 30<40 Years**

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals								
Acenaphthylene	208-96-8	11	0	0.24	0.49	0	1	2.1
Acetone	67-64-1	34	380	4700	5300	2600	15000	17000
Aniline	62-53-3	10	0	1.6	2.8	0	6.1	11
Anthracene	120-12-7	12	0	0.079	0.15	0	0.35	0.58
Anthracene, 2-methyl-	613-12-7	15	0	0.021	0.029	0	0.079	0.1
Anthracene, 9,10-dimethyl	781-43-1	16	0	0.024	0.042	0	0.066	0.23
Anthracene, 9-phenyl	602-55-1	1	0	0.0022	0.013	0	0	0.074
Benz[a]anthracene	56-55-3	1	0	0.0012	0.007	0	0	0.041
Benzaldehyde	100-52-7	15	0	22	33	0	78	130
Benzene, 1,2,3-trimethyl-	526-73-8	6	0	3.2	9.4	0	14	51
Benzene, 1,2,4,5-tetramethyl-	95-93-2	5	0	0.61	1.6	0	3.7	6.5
Benzene, 1,2,4-trimethyl-	95-63-6	13	0	28	50	0	100	230
Benzene, 1-ethyl-2,4-dimethyl-	874-41-9	7	0	1.3	3.3	0	6.6	17
Benzene, 2-ethyl-1,4-dimethyl-	1758-88-9	12	0	1.8	3.6	0	8	17

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Benzene, butyl-	104-51-8	2	0	0.63	3.1	0	1.3	18
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	26	0	0.9	1.1	0.54	2.9	3.6
Benzo[b]fluoranthene	205-99-2	2	0	0.006	0.024	0	0.036	0.1
7H-Benzo[c]fluorene	205-12-9	13	0	0.013	0.02	0	0.034	0.086
Benzo[k]fluoranthene	207-08-9	4	0	0.0074	0.022	0	0.057	0.084
Benzothiazole	95-16-9	19	0	9	10	5	30	30
Benzothiazole, 2-phenyl-	883-93-2	27	0	0.71	0.94	0.36	2.5	4.2
2-Benzothiazolone	934-34-9	5	0	1.1	2.9	0	7.3	11
Benzyl butyl phthalate	85-68-7	7	0	0.83	1.8	0	5.6	5.6
Butanal	123-72-8	13	0	74	180	0	440	910
Cyclopentasiloxane, decamethyl-	541-02-6	18	0	39	66	12	140	320
Cyclotetrasiloxane, octamethyl-	556-67-2	13	0	14	22	0	55	79
p-Cymene	99-87-6	21	0	6.1	7.4	3.8	20	29
Decane	124-18-5	11	0	13	23	0	72	74
Dibenz[a,h]anthracene	53-70-3	14	0	0.035	0.069	0	0.17	0.29
Dibenzothiophene	132-65-0	14	0	0.3	0.46	0	1.3	1.7
Dibutyl phthalate	84-74-2	7	0	91	230	0	410	1200
Diethyl phthalate	84-66-2	1	0	0.64	3.7	0	0	22
Diisobutyl phthalate	84-69-5	15	0	3.4	6.8	0	11	36
Diisooctylphthalate	27554-26-3	9	0	12	40	0	31	230
Di-n-octyl phthalate	117-84-0	5	0	0.023	0.061	0	0.13	0.26
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	26	0	7.8	11	4.1	31	35
3,5-di-tert-Butyl-4-hydroxybenzaldehyde	1620-98-0	8	0	4.1	8.1	0	21	27
Dodecane	112-40-3	4	0	1.6	5.5	0	9.3	29
Fluoranthene	206-44-0	21	0	0.91	1.2	0.33	3.2	4.1
Fluorene	86-73-7	15	0	1.4	2.8	0	5.1	15
Furan, 2-methyl	534-22-5	34	0	26	22	19	61	99
Heptanal	111-71-7	7	0	3.6	8.9	0	31	31
Hexadecane	544-76-3	11	0	7.7	14	0	41	55
2,5-Hexanedione	110-13-4	5	0	6.6	17	0	43	64
Indan	496-11-7	12	0	3.3	6.2	0	14	26
Mesitylene	108-67-8	15	0	6.7	12	0	27	55
Methacrolein	78-85-3	20	0	18	23	10	54	100
Methyl Isobutyl Ketone	108-10-1	5	0	3.8	10	0	29	44
Naphthalene	91-20-3	9	0	6.4	13	0	28	63
Naphthalene, 1,2-dimethyl-	573-98-8	4	0	0.09	0.26	0	0.87	0.87
Naphthalene, 1,6-dimethyl-	575-43-9	14	0	0.64	0.99	0	3	3.6

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Naphthalene, 1-methyl-	90-12-0	15	0	5.2	9	0	23	36
Naphthalene, 2-(bromomethyl)-	939-26-4	11	0	0.18	0.27	0	0.61	0.61
Naphthalene, 2,3-dimethyl-	581-40-8	14	0	0.48	0.72	0	2.2	2.5
Naphthalene, 2-methyl-	91-57-6	10	0	8	17	0	39	76
1-Octadecene	112-88-9	16	0	1.1	1.4	0	3.7	4.4
Octanal	124-13-0	24	0	11	13	6.7	33	50
Octane	111-65-9	10	0	15	27	0	61	100
17-Pentatriacontene	6971-40-0	2	0	0.18	0.76	0	0.7	4
N-Phenylbenzamide	93-98-1	6	0	2.2	4.9	0	13	13
Phenanthrene	85-01-8	17	0	3.1	4.9	1.7	14	20
Phenanthrene, 1-methyl	832-69-9	17	0	0.2	0.26	0.09	0.72	0.82
Phenanthrene, 2-methyl-	2531-84-2	18	0	0.36	0.47	0.24	1.3	1.5
Phenanthrene, 3-methyl	832-71-3	18	0	0.43	0.56	0.23	1.6	1.8
Propionaldehyde	123-38-6	12	0	45	90	0	180	430
Pyrene	129-00-0	20	0	0.77	0.99	0.3	2.8	3.3
Pyridine, 2-(4-methylphenyl)-	4467-06-5	2	0	0.0086	0.043	0	0.015	0.25
Resorcinol	108-46-3	18	0	4.5	6.6	1.8	15	28
m-Tolualdehyde	620-23-5	19	0	65	69	53	180	220
TXIB "Kodaflex"	6846-50-0	1	0	0.48	2.8	0	0	17
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	14	0	0.92	1.3	0	3.2	4.7
Undecane	1120-21-4	5	0	3.2	8.3	0	25	32
Valeraldehyde	110-62-3	11	0	230	390	0	1000	1100
Non-Field-Related Chemicals								
Benzene	71-43-2	35	22	150	120	100	370	590
Benzene, 1,4-dichloro	106-46-7	7	0	4.6	10	0	29	29
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	34	0	140	140	92	410	510
2-Butoxyethanol	111-76-2	1	0	1.2	7.1	0	0	42
Cyclotrisiloxane, hexamethyl-	541-05-9	1	0	18	100	0	0	620
Decanal	112-31-2	7	0	6.8	23	0	26	130
Ethylbenzene	100-41-4	13	0	42	70	0	170	280
Heptane	142-82-5	20	0	56	83	11	230	360
Hexanal	66-25-1	30	0	190	240	89	740	960
Hexane	110-54-3	26	0	160	360	72	430	2100
1-Hexanol, 2-ethyl-	104-76-7	6	0	1.9	4.8	0	9.5	22
Nonanal	124-19-6	2	0	1.9	7.8	0	9.9	33
Phenol	108-95-2	18	0	14	18	8.4	50	50
Tetrachloroethylene	127-18-4	7	0	12	27	0	78	100
Tetradecane	629-59-4	3	0	2	6.9	0	17	34

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
m/p-Xylene	106-42-3	25	0	140	200	57	480	840
o-Xylene	95-47-6	13	0	47	79	0	190	310

[a] 35 field-specific $C_{inh\text{-}field}$ values are included in the table.
[b] On-Field field-specific Chronic $C_{inh\text{-}field}$ equals the modified field-specific average concentration of a field ($C_{air\text{-}field}$ x AF_{inh}) of a general chemical (see Section F.4.3 of this Appendix F).
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-152. **On-Field** Field-Specific[a] Chronic Inhalation Exposure Concentration[b] for **All General Chemicals** (Chronic $C_{inh\text{-}field}$, nanograms per cubic meter) —Combined Gender **Athletes 40<50 Years**

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals								
Acenaphthylene	208-96-8	11	0	0.24	0.48	0	1	2.1
Acetone	67-64-1	34	370	4700	5200	2500	15000	16000
Aniline	62-53-3	10	0	1.5	2.7	0	6	10
Anthracene	120-12-7	12	0	0.078	0.15	0	0.34	0.58
Anthracene, 2-methyl-	613-12-7	15	0	0.02	0.029	0	0.078	0.1
Anthracene, 9,10-dimethyl	781-43-1	16	0	0.023	0.042	0	0.065	0.23
Anthracene, 9-phenyl	602-55-1	1	0	0.0022	0.013	0	0	0.073
Benz[a]anthracene	56-55-3	1	0	0.0012	0.0069	0	0	0.04
Benzaldehyde	100-52-7	15	0	21	33	0	77	130
Benzene, 1,2,3-trimethyl-	526-73-8	6	0	3.1	9.3	0	14	50
Benzene, 1,2,4,5-tetramethyl-	95-93-2	5	0	0.6	1.6	0	3.7	6.4
Benzene, 1,2,4-trimethyl-	95-63-6	13	0	28	50	0	100	230
Benzene, 1-ethyl-2,4-dimethyl-	874-41-9	7	0	1.3	3.3	0	6.5	17
Benzene, 2-ethyl-1,4-dimethyl-	1758-88-9	12	0	1.8	3.6	0	7.9	16
Benzene, butyl-	104-51-8	2	0	0.63	3	0	1.3	18
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	26	0	0.89	1	0.54	2.9	3.5
Benzo[b]fluoranthene	205-99-2	2	0	0.0059	0.024	0	0.035	0.1
7H-Benzo[c]fluorene	205-12-9	13	0	0.013	0.02	0	0.034	0.085
Benzo[k]fluoranthene	207-08-9	4	0	0.0073	0.022	0	0.056	0.083
Benzothiazole	95-16-9	19	0	8.8	10	4.9	29	29
Benzothiazole, 2-phenyl-	883-93-2	27	0	0.7	0.93	0.36	2.4	4.2
2-Benzothiazolone	934-34-9	5	0	1.1	2.9	0	7.2	11
Benzyl butyl phthalate	85-68-7	7	0	0.82	1.8	0	5.6	5.6

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Butanal	123-72-8	13	0	73	180	0	430	900
Cyclopentasiloxane, decamethyl-	541-02-6	18	0	38	65	12	140	310
Cyclotetrasiloxane, octamethyl-	556-67-2	13	0	14	22	0	54	78
p-Cymene	99-87-6	21	0	6	7.3	3.8	20	28
Decane	124-18-5	11	0	13	23	0	71	73
Dibenz[a,h]anthracene	53-70-3	14	0	0.034	0.068	0	0.17	0.29
Dibenzothiophene	132-65-0	14	0	0.29	0.45	0	1.3	1.6
Dibutyl phthalate	84-74-2	7	0	90	230	0	400	1200
Diethyl phthalate	84-66-2	1	0	0.63	3.7	0	0	21
Diisobutyl phthalate	84-69-5	15	0	3.4	6.7	0	11	36
Diisooctylphthalate	27554-26-3	9	0	12	39	0	31	230
Di-n-octyl phthalate	117-84-0	5	0	0.023	0.06	0	0.13	0.26
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	26	0	7.7	10	4	30	35
3,5-di-tert-Butyl-4-hydroxybenzaldehyde	1620-98-0	8	0	4	7.9	0	20	26
Dodecane	112-40-3	4	0	1.6	5.4	0	9.2	28
Fluoranthene	206-44-0	21	0	0.9	1.1	0.32	3.1	4.1
Fluorene	86-73-7	15	0	1.4	2.8	0	5	15
Furan, 2-methyl	534-22-5	34	0	25	21	19	60	98
Heptanal	111-71-7	7	0	3.5	8.8	0	31	31
Hexadecane	544-76-3	11	0	7.6	14	0	40	54
2,5-Hexanedione	110-13-4	5	0	6.5	17	0	42	63
Indan	496-11-7	12	0	3.3	6.1	0	14	26
Mesitylene	108-67-8	15	0	6.6	12	0	26	54
Methacrolein	78-85-3	20	0	18	23	10	53	100
Methyl Isobutyl Ketone	108-10-1	5	0	3.7	10	0	29	44
Naphthalene	91-20-3	9	0	6.3	13	0	27	62
Naphthalene, 1,2-dimethyl-	573-98-8	4	0	0.089	0.25	0	0.86	0.86
Naphthalene, 1,6-dimethyl-	575-43-9	14	0	0.63	0.98	0	3	3.6
Naphthalene, 1-methyl-	90-12-0	15	0	5.2	8.9	0	23	36
Naphthalene, 2-(bromomethyl)-	939-26-4	11	0	0.18	0.27	0	0.6	0.6
Naphthalene, 2,3-dimethyl-	581-40-8	14	0	0.48	0.71	0	2.2	2.5
Naphthalene, 2-methyl-	91-57-6	10	0	7.9	17	0	38	75
1-Octadecene	112-88-9	16	0	1.1	1.4	0	3.6	4.3
Octanal	124-13-0	24	0	11	12	6.6	32	49
Octane	111-65-9	10	0	14	26	0	60	100
17-Pentatriacontene	6971-40-0	2	0	0.17	0.75	0	0.69	4

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
N-Phenylbenzamide	93-98-1	6	0	2.1	4.8	0	13	13
Phenanthrene	85-01-8	17	0	3.1	4.8	1.7	14	20
Phenanthrene, 1-methyl	832-69-9	17	0	0.2	0.25	0.088	0.71	0.81
Phenanthrene, 2-methyl-	2531-84-2	18	0	0.36	0.46	0.24	1.3	1.5
Phenanthrene, 3-methyl	832-71-3	18	0	0.42	0.55	0.23	1.6	1.8
Propionaldehyde	123-38-6	12	0	44	89	0	170	430
Pyrene	129-00-0	20	0	0.76	0.97	0.3	2.7	3.3
Pyridine, 2-(4-methylphenyl)-	4467-06-5	2	0	0.0084	0.042	0	0.015	0.24
Resorcinol	108-46-3	18	0	4.5	6.5	1.8	15	28
m-Tolualdehyde	620-23-5	19	0	64	68	52	180	220
TXIB "Kodaflex"	6846-50-0	1	0	0.47	2.8	0	0	17
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	14	0	0.9	1.3	0	3.2	4.6
Undecane	1120-21-4	5	0	3.1	8.2	0	24	31
Valeraldehyde	110-62-3	11	0	220	380	0	1000	1100
Non-Field-Related Chemicals								
Benzene	71-43-2	35	22	140	120	100	360	590
Benzene, 1,4-dichloro	106-46-7	7	0	4.6	10	0	28	28
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	34	0	140	140	91	410	510
2-Butoxyethanol	111-76-2	1	0	1.2	7	0	0	41
Cyclotrisiloxane, hexamethyl-	541-05-9	1	0	17	100	0	0	610
Decanal	112-31-2	7	0	6.7	23	0	25	130
Ethylbenzene	100-41-4	13	0	41	69	0	170	280
Heptane	142-82-5	20	0	55	82	11	230	360
Hexanal	66-25-1	30	0	190	240	88	730	950
Hexane	110-54-3	26	0	160	360	71	420	2100
1-Hexanol, 2-ethyl-	104-76-7	6	0	1.9	4.8	0	9.4	22
Nonanal	124-19-6	2	0	1.9	7.7	0	9.8	33
Phenol	108-95-2	18	0	14	18	8.2	49	49
Tetrachloroethylene	127-18-4	7	0	11	27	0	76	100
Tetradecane	629-59-4	3	0	1.9	6.8	0	17	34
m/p-Xylene	106-42-3	25	0	140	200	56	470	830
o-Xylene	95-47-6	13	0	46	77	0	180	300

[a] 35 field-specific $C_{inh\text{-}field}$ values are included in the table.
[b] On-Field field-specific Chronic $C_{inh\text{-}field}$ equals the modified field-specific average concentration of a field ($C_{air\text{-}field}$ x AF_{inh}) of a general chemical (see Section F.4.3 of this Appendix F).
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-153. **On-Field** Field-Specific[a] Chronic Inhalation Exposure Concentration[b] for **All General Chemicals** (Chronic $C_{inh\text{-}field}$, nanograms per cubic meter) —Combined Gender **Athletes 50<70 Years**

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals								
Acenaphthylene	208-96-8	11	0	0.24	0.48	0	0.99	2.1
Acetone	67-64-1	34	370	4600	5100	2500	15000	16000
Aniline	62-53-3	10	0	1.5	2.7	0	5.9	10
Anthracene	120-12-7	12	0	0.077	0.14	0	0.33	0.57
Anthracene, 2-methyl-	613-12-7	15	0	0.02	0.028	0	0.077	0.098
Anthracene, 9,10-dimethyl	781-43-1	16	0	0.023	0.041	0	0.064	0.22
Anthracene, 9-phenyl	602-55-1	1	0	0.0021	0.012	0	0	0.072
Benz[a]anthracene	56-55-3	1	0	0.0012	0.0067	0	0	0.039
Benzaldehyde	100-52-7	15	0	21	32	0	76	130
Benzene, 1,2,3-trimethyl-	526-73-8	6	0	3.1	9.1	0	14	49
Benzene, 1,2,4,5-tetramethyl-	95-93-2	5	0	0.59	1.5	0	3.6	6.3
Benzene, 1,2,4-trimethyl-	95-63-6	13	0	28	49	0	98	230
Benzene, 1-ethyl-2,4-dimethyl-	874-41-9	7	0	1.2	3.2	0	6.3	17
Benzene, 2-ethyl-1,4-dimethyl-	1758-88-9	12	0	1.8	3.5	0	7.7	16
Benzene, butyl-	104-51-8	2	0	0.61	3	0	1.3	17
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	26	0	0.87	1	0.53	2.9	3.4
Benzo[b]fluoranthene	205-99-2	2	0	0.0058	0.023	0	0.034	0.098
7H-Benzo[c]fluorene	205-12-9	13	0	0.013	0.019	0	0.033	0.084
Benzo[k]fluoranthene	207-08-9	4	0	0.0072	0.021	0	0.055	0.081
Benzothiazole	95-16-9	19	0	8.7	10	4.8	29	29
Benzothiazole, 2-phenyl-	883-93-2	27	0	0.69	0.91	0.35	2.4	4.1
2-Benzothiazolone	934-34-9	5	0	1.1	2.8	0	7.1	10
Benzyl butyl phthalate	85-68-7	7	0	0.8	1.7	0	5.5	5.5
Butanal	123-72-8	13	0	72	180	0	420	880
Cyclopentasiloxane, decamethyl-	541-02-6	18	0	38	64	12	130	310
Cyclotetrasiloxane, octamethyl-	556-67-2	13	0	14	22	0	53	77
p-Cymene	99-87-6	21	0	5.9	7.1	3.7	20	28
Decane	124-18-5	11	0	13	23	0	69	72
Dibenz[a,h]anthracene	53-70-3	14	0	0.034	0.067	0	0.17	0.28
Dibenzothiophene	132-65-0	14	0	0.29	0.44	0	1.2	1.6
Dibutyl phthalate	84-74-2	7	0	88	220	0	400	1200
Diethyl phthalate	84-66-2	1	0	0.62	3.6	0	0	21
Diisobutyl phthalate	84-69-5	15	0	3.3	6.6	0	11	35

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Diisooctylphthalate	27554-26-3	9	0	12	39	0	30	220
Di-n-octyl phthalate	117-84-0	5	0	0.023	0.059	0	0.13	0.26
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	26	0	7.6	10	3.9	30	34
3,5-di-tert-Butyl-4-hydroxybenzaldehyde	1620-98-0	8	0	4	7.8	0	20	26
Dodecane	112-40-3	4	0	1.6	5.3	0	9	28
Fluoranthene	206-44-0	21	0	0.88	1.1	0.32	3.1	4
Fluorene	86-73-7	15	0	1.4	2.7	0	4.9	14
Furan, 2-methyl	534-22-5	34	0	25	21	18	59	96
Heptanal	111-71-7	7	0	3.4	8.7	0	30	30
Hexadecane	544-76-3	11	0	7.4	14	0	40	53
2,5-Hexanedione	110-13-4	5	0	6.4	17	0	42	62
Indan	496-11-7	12	0	3.2	6	0	14	25
Mesitylene	108-67-8	15	0	6.5	12	0	26	53
Methacrolein	78-85-3	20	0	18	23	10	52	100
Methyl Isobutyl Ketone	108-10-1	5	0	3.7	10	0	29	43
Naphthalene	91-20-3	9	0	6.2	13	0	27	61
Naphthalene, 1,2-dimethyl-	573-98-8	4	0	0.087	0.25	0	0.85	0.85
Naphthalene, 1,6-dimethyl-	575-43-9	14	0	0.62	0.96	0	2.9	3.5
Naphthalene, 1-methyl-	90-12-0	15	0	5.1	8.7	0	23	35
Naphthalene, 2-(bromomethyl)-	939-26-4	11	0	0.17	0.26	0	0.59	0.59
Naphthalene, 2,3-dimethyl-	581-40-8	14	0	0.47	0.7	0	2.1	2.5
Naphthalene, 2-methyl-	91-57-6	10	0	7.8	16	0	38	74
1-Octadecene	112-88-9	16	0	1	1.3	0	3.6	4.3
Octanal	124-13-0	24	0	10	12	6.5	32	48
Octane	111-65-9	10	0	14	26	0	59	99
17-Pentatriacontene	6971-40-0	2	0	0.17	0.74	0	0.68	3.9
N-Phenylbenzamide	93-98-1	6	0	2.1	4.7	0	13	13
Phenanthrene	85-01-8	17	0	3	4.7	1.6	13	20
Phenanthrene, 1-methyl	832-69-9	17	0	0.19	0.25	0.087	0.69	0.79
Phenanthrene, 2-methyl-	2531-84-2	18	0	0.35	0.46	0.24	1.3	1.5
Phenanthrene, 3-methyl	832-71-3	18	0	0.42	0.54	0.23	1.5	1.8
Propionaldehyde	123-38-6	12	0	43	87	0	170	420
Pyrene	129-00-0	20	0	0.75	0.95	0.3	2.7	3.2
Pyridine, 2-(4-methylphenyl)-	4467-06-5	2	0	0.0083	0.042	0	0.015	0.24
Resorcinol	108-46-3	18	0	4.4	6.4	1.8	14	27
m-Tolualdehyde	620-23-5	19	0	63	67	51	170	210
TXIB "Kodaflex"	6846-50-0	1	0	0.46	2.7	0	0	16
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	14	0	0.89	1.2	0	3.1	4.5

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Undecane	1120-21-4	5	0	3.1	8	0	24	31
Valeraldehyde	110-62-3	11	0	220	380	0	990	1100
Non-Field-Related Chemicals								
Benzene	71-43-2	35	21	140	110	100	350	580
Benzene, 1,4-dichloro	106-46-7	7	0	4.5	9.9	0	28	28
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	34	0	130	140	89	400	500
2-Butoxyethanol	111-76-2	1	0	1.2	6.9	0	0	41
Cyclotrisiloxane, hexamethyl-	541-05-9	1	0	17	100	0	0	600
Decanal	112-31-2	7	0	6.6	22	0	25	130
Ethylbenzene	100-41-4	13	0	40	68	0	160	270
Heptane	142-82-5	20	0	54	81	10	220	350
Hexanal	66-25-1	30	0	180	240	86	710	930
Hexane	110-54-3	26	0	160	350	70	420	2100
1-Hexanol, 2-ethyl-	104-76-7	6	0	1.8	4.7	0	9.2	21
Nonanal	124-19-6	2	0	1.8	7.5	0	9.6	32
Phenol	108-95-2	18	0	14	17	8.1	49	49
Tetrachloroethylene	127-18-4	7	0	11	27	0	75	98
Tetradecane	629-59-4	3	0	1.9	6.7	0	17	33
m/p-Xylene	106-42-3	25	0	140	190	55	460	810
o-Xylene	95-47-6	13	0	45	76	0	180	300

[a] 35 field-specific $C_{inh\text{-}field}$ values are included in the table.
[b] On-Field field-specific Chronic $C_{inh\text{-}field}$ equals the modified field-specific average concentration of a field ($C_{air\text{-}field}$ x AF_{inh}) of a general chemical (see Section F.4.3 of this Appendix F).
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-154. **On-Field** Field-Specific[a] Chronic Inhalation Exposure Concentration[b] for **All General Chemicals** (Chronic $C_{inh\text{-}field}$, nanograms per cubic meter) —Combined Gender **Coaches 16<30 Years**

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals								
Acenaphthylene	208-96-8	11	0	0.15	0.31	0	0.65	1.3
Acetone	67-64-1	34	240	3000	3400	1600	9800	11000
Aniline	62-53-3	10	0	0.99	1.7	0	3.9	6.7
Anthracene	120-12-7	12	0	0.05	0.094	0	0.22	0.37
Anthracene, 2-methyl-	613-12-7	15	0	0.013	0.019	0	0.05	0.064
Anthracene, 9,10-dimethyl	781-43-1	16	0	0.015	0.027	0	0.042	0.14
Anthracene, 9-phenyl	602-55-1	1	0	0.0014	0.0081	0	0	0.047

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Benz[a]anthracene	56-55-3	1	0	0.00075	0.0044	0	0	0.026
Benzaldehyde	100-52-7	15	0	14	21	0	49	83
Benzene, 1,2,3-trimethyl-	526-73-8	6	0	2	6	0	8.9	32
Benzene, 1,2,4,5-tetramethyl-	95-93-2	5	0	0.38	1	0	2.4	4.1
Benzene, 1,2,4-trimethyl-	95-63-6	13	0	18	32	0	64	150
Benzene, 1-ethyl-2,4-dimethyl-	874-41-9	7	0	0.81	2.1	0	4.1	11
Benzene, 2-ethyl-1,4-dimethyl-	1758-88-9	12	0	1.1	2.3	0	5	10
Benzene, butyl-	104-51-8	2	0	0.4	1.9	0	0.84	11
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	26	0	0.57	0.67	0.34	1.9	2.3
Benzo[b]fluoranthene	205-99-2	2	0	0.0038	0.015	0	0.022	0.064
7H-Benzo[c]fluorene	205-12-9	13	0	0.0083	0.013	0	0.022	0.055
Benzo[k]fluoranthene	207-08-9	4	0	0.0047	0.014	0	0.036	0.053
Benzothiazole	95-16-9	19	0	5.7	6.5	3.1	19	19
Benzothiazole, 2-phenyl-	883-93-2	27	0	0.45	0.59	0.23	1.6	2.7
2-Benzothiazolone	934-34-9	5	0	0.71	1.8	0	4.6	6.9
Benzyl butyl phthalate	85-68-7	7	0	0.53	1.1	0	3.6	3.6
Butanal	123-72-8	13	0	47	120	0	280	580
Cyclopentasiloxane, decamethyl-	541-02-6	18	0	25	42	7.6	88	200
Cyclotetrasiloxane, octamethyl-	556-67-2	13	0	8.9	14	0	35	50
p-Cymene	99-87-6	21	0	3.8	4.7	2.4	13	18
Decane	124-18-5	11	0	8.3	15	0	45	47
Dibenz[a,h]anthracene	53-70-3	14	0	0.022	0.044	0	0.11	0.18
Dibenzothiophene	132-65-0	14	0	0.19	0.29	0	0.81	1
Dibutyl phthalate	84-74-2	7	0	57	150	0	260	750
Diethyl phthalate	84-66-2	1	0	0.4	2.3	0	0	14
Diisobutyl phthalate	84-69-5	15	0	2.2	4.3	0	6.9	23
Diisooctylphthalate	27554-26-3	9	0	7.6	25	0	20	150
Di-n-octyl phthalate	117-84-0	5	0	0.015	0.038	0	0.084	0.17
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	26	0	5	6.7	2.6	19	22
3,5-di-tert-Butyl-4-hydroxybenzaldehyde	1620-98-0	8	0	2.6	5.1	0	13	17
Dodecane	112-40-3	4	0	1	3.5	0	5.9	18
Fluoranthene	206-44-0	21	0	0.58	0.74	0.21	2	2.6
Fluorene	86-73-7	15	0	0.91	1.8	0	3.2	9.4
Furan, 2-methyl	534-22-5	34	0	16	14	12	38	63
Heptanal	111-71-7	7	0	2.3	5.7	0	20	20
Hexadecane	544-76-3	11	0	4.9	8.9	0	26	35

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
2,5-Hexanedione	110-13-4	5	0	4.2	11	0	27	40
Indan	496-11-7	12	0	2.1	3.9	0	9	17
Mesitylene	108-67-8	15	0	4.2	7.5	0	17	35
Methacrolein	78-85-3	20	0	12	15	6.6	34	66
Methyl Isobutyl Ketone	108-10-1	5	0	2.4	6.5	0	19	28
Naphthalene	91-20-3	9	0	4.1	8.5	0	18	40
Naphthalene, 1,2-dimethyl-	573-98-8	4	0	0.057	0.16	0	0.55	0.55
Naphthalene, 1,6-dimethyl-	575-43-9	14	0	0.41	0.63	0	1.9	2.3
Naphthalene, 1-methyl-	90-12-0	15	0	3.3	5.7	0	15	23
Naphthalene, 2-(bromomethyl)-	939-26-4	11	0	0.11	0.17	0	0.38	0.38
Naphthalene, 2,3-dimethyl-	581-40-8	14	0	0.31	0.45	0	1.4	1.6
Naphthalene, 2-methyl-	91-57-6	10	0	5.1	11	0	25	48
1-Octadecene	112-88-9	16	0	0.68	0.87	0	2.3	2.8
Octanal	124-13-0	24	0	6.9	7.9	4.2	21	32
Octane	111-65-9	10	0	9.3	17	0	39	64
17-Pentatriacontene	6971-40-0	2	0	0.11	0.48	0	0.44	2.5
N-Phenylbenzamide	93-98-1	6	0	1.4	3.1	0	8.5	8.5
Phenanthrene	85-01-8	17	0	2	3.1	1.1	8.7	13
Phenanthrene, 1-methyl	832-69-9	17	0	0.13	0.16	0.057	0.45	0.52
Phenanthrene, 2-methyl-	2531-84-2	18	0	0.23	0.3	0.15	0.84	0.96
Phenanthrene, 3-methyl	832-71-3	18	0	0.27	0.35	0.15	1	1.1
Propionaldehyde	123-38-6	12	0	28	57	0	110	270
Pyrene	129-00-0	20	0	0.49	0.62	0.19	1.8	2.1
Pyridine, 2-(4-methylphenyl)-	4467-06-5	2	0	0.0054	0.027	0	0.0095	0.16
Resorcinol	108-46-3	18	0	2.9	4.2	1.2	9.4	18
m-Tolualdehyde	620-23-5	19	0	41	43	33	110	140
TXIB "Kodaflex"	6846-50-0	1	0	0.3	1.8	0	0	11
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	14	0	0.58	0.81	0	2	3
Undecane	1120-21-4	5	0	2	5.2	0	16	20
Valeraldehyde	110-62-3	11	0	140	250	0	640	700
Non-Field-Related Chemicals								
Benzene	71-43-2	35	14	93	75	65	230	380
Benzene, 1,4-dichloro	106-46-7	7	0	2.9	6.5	0	18	18
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	34	0	88	91	58	260	320
2-Butoxyethanol	111-76-2	1	0	0.76	4.5	0	0	27
Cyclotrisiloxane, hexamethyl-	541-05-9	1	0	11	66	0	0	390
Decanal	112-31-2	7	0	4.3	15	0	16	84
Ethylbenzene	100-41-4	13	0	26	44	0	110	180

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Heptane	142-82-5	20	0	35	53	6.8	150	230
Hexanal	66-25-1	30	0	120	150	56	470	610
Hexane	110-54-3	26	0	100	230	45	270	1300
1-Hexanol, 2-ethyl-	104-76-7	6	0	1.2	3.1	0	6	14
Nonanal	124-19-6	2	0	1.2	4.9	0	6.3	21
Phenol	108-95-2	18	0	8.9	11	5.3	32	32
Tetrachloroethylene	127-18-4	7	0	7.3	17	0	49	64
Tetradecane	629-59-4	3	0	1.2	4.4	0	11	22
m/p-Xylene	106-42-3	25	0	88	130	36	300	530
o-Xylene	95-47-6	13	0	30	50	0	120	200

[a] 35 field-specific $C_{inh\text{-}field}$ values are included in the table.
[b] On-Field field-specific Chronic $C_{inh\text{-}field}$ equals the modified field-specific average concentration of a field ($C_{air\text{-}field}$ x AF_{inh}) of a general chemical (see Section F.4.3 of this Appendix F).
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-155. **On-Field** Field-Specific[a] Chronic Inhalation Exposure Concentration[b] for **All General Chemicals** (Chronic $C_{inh\text{-}field}$, nanograms per cubic meter) —Combined Gender **Coaches 30<40 Years**

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals								
Acenaphthylene	208-96-8	11	0	0.13	0.27	0	0.57	1.2
Acetone	67-64-1	34	210	2600	2900	1400	8600	9200
Aniline	62-53-3	10	0	0.87	1.5	0	3.4	5.8
Anthracene	120-12-7	12	0	0.044	0.082	0	0.19	0.32
Anthracene, 2-methyl-	613-12-7	15	0	0.011	0.016	0	0.044	0.056
Anthracene, 9,10-dimethyl	781-43-1	16	0	0.013	0.023	0	0.036	0.13
Anthracene, 9-phenyl	602-55-1	1	0	0.0012	0.007	0	0	0.041
Benz[a]anthracene	56-55-3	1	0	0.00066	0.0038	0	0	0.022
Benzaldehyde	100-52-7	15	0	12	18	0	43	73
Benzene, 1,2,3-trimethyl-	526-73-8	6	0	1.8	5.2	0	7.8	28
Benzene, 1,2,4,5-tetramethyl-	95-93-2	5	0	0.33	0.88	0	2.1	3.6
Benzene, 1,2,4-trimethyl-	95-63-6	13	0	16	28	0	56	130
Benzene, 1-ethyl-2,4-dimethyl-	874-41-9	7	0	0.7	1.9	0	3.6	9.5
Benzene, 2-ethyl-1,4-dimethyl-	1758-88-9	12	0	1	2	0	4.4	9.1
Benzene, butyl-	104-51-8	2	0	0.35	1.7	0	0.74	9.8

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	26	0	0.5	0.58	0.3	1.6	2
Benzo[b]fluoranthene	205-99-2	2	0	0.0033	0.013	0	0.02	0.056
7H-Benzo[c]fluorene	205-12-9	13	0	0.0072	0.011	0	0.019	0.048
Benzo[k]fluoranthene	207-08-9	4	0	0.0041	0.012	0	0.031	0.046
Benzothiazole	95-16-9	19	0	4.9	5.7	2.7	16	16
Benzothiazole, 2-phenyl-	883-93-2	27	0	0.39	0.52	0.2	1.4	2.3
2-Benzothiazolone	934-34-9	5	0	0.62	1.6	0	4	6
Benzyl butyl phthalate	85-68-7	7	0	0.46	0.98	0	3.1	3.1
Butanal	123-72-8	13	0	41	100	0	240	500
Cyclopentasiloxane, decamethyl-	541-02-6	18	0	22	36	6.6	77	170
Cyclotetrasiloxane, octamethyl-	556-67-2	13	0	7.8	12	0	30	44
p-Cymene	99-87-6	21	0	3.3	4.1	2.1	11	16
Decane	124-18-5	11	0	7.2	13	0	40	41
Dibenz[a,h]anthracene	53-70-3	14	0	0.019	0.038	0	0.096	0.16
Dibenzothiophene	132-65-0	14	0	0.17	0.25	0	0.7	0.91
Dibutyl phthalate	84-74-2	7	0	50	130	0	230	660
Diethyl phthalate	84-66-2	1	0	0.35	2	0	0	12
Diisobutyl phthalate	84-69-5	15	0	1.9	3.7	0	6	20
Diisooctylphthalate	27554-26-3	9	0	6.6	22	0	17	130
Di-n-octyl phthalate	117-84-0	5	0	0.013	0.034	0	0.073	0.15
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	26	0	4.3	5.9	2.2	17	19
3,5-di-tert-Butyl-4-hydroxybenzaldehyde	1620-98-0	8	0	2.3	4.5	0	11	15
Dodecane	112-40-3	4	0	0.9	3	0	5.1	16
Fluoranthene	206-44-0	21	0	0.5	0.64	0.18	1.8	2.3
Fluorene	86-73-7	15	0	0.8	1.6	0	2.8	8.2
Furan, 2-methyl	534-22-5	34	0	14	12	11	33	55
Heptanal	111-71-7	7	0	2	4.9	0	17	17
Hexadecane	544-76-3	11	0	4.2	7.7	0	23	30
2,5-Hexanedione	110-13-4	5	0	3.6	9.5	0	24	35
Indan	496-11-7	12	0	1.8	3.4	0	7.9	14
Mesitylene	108-67-8	15	0	3.7	6.6	0	15	30
Methacrolein	78-85-3	20	0	10	13	5.8	30	57
Methyl Isobutyl Ketone	108-10-1	5	0	2.1	5.7	0	16	24
Naphthalene	91-20-3	9	0	3.6	7.4	0	15	35
Naphthalene, 1,2-dimethyl-	573-98-8	4	0	0.05	0.14	0	0.48	0.48
Naphthalene, 1,6-dimethyl-	575-43-9	14	0	0.36	0.55	0	1.7	2

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Naphthalene, 1-methyl-	90-12-0	15	0	2.9	5	0	13	20
Naphthalene, 2-(bromomethyl)-	939-26-4	11	0	0.099	0.15	0	0.34	0.34
Naphthalene, 2,3-dimethyl-	581-40-8	14	0	0.27	0.4	0	1.2	1.4
Naphthalene, 2-methyl-	91-57-6	10	0	4.4	9.4	0	22	42
1-Octadecene	112-88-9	16	0	0.59	0.76	0	2	2.4
Octanal	124-13-0	24	0	6	6.9	3.7	18	28
Octane	111-65-9	10	0	8.1	15	0	34	56
17-Pentatriacontene	6971-40-0	2	0	0.098	0.42	0	0.39	2.2
N-Phenylbenzamide	93-98-1	6	0	1.2	2.7	0	7.4	7.4
Phenanthrene	85-01-8	17	0	1.7	2.7	0.93	7.6	11
Phenanthrene, 1-methyl	832-69-9	17	0	0.11	0.14	0.05	0.4	0.45
Phenanthrene, 2-methyl-	2531-84-2	18	0	0.2	0.26	0.14	0.73	0.84
Phenanthrene, 3-methyl	832-71-3	18	0	0.24	0.31	0.13	0.88	1
Propionaldehyde	123-38-6	12	0	25	50	0	98	240
Pyrene	129-00-0	20	0	0.43	0.54	0.17	1.5	1.8
Pyridine, 2-(4-methylphenyl)-	4467-06-5	2	0	0.0047	0.024	0	0.0083	0.14
Resorcinol	108-46-3	18	0	2.5	3.6	1	8.2	16
m-Tolualdehyde	620-23-5	19	0	36	38	29	99	120
TXIB "Kodaflex"	6846-50-0	1	0	0.26	1.6	0	0	9.3
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	14	0	0.51	0.71	0	1.8	2.6
Undecane	1120-21-4	5	0	1.8	4.6	0	14	17
Valeraldehyde	110-62-3	11	0	120	220	0	560	610
Non-Field-Related Chemicals								
Benzene	71-43-2	35	12	81	65	57	200	330
Benzene, 1,4-dichloro	106-46-7	7	0	2.6	5.6	0	16	16
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	34	0	77	80	51	230	280
2-Butoxyethanol	111-76-2	1	0	0.66	3.9	0	0	23
Cyclotrisiloxane, hexamethyl-	541-05-9	1	0	9.8	58	0	0	340
Decanal	112-31-2	7	0	3.8	13	0	14	74
Ethylbenzene	100-41-4	13	0	23	39	0	94	150
Heptane	142-82-5	20	0	31	46	5.9	130	200
Hexanal	66-25-1	30	0	110	140	49	410	530
Hexane	110-54-3	26	0	90	200	40	240	1200
1-Hexanol, 2-ethyl-	104-76-7	6	0	1	2.7	0	5.3	12
Nonanal	124-19-6	2	0	1	4.3	0	5.5	18
Phenol	108-95-2	18	0	7.8	9.9	4.6	28	28
Tetrachloroethylene	127-18-4	7	0	6.4	15	0	43	56

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Tetradecane	629-59-4	3	0	1.1	3.8	0	9.5	19
m/p-Xylene	106-42-3	25	0	77	110	31	260	470
o-Xylene	95-47-6	13	0	26	43	0	100	170

[a] 35 field-specific $C_{inh\text{-}field}$ values are included in the table.
[b] On-Field field-specific Chronic $C_{inh\text{-}field}$ equals the modified field-specific average concentration of a field ($C_{air\text{-}field}$ x AF_{inh}) of a general chemical (see Section F.4.3 of this Appendix F).
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-156. **On-Field** Field-Specific[a] Chronic Inhalation Exposure Concentration[b] for **All General Chemicals** (Chronic $C_{inh\text{-}field}$, nanograms per cubic meter) —Combined Gender **Coaches 40<50 Years**

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals								
Acenaphthylene	208-96-8	11	0	0.14	0.27	0	0.57	1.2
Acetone	67-64-1	34	210	2600	3000	1400	8600	9300
Aniline	62-53-3	10	0	0.88	1.5	0	3.4	5.9
Anthracene	120-12-7	12	0	0.044	0.083	0	0.19	0.33
Anthracene, 2-methyl-	613-12-7	15	0	0.012	0.016	0	0.044	0.057
Anthracene, 9,10-dimethyl	781-43-1	16	0	0.013	0.024	0	0.037	0.13
Anthracene, 9-phenyl	602-55-1	1	0	0.0012	0.0071	0	0	0.042
Benz[a]anthracene	56-55-3	1	0	0.00067	0.0039	0	0	0.023
Benzaldehyde	100-52-7	15	0	12	19	0	44	73
Benzene, 1,2,3-trimethyl-	526-73-8	6	0	1.8	5.3	0	7.9	28
Benzene, 1,2,4,5-tetramethyl-	95-93-2	5	0	0.34	0.89	0	2.1	3.6
Benzene, 1,2,4-trimethyl-	95-63-6	13	0	16	28	0	56	130
Benzene, 1-ethyl-2,4-dimethyl-	874-41-9	7	0	0.71	1.9	0	3.7	9.6
Benzene, 2-ethyl-1,4-dimethyl-	1758-88-9	12	0	1	2	0	4.5	9.2
Benzene, butyl-	104-51-8	2	0	0.35	1.7	0	0.74	9.9
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	26	0	0.5	0.59	0.3	1.6	2
Benzo[b]fluoranthene	205-99-2	2	0	0.0033	0.014	0	0.02	0.057
7H-Benzo[c]fluorene	205-12-9	13	0	0.0073	0.011	0	0.019	0.048
Benzo[k]fluoranthene	207-08-9	4	0	0.0041	0.012	0	0.032	0.047
Benzothiazole	95-16-9	19	0	5	5.8	2.8	17	17
Benzothiazole, 2-phenyl-	883-93-2	27	0	0.4	0.53	0.2	1.4	2.4
2-Benzothiazolone	934-34-9	5	0	0.62	1.6	0	4.1	6.1
Benzyl butyl phthalate	85-68-7	7	0	0.46	0.99	0	3.2	3.2
Butanal	123-72-8	13	0	41	100	0	240	510

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Cyclopentasiloxane, decamethyl-	541-02-6	18	0	22	37	6.7	78	180
Cyclotetrasiloxane, octamethyl-	556-67-2	13	0	7.8	13	0	31	44
p-Cymene	99-87-6	21	0	3.4	4.1	2.1	11	16
Decane	124-18-5	11	0	7.3	13	0	40	41
Dibenz[a,h]anthracene	53-70-3	14	0	0.019	0.039	0	0.097	0.16
Dibenzothiophene	132-65-0	14	0	0.17	0.26	0	0.71	0.92
Dibutyl phthalate	84-74-2	7	0	51	130	0	230	660
Diethyl phthalate	84-66-2	1	0	0.36	2.1	0	0	12
Diisobutyl phthalate	84-69-5	15	0	1.9	3.8	0	6.1	20
Diisooctylphthalate	27554-26-3	9	0	6.7	22	0	17	130
Di-n-octyl phthalate	117-84-0	5	0	0.013	0.034	0	0.074	0.15
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	26	0	4.4	5.9	2.3	17	20
3,5-di-tert-Butyl-4-hydroxybenzaldehyde	1620-98-0	8	0	2.3	4.5	0	11	15
Dodecane	112-40-3	4	0	0.91	3.1	0	5.2	16
Fluoranthene	206-44-0	21	0	0.51	0.65	0.18	1.8	2.3
Fluorene	86-73-7	15	0	0.81	1.6	0	2.8	8.3
Furan, 2-methyl	534-22-5	34	0	14	12	11	34	55
Heptanal	111-71-7	7	0	2	5	0	17	17
Hexadecane	544-76-3	11	0	4.3	7.8	0	23	31
2,5-Hexanedione	110-13-4	5	0	3.7	9.6	0	24	36
Indan	496-11-7	12	0	1.8	3.4	0	8	15
Mesitylene	108-67-8	15	0	3.7	6.6	0	15	31
Methacrolein	78-85-3	20	0	10	13	5.8	30	58
Methyl Isobutyl Ketone	108-10-1	5	0	2.1	5.8	0	16	25
Naphthalene	91-20-3	9	0	3.6	7.5	0	16	35
Naphthalene, 1,2-dimethyl-	573-98-8	4	0	0.05	0.14	0	0.49	0.49
Naphthalene, 1,6-dimethyl-	575-43-9	14	0	0.36	0.55	0	1.7	2
Naphthalene, 1-methyl-	90-12-0	15	0	2.9	5	0	13	20
Naphthalene, 2-(bromomethyl)-	939-26-4	11	0	0.1	0.15	0	0.34	0.34
Naphthalene, 2,3-dimethyl-	581-40-8	14	0	0.27	0.4	0	1.2	1.4
Naphthalene, 2-methyl-	91-57-6	10	0	4.5	9.5	0	22	43
1-Octadecene	112-88-9	16	0	0.6	0.77	0	2.1	2.5
Octanal	124-13-0	24	0	6.1	7	3.7	18	28
Octane	111-65-9	10	0	8.2	15	0	34	57
17-Pentatriacontene	6971-40-0	2	0	0.099	0.42	0	0.39	2.2
N-Phenylbenzamide	93-98-1	6	0	1.2	2.7	0	7.5	7.5

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Phenanthrene	85-01-8	17	0	1.8	2.7	0.94	7.6	11
Phenanthrene, 1-methyl	832-69-9	17	0	0.11	0.14	0.05	0.4	0.46
Phenanthrene, 2-methyl-	2531-84-2	18	0	0.2	0.26	0.14	0.74	0.85
Phenanthrene, 3-methyl	832-71-3	18	0	0.24	0.31	0.13	0.89	1
Propionaldehyde	123-38-6	12	0	25	50	0	99	240
Pyrene	129-00-0	20	0	0.43	0.55	0.17	1.6	1.9
Pyridine, 2-(4-methylphenyl)-	4467-06-5	2	0	0.0048	0.024	0	0.0084	0.14
Resorcinol	108-46-3	18	0	2.5	3.7	1	8.3	16
m-Tolualdehyde	620-23-5	19	0	36	38	30	100	120
TXIB "Kodaflex"	6846-50-0	1	0	0.27	1.6	0	0	9.4
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	14	0	0.51	0.72	0	1.8	2.6
Undecane	1120-21-4	5	0	1.8	4.6	0	14	18
Valeraldehyde	110-62-3	11	0	130	220	0	570	620
Non-Field-Related Chemicals								
Benzene	71-43-2	35	12	82	66	58	200	330
Benzene, 1,4-dichloro	106-46-7	7	0	2.6	5.7	0	16	16
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	34	0	78	81	52	230	290
2-Butoxyethanol	111-76-2	1	0	0.67	4	0	0	23
Cyclotrisiloxane, hexamethyl-	541-05-9	1	0	9.9	59	0	0	350
Decanal	112-31-2	7	0	3.8	13	0	14	74
Ethylbenzene	100-41-4	13	0	23	39	0	95	160
Heptane	142-82-5	20	0	31	46	6	130	200
Hexanal	66-25-1	30	0	110	140	50	410	540
Hexane	110-54-3	26	0	91	200	40	240	1200
1-Hexanol, 2-ethyl-	104-76-7	6	0	1.1	2.7	0	5.3	12
Nonanal	124-19-6	2	0	1.1	4.3	0	5.5	18
Phenol	108-95-2	18	0	7.9	10	4.7	28	28
Tetrachloroethylene	127-18-4	7	0	6.5	15	0	43	57
Tetradecane	629-59-4	3	0	1.1	3.9	0	9.6	19
m/p-Xylene	106-42-3	25	0	78	110	32	270	470
o-Xylene	95-47-6	13	0	26	44	0	100	170

[a] 35 field-specific $C_{inh\text{-}field}$ values are included in the table.
[b] On-Field field-specific Chronic $C_{inh\text{-}field}$ equals the modified field-specific average concentration of a field ($C_{air\text{-}field}$ x AF_{inh}) of a general chemical (see Section F.4.3 of this Appendix F).
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-157. **On-Field** Field-Specific[a] Chronic Inhalation Exposure Concentration[b] for **All General Chemicals** (Chronic $C_{inh\text{-}field}$, nanograms per cubic meter) —Combined Gender **Coaches 50<70 Years**

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals								
Acenaphthylene	208-96-8	11	0	0.14	0.27	0	0.57	1.2
Acetone	67-64-1	34	210	2700	3000	1400	8700	9300
Aniline	62-53-3	10	0	0.88	1.5	0	3.4	5.9
Anthracene	120-12-7	12	0	0.044	0.083	0	0.19	0.33
Anthracene, 2-methyl-	613-12-7	15	0	0.012	0.016	0	0.044	0.057
Anthracene, 9,10-dimethyl	781-43-1	16	0	0.013	0.024	0	0.037	0.13
Anthracene, 9-phenyl	602-55-1	1	0	0.0012	0.0071	0	0	0.042
Benz[a]anthracene	56-55-3	1	0	0.00067	0.0039	0	0	0.023
Benzaldehyde	100-52-7	15	0	12	19	0	44	74
Benzene, 1,2,3-trimethyl-	526-73-8	6	0	1.8	5.3	0	7.9	28
Benzene, 1,2,4,5-tetramethyl-	95-93-2	5	0	0.34	0.89	0	2.1	3.7
Benzene, 1,2,4-trimethyl-	95-63-6	13	0	16	28	0	57	130
Benzene, 1-ethyl-2,4-dimethyl-	874-41-9	7	0	0.71	1.9	0	3.7	9.6
Benzene, 2-ethyl-1,4-dimethyl-	1758-88-9	12	0	1	2	0	4.5	9.2
Benzene, butyl-	104-51-8	2	0	0.36	1.7	0	0.75	10
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	26	0	0.51	0.59	0.3	1.7	2
Benzo[b]fluoranthene	205-99-2	2	0	0.0033	0.014	0	0.02	0.057
7H-Benzo[c]fluorene	205-12-9	13	0	0.0073	0.011	0	0.019	0.048
Benzo[k]fluoranthene	207-08-9	4	0	0.0042	0.012	0	0.032	0.047
Benzothiazole	95-16-9	19	0	5	5.8	2.8	17	17
Benzothiazole, 2-phenyl-	883-93-2	27	0	0.4	0.53	0.2	1.4	2.4
2-Benzothiazolone	934-34-9	5	0	0.63	1.6	0	4.1	6.1
Benzyl butyl phthalate	85-68-7	7	0	0.46	0.99	0	3.2	3.2
Butanal	123-72-8	13	0	41	100	0	240	510

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Cyclopentasiloxane, decamethyl-	541-02-6	18	0	22	37	6.7	78	180
Cyclotetrasiloxane, octamethyl-	556-67-2	13	0	7.9	13	0	31	44
p-Cymene	99-87-6	21	0	3.4	4.1	2.2	11	16
Decane	124-18-5	11	0	7.3	13	0	40	41
Dibenz[a,h]anthracene	53-70-3	14	0	0.019	0.039	0	0.097	0.16
Dibenzothiophene	132-65-0	14	0	0.17	0.26	0	0.71	0.93
Dibutyl phthalate	84-74-2	7	0	51	130	0	230	670
Diethyl phthalate	84-66-2	1	0	0.36	2.1	0	0	12
Diisobutyl phthalate	84-69-5	15	0	1.9	3.8	0	6.1	20
Diisooctylphthalate	27554-26-3	9	0	6.7	22	0	17	130
Di-n-octyl phthalate	117-84-0	5	0	0.013	0.034	0	0.074	0.15
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	26	0	4.4	6	2.3	17	20
3,5-di-tert-Butyl-4-hydroxybenzaldehyde	1620-98-0	8	0	2.3	4.5	0	11	15
Dodecane	112-40-3	4	0	0.92	3.1	0	5.2	16
Fluoranthene	206-44-0	21	0	0.51	0.65	0.18	1.8	2.3
Fluorene	86-73-7	15	0	0.81	1.6	0	2.9	8.3
Furan, 2-methyl	534-22-5	34	0	14	12	11	34	55
Heptanal	111-71-7	7	0	2	5	0	17	17
Hexadecane	544-76-3	11	0	4.3	7.8	0	23	31
2,5-Hexanedione	110-13-4	5	0	3.7	9.6	0	24	36
Indan	496-11-7	12	0	1.8	3.4	0	8	15
Mesitylene	108-67-8	15	0	3.7	6.7	0	15	31
Methacrolein	78-85-3	20	0	10	13	5.9	30	58
Methyl Isobutyl Ketone	108-10-1	5	0	2.1	5.8	0	16	25
Naphthalene	91-20-3	9	0	3.6	7.5	0	16	35
Naphthalene, 1,2-dimethyl-	573-98-8	4	0	0.05	0.14	0	0.49	0.49
Naphthalene, 1,6-dimethyl-	575-43-9	14	0	0.36	0.56	0	1.7	2
Naphthalene, 1-methyl-	90-12-0	15	0	2.9	5	0	13	20
Naphthalene, 2-(bromomethyl)-	939-26-4	11	0	0.1	0.15	0	0.34	0.34

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Naphthalene, 2,3-dimethyl-	581-40-8	14	0	0.27	0.4	0	1.2	1.4
Naphthalene, 2-methyl-	91-57-6	10	0	4.5	9.5	0	22	43
1-Octadecene	112-88-9	16	0	0.6	0.77	0	2.1	2.5
Octanal	124-13-0	24	0	6.1	7	3.8	18	28
Octane	111-65-9	10	0	8.2	15	0	34	57
17-Pentatriacontene	6971-40-0	2	0	0.099	0.43	0	0.39	2.2
N-Phenylbenzamide	93-98-1	6	0	1.2	2.7	0	7.5	7.5
Phenanthrene	85-01-8	17	0	1.8	2.7	0.94	7.7	11
Phenanthrene, 1-methyl	832-69-9	17	0	0.11	0.14	0.05	0.4	0.46
Phenanthrene, 2-methyl-	2531-84-2	18	0	0.2	0.26	0.14	0.74	0.85
Phenanthrene, 3-methyl	832-71-3	18	0	0.24	0.31	0.13	0.89	1
Propionaldehyde	123-38-6	12	0	25	50	0	99	240
Pyrene	129-00-0	20	0	0.43	0.55	0.17	1.6	1.9
Pyridine, 2-(4-methylphenyl)-	4467-06-5	2	0	0.0048	0.024	0	0.0084	0.14
Resorcinol	108-46-3	18	0	2.5	3.7	1	8.3	16
m-Tolualdehyde	620-23-5	19	0	37	39	30	100	120
TXIB "Kodaflex"	6846-50-0	1	0	0.27	1.6	0	0	9.4
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	14	0	0.51	0.72	0	1.8	2.6
Undecane	1120-21-4	5	0	1.8	4.6	0	14	18
Valeraldehyde	110-62-3	11	0	130	220	0	570	620
Non-Field-Related Chemicals								
Benzene	71-43-2	35	12	82	66	58	210	330
Benzene, 1,4-dichloro	106-46-7	7	0	2.6	5.7	0	16	16
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	34	0	78	81	52	230	290
2-Butoxyethanol	111-76-2	1	0	0.67	4	0	0	23
Cyclotrisiloxane, hexamethyl-	541-05-9	1	0	9.9	59	0	0	350
Decanal	112-31-2	7	0	3.8	13	0	14	75

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Ethylbenzene	100-41-4	13	0	23	39	0	95	160
Heptane	142-82-5	20	0	31	47	6	130	200
Hexanal	66-25-1	30	0	110	140	50	410	540
Hexane	110-54-3	26	0	91	200	40	240	1200
1-Hexanol, 2-ethyl-	104-76-7	6	0	1.1	2.7	0	5.3	12
Nonanal	124-19-6	2	0	1.1	4.3	0	5.5	18
Phenol	108-95-2	18	0	7.9	10	4.7	28	28
Tetrachloroethylene	127-18-4	7	0	6.5	15	0	43	57
Tetradecane	629-59-4	3	0	1.1	3.9	0	9.6	19
m/p-Xylene	106-42-3	25	0	78	110	32	270	470
o-Xylene	95-47-6	13	0	26	44	0	100	170

[a] 35 field-specific $C_{inh\text{-}field}$ values are included in the table.
[b] On-Field field-specific Chronic $C_{inh\text{-}field}$ equals the modified field-specific average concentration of a field ($C_{air\text{-}field}$ x AF_{inh}) of a general chemical (see Section F.4.3 of this Appendix F).
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-158. **On-Field** Field-Specific[a] Chronic Inhalation Exposure Concentration[b] for **All General Chemicals** (Chronic $C_{inh\text{-}field}$, nanograms per cubic meter) —Combined Gender **Referees 16<30 Years**

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals								
Acenaphthylene	208-96-8	11	0	0.057	0.12	0	0.24	0.5
Acetone	67-64-1	34	89	1100	1200	600	3600	3900
Aniline	62-53-3	10	0	0.37	0.65	0	1.4	2.5
Anthracene	120-12-7	12	0	0.019	0.035	0	0.081	0.14
Anthracene, 2-methyl-	613-12-7	15	0	0.0049	0.0069	0	0.019	0.024
Anthracene, 9,10-dimethyl	781-43-1	16	0	0.0055	0.0099	0	0.015	0.054
Anthracene, 9-phenyl	602-55-1	1	0	0.00051	0.003	0	0	0.017
Benz[a]anthracene	56-55-3	1	0	0.00028	0.0016	0	0	0.0095
Benzaldehyde	100-52-7	15	0	5.1	7.8	0	18	31

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Benzene, 1,2,3-trimethyl-	526-73-8	6	0	0.75	2.2	0	3.3	12
Benzene, 1,2,4,5-tetramethyl-	95-93-2	5	0	0.14	0.37	0	0.88	1.5
Benzene, 1,2,4-trimethyl-	95-63-6	13	0	6.7	12	0	24	55
Benzene, 1-ethyl-2,4-dimethyl-	874-41-9	7	0	0.3	0.79	0	1.5	4
Benzene, 2-ethyl-1,4-dimethyl-	1758-88-9	12	0	0.42	0.85	0	1.9	3.9
Benzene, butyl-	104-51-8	2	0	0.15	0.72	0	0.31	4.2
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	26	0	0.21	0.25	0.13	0.69	0.84
Benzo[b]fluoranthene	205-99-2	2	0	0.0014	0.0057	0	0.0083	0.024
7H-Benzo[c]fluorene	205-12-9	13	0	0.0031	0.0047	0	0.008	0.02
Benzo[k]fluoranthene	207-08-9	4	0	0.0017	0.0051	0	0.013	0.02
Benzothiazole	95-16-9	19	0	2.1	2.4	1.2	7	7
Benzothiazole, 2-phenyl-	883-93-2	27	0	0.17	0.22	0.085	0.58	0.99
2-Benzothiazolone	934-34-9	5	0	0.26	0.68	0	1.7	2.5
Benzyl butyl phthalate	85-68-7	7	0	0.19	0.42	0	1.3	1.3
Butanal	123-72-8	13	0	17	43	0	100	210
Cyclopentasiloxane, decamethyl-	541-02-6	18	0	9.1	15	2.8	33	74
Cyclotetrasiloxane, octamethyl-	556-67-2	13	0	3.3	5.3	0	13	19
p-Cymene	99-87-6	21	0	1.4	1.7	0.9	4.8	6.7
Decane	124-18-5	11	0	3.1	5.5	0	17	17
Dibenz[a,h]anthracene	53-70-3	14	0	0.0081	0.016	0	0.041	0.069
Dibenzothiophene	132-65-0	14	0	0.07	0.11	0	0.3	0.39
Dibutyl phthalate	84-74-2	7	0	21	55	0	96	280
Diethyl phthalate	84-66-2	1	0	0.15	0.87	0	0	5.1
Diisobutyl phthalate	84-69-5	15	0	0.81	1.6	0	2.6	8.6
Diisooctylphthalate	27554-26-3	9	0	2.8	9.4	0	7.3	54
Di-n-octyl phthalate	117-84-0	5	0	0.0055	0.014	0	0.031	0.062
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	26	0	1.8	2.5	0.95	7.2	8.2
3,5-di-tert-Butyl-4-hydroxybenzaldehyde	1620-98-0	8	0	0.96	1.9	0	4.8	6.3

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Dodecane	112-40-3	4	0	0.38	1.3	0	2.2	6.7
Fluoranthene	206-44-0	21	0	0.21	0.27	0.077	0.74	0.97
Fluorene	86-73-7	15	0	0.34	0.66	0	1.2	3.5
Furan, 2-methyl	534-22-5	34	0	6.1	5.1	4.5	14	23
Heptanal	111-71-7	7	0	0.84	2.1	0	7.3	7.3
Hexadecane	544-76-3	11	0	1.8	3.3	0	9.6	13
2,5-Hexanedione	110-13-4	5	0	1.5	4	0	10	15
Indan	496-11-7	12	0	0.77	1.4	0	3.3	6.2
Mesitylene	108-67-8	15	0	1.6	2.8	0	6.3	13
Methacrolein	78-85-3	20	0	4.3	5.5	2.5	13	24
Methyl Isobutyl Ketone	108-10-1	5	0	0.89	2.4	0	6.9	10
Naphthalene	91-20-3	9	0	1.5	3.2	0	6.5	15
Naphthalene, 1,2-dimethyl-	573-98-8	4	0	0.021	0.061	0	0.2	0.2
Naphthalene, 1,6-dimethyl-	575-43-9	14	0	0.15	0.23	0	0.72	0.85
Naphthalene, 1-methyl-	90-12-0	15	0	1.2	2.1	0	5.5	8.5
Naphthalene, 2-(bromomethyl)-	939-26-4	11	0	0.042	0.064	0	0.14	0.14
Naphthalene, 2,3-dimethyl-	581-40-8	14	0	0.11	0.17	0	0.52	0.6
Naphthalene, 2-methyl-	91-57-6	10	0	1.9	4	0	9.1	18
1-Octadecene	112-88-9	16	0	0.25	0.32	0	0.87	1
Octanal	124-13-0	24	0	2.5	2.9	1.6	7.7	12
Octane	111-65-9	10	0	3.4	6.3	0	14	24
17-Pentatriacontene	6971-40-0	2	0	0.042	0.18	0	0.16	0.94
N-Phenylbenzamide	93-98-1	6	0	0.51	1.1	0	3.2	3.2
Phenanthrene	85-01-8	17	0	0.74	1.1	0.4	3.2	4.8
Phenanthrene, 1-methyl	832-69-9	17	0	0.047	0.061	0.021	0.17	0.19
Phenanthrene, 2-methyl-	2531-84-2	18	0	0.085	0.11	0.057	0.31	0.36
Phenanthrene, 3-methyl	832-71-3	18	0	0.1	0.13	0.055	0.37	0.43
Propionaldehyde	123-38-6	12	0	10	21	0	41	100

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Pyrene	129-00-0	20	0	0.18	0.23	0.072	0.65	0.78
Pyridine, 2-(4-methylphenyl)-	4467-06-5	2	0	0.002	0.01	0	0.0035	0.058
Resorcinol	108-46-3	18	0	1.1	1.5	0.43	3.5	6.6
m-Tolualdehyde	620-23-5	19	0	15	16	12	42	51
TXIB "Kodaflex"	6846-50-0	1	0	0.11	0.66	0	0	3.9
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	14	0	0.21	0.3	0	0.76	1.1
Undecane	1120-21-4	5	0	0.75	1.9	0	5.8	7.4
Valeraldehyde	110-62-3	11	0	53	92	0	240	260
Non-Field-Related Chemicals								
Benzene	71-43-2	35	5.1	34	28	24	86	140
Benzene, 1,4-dichloro	106-46-7	7	0	1.1	2.4	0	6.7	6.7
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	34	0	33	34	22	97	120
2-Butoxyethanol	111-76-2	1	0	0.28	1.7	0	0	9.9
Cyclotrisiloxane, hexamethyl-	541-05-9	1	0	4.2	25	0	0	150
Decanal	112-31-2	7	0	1.6	5.4	0	6	31
Ethylbenzene	100-41-4	13	0	9.8	16	0	40	66
Heptane	142-82-5	20	0	13	20	2.5	54	85
Hexanal	66-25-1	30	0	45	57	21	170	230
Hexane	110-54-3	26	0	38	85	17	100	500
1-Hexanol, 2-ethyl-	104-76-7	6	0	0.44	1.1	0	2.2	5.2
Nonanal	124-19-6	2	0	0.44	1.8	0	2.3	7.7
Phenol	108-95-2	18	0	3.3	4.2	2	12	12
Tetrachloroethylene	127-18-4	7	0	2.7	6.4	0	18	24
Tetradecane	629-59-4	3	0	0.46	1.6	0	4	8.1
m/p-Xylene	106-42-3	25	0	33	47	13	110	200
o-Xylene	95-47-6	13	0	11	18	0	44	73

[a] 35 field-specific $C_{inh\text{-}field}$ values are included in the table.

[b] On-Field field-specific Chronic $C_{inh\text{-}field}$ equals the modified field-specific average concentration of a field

($C_{air\text{-}field}$ x AF_{inh}) of a general chemical (see Section F.4.3 of this Appendix F).
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-159. **On-Field** Field-Specific[a] Chronic Inhalation Exposure Concentration[b] for **All General Chemicals** (Chronic $C_{inh\text{-}field}$, nanograms per cubic meter) —Combined Gender **Referees 30<40 Years**

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals								
Acenaphthylene	208-96-8	11	0	0.05	0.1	0	0.21	0.43
Acetone	67-64-1	34	78	970	1100	530	3200	3400
Aniline	62-53-3	10	0	0.32	0.57	0	1.3	2.2
Anthracene	120-12-7	12	0	0.016	0.03	0	0.071	0.12
Anthracene, 2-methyl-	613-12-7	15	0	0.0042	0.006	0	0.016	0.021
Anthracene, 9,10-dimethyl	781-43-1	16	0	0.0048	0.0087	0	0.014	0.047
Anthracene, 9-phenyl	602-55-1	1	0	0.00045	0.0026	0	0	0.015
Benz[a]anthracene	56-55-3	1	0	0.00024	0.0014	0	0	0.0083
Benzaldehyde	100-52-7	15	0	4.4	6.9	0	16	27
Benzene, 1,2,3-trimethyl-	526-73-8	6	0	0.65	1.9	0	2.9	10
Benzene, 1,2,4,5-tetramethyl-	95-93-2	5	0	0.12	0.33	0	0.77	1.3
Benzene, 1,2,4-trimethyl-	95-63-6	13	0	5.8	10	0	21	48
Benzene, 1-ethyl-2,4-dimethyl-	874-41-9	7	0	0.26	0.69	0	1.3	3.5
Benzene, 2-ethyl-1,4-dimethyl-	1758-88-9	12	0	0.37	0.74	0	1.6	3.4
Benzene, butyl-	104-51-8	2	0	0.13	0.63	0	0.27	3.6
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	26	0	0.19	0.22	0.11	0.6	0.73
Benzo[b]fluoranthene	205-99-2	2	0	0.0012	0.005	0	0.0073	0.021
7H-Benzo[c]fluorene	205-12-9	13	0	0.0027	0.0041	0	0.007	0.018
Benzo[k]fluoranthene	207-08-9	4	0	0.0015	0.0045	0	0.012	0.017
Benzothiazole	95-16-9	19	0	1.8	2.1	1	6.1	6.1
Benzothiazole, 2-phenyl-	883-93-2	27	0	0.15	0.19	0.074	0.5	0.87
2-Benzothiazolone	934-34-9	5	0	0.23	0.6	0	1.5	2.2

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Benzyl butyl phthalate	85-68-7	7	0	0.17	0.36	0	1.2	1.2
Butanal	123-72-8	13	0	15	37	0	89	190
Cyclopentasiloxane, decamethyl-	541-02-6	18	0	8	14	2.5	28	65
Cyclotetrasiloxane, octamethyl-	556-67-2	13	0	2.9	4.6	0	11	16
p-Cymene	99-87-6	21	0	1.2	1.5	0.79	4.2	5.9
Decane	124-18-5	11	0	2.7	4.8	0	15	15
Dibenz[a,h]anthracene	53-70-3	14	0	0.0071	0.014	0	0.036	0.06
Dibenzothiophene	132-65-0	14	0	0.061	0.094	0	0.26	0.34
Dibutyl phthalate	84-74-2	7	0	19	48	0	84	240
Diethyl phthalate	84-66-2	1	0	0.13	0.76	0	0	4.4
Diisobutyl phthalate	84-69-5	15	0	0.71	1.4	0	2.2	7.5
Diisooctylphthalate	27554-26-3	9	0	2.5	8.2	0	6.4	47
Di-n-octyl phthalate	117-84-0	5	0	0.0048	0.012	0	0.027	0.054
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	26	0	1.6	2.2	0.83	6.3	7.2
3,5-di-tert-Butyl-4-hydroxybenzaldehyde	1620-98-0	8	0	0.84	1.7	0	4.2	5.5
Dodecane	112-40-3	4	0	0.34	1.1	0	1.9	5.9
Fluoranthene	206-44-0	21	0	0.19	0.24	0.067	0.65	0.85
Fluorene	86-73-7	15	0	0.3	0.58	0	1	3
Furan, 2-methyl	534-22-5	34	0	5.3	4.4	3.9	12	20
Heptanal	111-71-7	7	0	0.73	1.8	0	6.4	6.4
Hexadecane	544-76-3	11	0	1.6	2.9	0	8.4	11
2,5-Hexanedione	110-13-4	5	0	1.3	3.5	0	8.8	13
Indan	496-11-7	12	0	0.68	1.3	0	2.9	5.4
Mesitylene	108-67-8	15	0	1.4	2.4	0	5.5	11
Methacrolein	78-85-3	20	0	3.8	4.8	2.1	11	21
Methyl Isobutyl Ketone	108-10-1	5	0	0.78	2.1	0	6	9.1
Naphthalene	91-20-3	9	0	1.3	2.8	0	5.7	13
Naphthalene, 1,2-dimethyl-	573-98-8	4	0	0.018	0.053	0	0.18	0.18
Naphthalene, 1,6-dimethyl-	575-43-9	14	0	0.13	0.2	0	0.62	0.74

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Naphthalene, 1-methyl-	90-12-0	15	0	1.1	1.8	0	4.8	7.4
Naphthalene, 2-(bromomethyl)-	939-26-4	11	0	0.037	0.056	0	0.12	0.12
Naphthalene, 2,3-dimethyl-	581-40-8	14	0	0.099	0.15	0	0.45	0.52
Naphthalene, 2-methyl-	91-57-6	10	0	1.6	3.5	0	8	16
1-Octadecene	112-88-9	16	0	0.22	0.28	0	0.76	0.9
Octanal	124-13-0	24	0	2.2	2.6	1.4	6.7	10
Octane	111-65-9	10	0	3	5.5	0	12	21
17-Pentatriacontene	6971-40-0	2	0	0.036	0.16	0	0.14	0.82
N-Phenylbenzamide	93-98-1	6	0	0.45	1	0	2.8	2.8
Phenanthrene	85-01-8	17	0	0.64	1	0.35	2.8	4.2
Phenanthrene, 1-methyl	832-69-9	17	0	0.041	0.053	0.018	0.15	0.17
Phenanthrene, 2-methyl-	2531-84-2	18	0	0.074	0.097	0.05	0.27	0.31
Phenanthrene, 3-methyl	832-71-3	18	0	0.088	0.11	0.048	0.33	0.37
Propionaldehyde	123-38-6	12	0	9.1	18	0	36	89
Pyrene	129-00-0	20	0	0.16	0.2	0.063	0.57	0.68
Pyridine, 2-(4-methylphenyl)-	4467-06-5	2	0	0.0018	0.0088	0	0.0031	0.051
Resorcinol	108-46-3	18	0	0.93	1.3	0.38	3	5.8
m-Tolualdehyde	620-23-5	19	0	13	14	11	37	45
TXIB "Kodaflex"	6846-50-0	1	0	0.098	0.58	0	0	3.4
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	14	0	0.19	0.26	0	0.66	0.96
Undecane	1120-21-4	5	0	0.65	1.7	0	5	6.5
Valeraldehyde	110-62-3	11	0	46	80	0	210	230
Non-Field-Related Chemicals								
Benzene	71-43-2	35	4.5	30	24	21	75	120
Benzene, 1,4-dichloro	106-46-7	7	0	0.95	2.1	0	5.9	5.9
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	34	0	29	30	19	85	110
2-Butoxyethanol	111-76-2	1	0	0.25	1.5	0	0	8.6
Cyclotrisiloxane, hexamethyl-	541-05-9	1	0	3.6	22	0	0	130

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Decanal	112-31-2	7	0	1.4	4.8	0	5.3	27
Ethylbenzene	100-41-4	13	0	8.5	14	0	35	57
Heptane	142-82-5	20	0	11	17	2.2	47	74
Hexanal	66-25-1	30	0	39	50	18	150	200
Hexane	110-54-3	26	0	33	74	15	88	430
1-Hexanol, 2-ethyl-	104-76-7	6	0	0.39	0.99	0	2	4.5
Nonanal	124-19-6	2	0	0.39	1.6	0	2	6.8
Phenol	108-95-2	18	0	2.9	3.7	1.7	10	10
Tetrachloroethylene	127-18-4	7	0	2.4	5.6	0	16	21
Tetradecane	629-59-4	3	0	0.4	1.4	0	3.5	7.1
m/p-Xylene	106-42-3	25	0	29	41	12	98	170
o-Xylene	95-47-6	13	0	9.6	16	0	38	63

[a] 35 field-specific $C_{inh\text{-}field}$ values are included in the table.
[b] On-Field field-specific Chronic $C_{inh\text{-}field}$ equals the modified field-specific average concentration of a field ($C_{air\text{-}field}$ x AF_{inh}) of a general chemical (see Section F.4.3 of this Appendix F).
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-160. **On-Field** Field-Specific[a] Chronic Inhalation Exposure Concentration[b] for **All General Chemicals** (Chronic $C_{inh\text{-}field}$, nanograms per cubic meter) —Combined Gender **Referees 40<50 Years**

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals								
Acenaphthylene	208-96-8	11	0	0.05	0.1	0	0.21	0.44
Acetone	67-64-1	34	79	980	1100	530	3200	3500
Aniline	62-53-3	10	0	0.33	0.57	0	1.3	2.2
Anthracene	120-12-7	12	0	0.016	0.031	0	0.072	0.12
Anthracene, 2-methyl-	613-12-7	15	0	0.0043	0.0061	0	0.016	0.021
Anthracene, 9,10-dimethyl	781-43-1	16	0	0.0049	0.0088	0	0.014	0.047
Anthracene, 9-phenyl	602-55-1	1	0	0.00045	0.0026	0	0	0.015
Benz[a]anthracene	56-55-3	1	0	0.00025	0.0014	0	0	0.0084

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Benzaldehyde	100-52-7	15	0	4.5	6.9	0	16	27
Benzene, 1,2,3-trimethyl-	526-73-8	6	0	0.66	2	0	2.9	10
Benzene, 1,2,4,5-tetramethyl-	95-93-2	5	0	0.13	0.33	0	0.78	1.4
Benzene, 1,2,4-trimethyl-	95-63-6	13	0	5.9	10	0	21	49
Benzene, 1-ethyl-2,4-dimethyl-	874-41-9	7	0	0.26	0.69	0	1.4	3.6
Benzene, 2-ethyl-1,4-dimethyl-	1758-88-9	12	0	0.37	0.75	0	1.7	3.4
Benzene, butyl-	104-51-8	2	0	0.13	0.64	0	0.28	3.7
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	26	0	0.19	0.22	0.11	0.61	0.74
Benzo[b]fluoranthene	205-99-2	2	0	0.0012	0.005	0	0.0074	0.021
7H-Benzo[c]fluorene	205-12-9	13	0	0.0027	0.0041	0	0.0071	0.018
Benzo[k]fluoranthene	207-08-9	4	0	0.0015	0.0045	0	0.012	0.017
Benzothiazole	95-16-9	19	0	1.9	2.1	1	6.2	6.2
Benzothiazole, 2-phenyl-	883-93-2	27	0	0.15	0.2	0.075	0.51	0.87
2-Benzothiazolone	934-34-9	5	0	0.23	0.6	0	1.5	2.2
Benzyl butyl phthalate	85-68-7	7	0	0.17	0.37	0	1.2	1.2
Butanal	123-72-8	13	0	15	38	0	90	190
Cyclopentasiloxane, decamethyl-	541-02-6	18	0	8.1	14	2.5	29	66
Cyclotetrasiloxane, octamethyl-	556-67-2	13	0	2.9	4.6	0	11	16
p-Cymene	99-87-6	21	0	1.3	1.5	0.8	4.2	5.9
Decane	124-18-5	11	0	2.7	4.9	0	15	15
Dibenz[a,h]anthracene	53-70-3	14	0	0.0072	0.014	0	0.036	0.061
Dibenzothiophene	132-65-0	14	0	0.062	0.095	0	0.26	0.34
Dibutyl phthalate	84-74-2	7	0	19	48	0	85	250
Diethyl phthalate	84-66-2	1	0	0.13	0.77	0	0	4.5
Diisobutyl phthalate	84-69-5	15	0	0.72	1.4	0	2.3	7.6
Diisooctylphthalate	27554-26-3	9	0	2.5	8.3	0	6.5	48
Di-n-octyl phthalate	117-84-0	5	0	0.0048	0.013	0	0.027	0.055
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	26	0	1.6	2.2	0.84	6.4	7.3

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
3,5-di-tert-Butyl-4-hydroxybenzaldehyde	1620-98-0	8	0	0.85	1.7	0	4.3	5.6
Dodecane	112-40-3	4	0	0.34	1.1	0	1.9	5.9
Fluoranthene	206-44-0	21	0	0.19	0.24	0.068	0.66	0.86
Fluorene	86-73-7	15	0	0.3	0.58	0	1.1	3.1
Furan, 2-methyl	534-22-5	34	0	5.3	4.5	3.9	13	21
Heptanal	111-71-7	7	0	0.74	1.9	0	6.5	6.5
Hexadecane	544-76-3	11	0	1.6	2.9	0	8.5	11
2,5-Hexanedione	110-13-4	5	0	1.4	3.6	0	8.9	13
Indan	496-11-7	12	0	0.68	1.3	0	3	5.4
Mesitylene	108-67-8	15	0	1.4	2.5	0	5.5	11
Methacrolein	78-85-3	20	0	3.8	4.9	2.2	11	22
Methyl Isobutyl Ketone	108-10-1	5	0	0.79	2.1	0	6.1	9.2
Naphthalene	91-20-3	9	0	1.3	2.8	0	5.8	13
Naphthalene, 1,2-dimethyl-	573-98-8	4	0	0.019	0.054	0	0.18	0.18
Naphthalene, 1,6-dimethyl-	575-43-9	14	0	0.13	0.21	0	0.63	0.75
Naphthalene, 1-methyl-	90-12-0	15	0	1.1	1.9	0	4.9	7.5
Naphthalene, 2-(bromomethyl)-	939-26-4	11	0	0.037	0.056	0	0.13	0.13
Naphthalene, 2,3-dimethyl-	581-40-8	14	0	0.1	0.15	0	0.46	0.53
Naphthalene, 2-methyl-	91-57-6	10	0	1.7	3.5	0	8.1	16
1-Octadecene	112-88-9	16	0	0.22	0.29	0	0.77	0.91
Octanal	124-13-0	24	0	2.2	2.6	1.4	6.8	10
Octane	111-65-9	10	0	3	5.5	0	13	21
17-Pentatriacontene	6971-40-0	2	0	0.037	0.16	0	0.15	0.83
N-Phenylbenzamide	93-98-1	6	0	0.45	1	0	2.8	2.8
Phenanthrene	85-01-8	17	0	0.65	1	0.35	2.8	4.2
Phenanthrene, 1-methyl	832-69-9	17	0	0.041	0.053	0.019	0.15	0.17
Phenanthrene, 2-methyl-	2531-84-2	18	0	0.075	0.098	0.051	0.27	0.32
Phenanthrene, 3-methyl	832-71-3	18	0	0.089	0.12	0.048	0.33	0.38

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Propionaldehyde	123-38-6	12	0	9.2	19	0	37	90
Pyrene	129-00-0	20	0	0.16	0.2	0.063	0.58	0.69
Pyridine, 2-(4-methylphenyl)-	4467-06-5	2	0	0.0018	0.0089	0	0.0031	0.051
Resorcinol	108-46-3	18	0	0.94	1.4	0.38	3.1	5.9
m-Tolualdehyde	620-23-5	19	0	14	14	11	37	45
TXIB "Kodaflex"	6846-50-0	1	0	0.099	0.59	0	0	3.5
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	14	0	0.19	0.27	0	0.67	0.97
Undecane	1120-21-4	5	0	0.66	1.7	0	5.1	6.6
Valeraldehyde	110-62-3	11	0	47	81	0	210	230
Non-Field-Related Chemicals								
Benzene	71-43-2	35	4.5	30	25	21	76	120
Benzene, 1,4-dichloro	106-46-7	7	0	0.96	2.1	0	5.9	5.9
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	34	0	29	30	19	86	110
2-Butoxyethanol	111-76-2	1	0	0.25	1.5	0	0	8.7
Cyclotrisiloxane, hexamethyl-	541-05-9	1	0	3.7	22	0	0	130
Decanal	112-31-2	7	0	1.4	4.8	0	5.3	28
Ethylbenzene	100-41-4	13	0	8.6	15	0	35	58
Heptane	142-82-5	20	0	12	17	2.2	48	75
Hexanal	66-25-1	30	0	40	51	18	150	200
Hexane	110-54-3	26	0	34	75	15	89	440
1-Hexanol, 2-ethyl-	104-76-7	6	0	0.39	1	0	2	4.6
Nonanal	124-19-6	2	0	0.39	1.6	0	2.1	6.8
Phenol	108-95-2	18	0	2.9	3.7	1.7	10	10
Tetrachloroethylene	127-18-4	7	0	2.4	5.7	0	16	21
Tetradecane	629-59-4	3	0	0.41	1.4	0	3.6	7.1
m/p-Xylene	106-42-3	25	0	29	42	12	99	170
o-Xylene	95-47-6	13	0	9.7	16	0	39	64

[a] 35 field-specific $C_{inh\text{-}field}$ values are included in the table.
[b] On-Field field-specific Chronic $C_{inh\text{-}field}$ equals the modified field-specific average concentration of a field ($C_{air\text{-}field}$ x AF_{inh}) of a general chemical (see Section F.4.3 of this Appendix F).
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.
Values are rounded to two significant figures.

Table F-161. **On-Field** Field-Specific[a] Chronic Inhalation Exposure Concentration[b] for **All General Chemicals** (Chronic $C_{inh\text{-}field}$, nanograms per cubic meter) —Combined Gender **Referees 50<70 Years**

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals								
Acenaphthylene	208-96-8	11	0	0.05	0.1	0	0.21	0.44
Acetone	67-64-1	34	79	990	1100	530	3200	3500
Aniline	62-53-3	10	0	0.33	0.57	0	1.3	2.2
Anthracene	120-12-7	12	0	0.016	0.031	0	0.072	0.12
Anthracene, 2-methyl-	613-12-7	15	0	0.0043	0.0061	0	0.017	0.021
Anthracene, 9,10-dimethyl	781-43-1	16	0	0.0049	0.0088	0	0.014	0.048
Anthracene, 9-phenyl	602-55-1	1	0	0.00045	0.0027	0	0	0.015
Benz[a]anthracene	56-55-3	1	0	0.00025	0.0014	0	0	0.0084
Benzaldehyde	100-52-7	15	0	4.5	6.9	0	16	27
Benzene, 1,2,3-trimethyl-	526-73-8	6	0	0.66	2	0	2.9	11
Benzene, 1,2,4,5-tetramethyl-	95-93-2	5	0	0.13	0.33	0	0.78	1.4
Benzene, 1,2,4-trimethyl-	95-63-6	13	0	5.9	10	0	21	49
Benzene, 1-ethyl-2,4-dimethyl-	874-41-9	7	0	0.26	0.7	0	1.4	3.6
Benzene, 2-ethyl-1,4-dimethyl-	1758-88-9	12	0	0.38	0.75	0	1.7	3.4
Benzene, butyl-	104-51-8	2	0	0.13	0.64	0	0.28	3.7
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	26	0	0.19	0.22	0.11	0.61	0.74
Benzo[b]fluoranthene	205-99-2	2	0	0.0012	0.005	0	0.0074	0.021
7H-Benzo[c]fluorene	205-12-9	13	0	0.0027	0.0041	0	0.0071	0.018
Benzo[k]fluoranthene	207-08-9	4	0	0.0015	0.0046	0	0.012	0.017
Benzothiazole	95-16-9	19	0	1.9	2.1	1	6.2	6.2
Benzothiazole, 2-phenyl-	883-93-2	27	0	0.15	0.2	0.075	0.51	0.88
2-Benzothiazolone	934-34-9	5	0	0.23	0.61	0	1.5	2.3
Benzyl butyl phthalate	85-68-7	7	0	0.17	0.37	0	1.2	1.2
Butanal	123-72-8	13	0	15	38	0	91	190
Cyclopentasiloxane, decamethyl-	541-02-6	18	0	8.1	14	2.5	29	66
Cyclotetrasiloxane, octamethyl-	556-67-2	13	0	2.9	4.7	0	11	16
p-Cymene	99-87-6	21	0	1.3	1.5	0.8	4.2	5.9

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Decane	124-18-5	11	0	2.7	4.9	0	15	15
Dibenz[a,h]anthracene	53-70-3	14	0	0.0072	0.014	0	0.036	0.061
Dibenzothiophene	132-65-0	14	0	0.062	0.095	0	0.26	0.34
Dibutyl phthalate	84-74-2	7	0	19	48	0	85	250
Diethyl phthalate	84-66-2	1	0	0.13	0.77	0	0	4.5
Diisobutyl phthalate	84-69-5	15	0	0.72	1.4	0	2.3	7.6
Diisooctylphthalate	27554-26-3	9	0	2.5	8.3	0	6.5	48
Di-n-octyl phthalate	117-84-0	5	0	0.0049	0.013	0	0.027	0.055
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	26	0	1.6	2.2	0.85	6.4	7.3
3,5-di-tert-Butyl-4-hydroxybenzaldehyde	1620-98-0	8	0	0.85	1.7	0	4.3	5.6
Dodecane	112-40-3	4	0	0.34	1.1	0	1.9	5.9
Fluoranthene	206-44-0	21	0	0.19	0.24	0.068	0.66	0.86
Fluorene	86-73-7	15	0	0.3	0.59	0	1.1	3.1
Furan, 2-methyl	534-22-5	34	0	5.4	4.5	4	13	21
Heptanal	111-71-7	7	0	0.74	1.9	0	6.5	6.5
Hexadecane	544-76-3	11	0	1.6	2.9	0	8.5	11
2,5-Hexanedione	110-13-4	5	0	1.4	3.6	0	9	13
Indan	496-11-7	12	0	0.69	1.3	0	3	5.5
Mesitylene	108-67-8	15	0	1.4	2.5	0	5.5	11
Methacrolein	78-85-3	20	0	3.8	4.9	2.2	11	22
Methyl Isobutyl Ketone	108-10-1	5	0	0.79	2.1	0	6.1	9.2
Naphthalene	91-20-3	9	0	1.3	2.8	0	5.8	13
Naphthalene, 1,2-dimethyl-	573-98-8	4	0	0.019	0.054	0	0.18	0.18
Naphthalene, 1,6-dimethyl-	575-43-9	14	0	0.13	0.21	0	0.63	0.75
Naphthalene, 1-methyl-	90-12-0	15	0	1.1	1.9	0	4.9	7.5
Naphthalene, 2-(bromomethyl)-	939-26-4	11	0	0.037	0.056	0	0.13	0.13
Naphthalene, 2,3-dimethyl-	581-40-8	14	0	0.1	0.15	0	0.46	0.53
Naphthalene, 2-methyl-	91-57-6	10	0	1.7	3.5	0	8.1	16
1-Octadecene	112-88-9	16	0	0.22	0.29	0	0.77	0.91
Octanal	124-13-0	24	0	2.3	2.6	1.4	6.8	10
Octane	111-65-9	10	0	3	5.6	0	13	21
17-Pentatriacontene	6971-40-0	2	0	0.037	0.16	0	0.15	0.83
N-Phenylbenzamide	93-98-1	6	0	0.45	1	0	2.8	2.8
Phenanthrene	85-01-8	17	0	0.65	1	0.35	2.8	4.2
Phenanthrene, 1-methyl	832-69-9	17	0	0.041	0.054	0.019	0.15	0.17
Phenanthrene, 2-methyl-	2531-84-2	18	0	0.075	0.098	0.051	0.28	0.32
Phenanthrene, 3-methyl	832-71-3	18	0	0.09	0.12	0.048	0.33	0.38

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Propionaldehyde	123-38-6	12	0	9.3	19	0	37	90
Pyrene	129-00-0	20	0	0.16	0.21	0.063	0.58	0.69
Pyridine, 2-(4-methylphenyl)-	4467-06-5	2	0	0.0018	0.0089	0	0.0031	0.052
Resorcinol	108-46-3	18	0	0.94	1.4	0.38	3.1	5.9
m-Tolualdehyde	620-23-5	19	0	14	14	11	37	45
TXIB "Kodaflex"	6846-50-0	1	0	0.099	0.59	0	0	3.5
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	14	0	0.19	0.27	0	0.67	0.98
Undecane	1120-21-4	5	0	0.66	1.7	0	5.1	6.6
Valeraldehyde	110-62-3	11	0	47	81	0	210	230
Non-Field-Related Chemicals								
Benzene	71-43-2	35	4.5	30	25	21	76	120
Benzene, 1,4-dichloro	106-46-7	7	0	0.97	2.1	0	6	6
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	34	0	29	30	19	86	110
2-Butoxyethanol	111-76-2	1	0	0.25	1.5	0	0	8.7
Cyclotrisiloxane, hexamethyl-	541-05-9	1	0	3.7	22	0	0	130
Decanal	112-31-2	7	0	1.4	4.8	0	5.3	28
Ethylbenzene	100-41-4	13	0	8.6	15	0	35	58
Heptane	142-82-5	20	0	12	17	2.2	48	75
Hexanal	66-25-1	30	0	40	51	19	150	200
Hexane	110-54-3	26	0	34	75	15	89	440
1-Hexanol, 2-ethyl-	104-76-7	6	0	0.39	1	0	2	4.6
Nonanal	124-19-6	2	0	0.39	1.6	0	2.1	6.9
Phenol	108-95-2	18	0	2.9	3.7	1.7	10	10
Tetrachloroethylene	127-18-4	7	0	2.4	5.7	0	16	21
Tetradecane	629-59-4	3	0	0.41	1.4	0	3.6	7.2
m/p-Xylene	106-42-3	25	0	29	42	12	99	170
o-Xylene	95-47-6	13	0	9.7	16	0	39	64

[a] 35 field-specific $C_{inh\text{-}field}$ values are included in the table.
[b] On-Field field-specific Chronic $C_{inh\text{-}field}$ equals the modified field-specific average concentration of a field ($C_{air\text{-}field}$ x AF_{inh}) of a general chemical (see Section F.4.3 of this Appendix F).
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-162. **On-Field** Field-Specific[a] Chronic Inhalation Exposure Concentration[b] for **All General Chemicals** (Chronic $C_{inh\text{-}field}$, nanograms per cubic meter) —Combined Gender **Spectators Third Trimester<0 Years**

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals								
Acenaphthylene	208-96-8	11	0	0.021	0.042	0	0.087	0.18
Acetone	67-64-1	34	32	400	450	220	1300	1400
Aniline	62-53-3	10	0	0.13	0.24	0	0.52	0.9
Anthracene	120-12-7	12	0	0.0067	0.013	0	0.029	0.05
Anthracene, 2-methyl-	613-12-7	15	0	0.0018	0.0025	0	0.0068	0.0086
Anthracene, 9,10-dimethyl	781-43-1	16	0	0.002	0.0036	0	0.0056	0.019
Anthracene, 9-phenyl	602-55-1	1	0	0.00019	0.0011	0	0	0.0063
Benz[a]anthracene	56-55-3	1	0	0.0001	0.00059	0	0	0.0035
Benzaldehyde	100-52-7	15	0	1.8	2.8	0	6.6	11
Benzene, 1,2,3-trimethyl-	526-73-8	6	0	0.27	0.8	0	1.2	4.3
Benzene, 1,2,4,5-tetramethyl-	95-93-2	5	0	0.052	0.14	0	0.32	0.56
Benzene, 1,2,4-trimethyl-	95-63-6	13	0	2.4	4.3	0	8.6	20
Benzene, 1-ethyl-2,4-dimethyl-	874-41-9	7	0	0.11	0.29	0	0.56	1.5
Benzene, 2-ethyl-1,4-dimethyl-	1758-88-9	12	0	0.15	0.31	0	0.68	1.4
Benzene, butyl-	104-51-8	2	0	0.054	0.26	0	0.11	1.5
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	26	0	0.077	0.09	0.046	0.25	0.3
Benzo[b]fluoranthene	205-99-2	2	0	0.00051	0.0021	0	0.003	0.0086
7H-Benzo[c]fluorene	205-12-9	13	0	0.0011	0.0017	0	0.0029	0.0073
Benzo[k]fluoranthene	207-08-9	4	0	0.00063	0.0019	0	0.0048	0.0072
Benzothiazole	95-16-9	19	0	0.76	0.88	0.42	2.5	2.5
Benzothiazole, 2-phenyl-	883-93-2	27	0	0.061	0.08	0.031	0.21	0.36
2-Benzothiazolone	934-34-9	5	0	0.095	0.25	0	0.62	0.92
Benzyl butyl phthalate	85-68-7	7	0	0.071	0.15	0	0.48	0.48
Butanal	123-72-8	13	0	6.3	15	0	37	78
Cyclopentasiloxane, decamethyl-	541-02-6	18	0	3.3	5.6	1	12	27
Cyclotetrasiloxane, octamethyl-	556-67-2	13	0	1.2	1.9	0	4.7	6.7
p-Cymene	99-87-6	21	0	0.52	0.63	0.33	1.7	2.4
Decane	124-18-5	11	0	1.1	2	0	6.1	6.3
Dibenz[a,h]anthracene	53-70-3	14	0	0.003	0.0059	0	0.015	0.025
Dibenzothiophene	132-65-0	14	0	0.025	0.039	0	0.11	0.14
Dibutyl phthalate	84-74-2	7	0	7.7	20	0	35	100
Diethyl phthalate	84-66-2	1	0	0.054	0.32	0	0	1.8

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Diisobutyl phthalate	84-69-5	15	0	0.29	0.58	0	0.93	3.1
Diisooctylphthalate	27554-26-3	9	0	1	3.4	0	2.7	20
Di-n-octyl phthalate	117-84-0	5	0	0.002	0.0052	0	0.011	0.023
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	26	0	0.67	0.91	0.35	2.6	3
3,5-di-tert-Butyl-4-hydroxybenzaldehyde	1620-98-0	8	0	0.35	0.69	0	1.7	2.3
Dodecane	112-40-3	4	0	0.14	0.47	0	0.79	2.4
Fluoranthene	206-44-0	21	0	0.078	0.099	0.028	0.27	0.35
Fluorene	86-73-7	15	0	0.12	0.24	0	0.43	1.3
Furan, 2-methyl	534-22-5	34	0	2.2	1.8	1.6	5.2	8.4
Heptanal	111-71-7	7	0	0.3	0.76	0	2.7	2.7
Hexadecane	544-76-3	11	0	0.65	1.2	0	3.5	4.7
2,5-Hexanedione	110-13-4	5	0	0.56	1.5	0	3.7	5.4
Indan	496-11-7	12	0	0.28	0.52	0	1.2	2.2
Mesitylene	108-67-8	15	0	0.57	1	0	2.3	4.7
Methacrolein	78-85-3	20	0	1.6	2	0.89	4.6	8.8
Methyl Isobutyl Ketone	108-10-1	5	0	0.32	0.88	0	2.5	3.8
Naphthalene	91-20-3	9	0	0.55	1.1	0	2.4	5.3
Naphthalene, 1,2-dimethyl-	573-98-8	4	0	0.0077	0.022	0	0.074	0.074
Naphthalene, 1,6-dimethyl-	575-43-9	14	0	0.055	0.084	0	0.26	0.31
Naphthalene, 1-methyl-	90-12-0	15	0	0.45	0.76	0	2	3.1
Naphthalene, 2-(bromomethyl)-	939-26-4	11	0	0.015	0.023	0	0.052	0.052
Naphthalene, 2,3-dimethyl-	581-40-8	14	0	0.041	0.061	0	0.19	0.22
Naphthalene, 2-methyl-	91-57-6	10	0	0.68	1.4	0	3.3	6.5
1-Octadecene	112-88-9	16	0	0.091	0.12	0	0.31	0.37
Octanal	124-13-0	24	0	0.92	1.1	0.57	2.8	4.3
Octane	111-65-9	10	0	1.2	2.3	0	5.2	8.7
17-Pentatriacontene	6971-40-0	2	0	0.015	0.065	0	0.06	0.34
N-Phenylbenzamide	93-98-1	6	0	0.18	0.42	0	1.1	1.1
Phenanthrene	85-01-8	17	0	0.27	0.41	0.14	1.2	1.7
Phenanthrene, 1-methyl	832-69-9	17	0	0.017	0.022	0.0076	0.061	0.07
Phenanthrene, 2-methyl-	2531-84-2	18	0	0.031	0.04	0.021	0.11	0.13
Phenanthrene, 3-methyl	832-71-3	18	0	0.037	0.047	0.02	0.14	0.15
Propionaldehyde	123-38-6	12	0	3.8	7.7	0	15	37
Pyrene	129-00-0	20	0	0.066	0.084	0.026	0.24	0.28
Pyridine, 2-(4-methylphenyl)-	4467-06-5	2	0	0.00073	0.0037	0	0.0013	0.021
Resorcinol	108-46-3	18	0	0.39	0.56	0.16	1.3	2.4

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
m-Tolualdehyde	620-23-5	19	0	5.6	5.9	4.5	15	19
TXIB "Kodaflex"	6846-50-0	1	0	0.041	0.24	0	0	1.4
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	14	0	0.078	0.11	0	0.28	0.4
Undecane	1120-21-4	5	0	0.27	0.71	0	2.1	2.7
Valeraldehyde	110-62-3	11	0	19	33	0	87	94
Non-Field-Related Chemicals								
Benzene	71-43-2	35	1.9	12	10	8.8	31	51
Benzene, 1,4-dichloro	106-46-7	7	0	0.4	0.87	0	2.4	2.4
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	34	0	12	12	7.9	35	44
2-Butoxyethanol	111-76-2	1	0	0.1	0.6	0	0	3.6
Cyclotrisiloxane, hexamethyl-	541-05-9	1	0	1.5	8.9	0	0	53
Decanal	112-31-2	7	0	0.58	2	0	2.2	11
Ethylbenzene	100-41-4	13	0	3.5	6	0	14	24
Heptane	142-82-5	20	0	4.8	7.1	0.91	20	31
Hexanal	66-25-1	30	0	16	21	7.6	63	82
Hexane	110-54-3	26	0	14	31	6.1	37	180
1-Hexanol, 2-ethyl-	104-76-7	6	0	0.16	0.41	0	0.81	1.9
Nonanal	124-19-6	2	0	0.16	0.66	0	0.84	2.8
Phenol	108-95-2	18	0	1.2	1.5	0.71	4.3	4.3
Tetrachloroethylene	127-18-4	7	0	0.98	2.3	0	6.6	8.6
Tetradecane	629-59-4	3	0	0.17	0.59	0	1.5	2.9
m/p-Xylene	106-42-3	25	0	12	17	4.8	41	72
o-Xylene	95-47-6	13	0	4	6.7	0	16	26

[a] 35 field-specific $C_{inh\text{-}field}$ values are included in the table.
[b] On-Field field-specific Chronic $C_{inh\text{-}field}$ equals the modified field-specific average concentration of a field ($C_{air\text{-}field}$ x AF_{inh}) of a general chemical (see Section F.4.3 of this Appendix F).
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-163. **On-Field** Field-Specific[a] Chronic Inhalation Exposure Concentration[b] for **All General Chemicals** (Chronic $C_{inh\text{-}field}$, nanograms per cubic meter) —Combined Gender **Spectators 0<2 Years**

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals								
Acenaphthylene	208-96-8	11	0	0.17	0.34	0	0.7	1.5
Acetone	67-64-1	34	260	3200	3600	1800	11000	11000
Aniline	62-53-3	10	0	1.1	1.9	0	4.2	7.2

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Anthracene	120-12-7	12	0	0.054	0.1	0	0.24	0.4
Anthracene, 2-methyl-	613-12-7	15	0	0.014	0.02	0	0.054	0.069
Anthracene, 9,10-dimethyl	781-43-1	16	0	0.016	0.029	0	0.045	0.16
Anthracene, 9-phenyl	602-55-1	1	0	0.0015	0.0087	0	0	0.051
Benz[a]anthracene	56-55-3	1	0	0.00082	0.0048	0	0	0.028
Benzaldehyde	100-52-7	15	0	15	23	0	53	90
Benzene, 1,2,3-trimethyl-	526-73-8	6	0	2.2	6.5	0	9.6	35
Benzene, 1,2,4,5-tetramethyl-	95-93-2	5	0	0.41	1.1	0	2.6	4.5
Benzene, 1,2,4-trimethyl-	95-63-6	13	0	19	34	0	69	160
Benzene, 1-ethyl-2,4-dimethyl-	874-41-9	7	0	0.87	2.3	0	4.5	12
Benzene, 2-ethyl-1,4-dimethyl-	1758-88-9	12	0	1.2	2.5	0	5.5	11
Benzene, butyl-	104-51-8	2	0	0.43	2.1	0	0.91	12
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	26	0	0.62	0.72	0.37	2	2.4
Benzo[b]fluoranthene	205-99-2	2	0	0.0041	0.017	0	0.024	0.069
7H-Benzo[c]fluorene	205-12-9	13	0	0.0089	0.014	0	0.023	0.059
Benzo[k]fluoranthene	207-08-9	4	0	0.0051	0.015	0	0.039	0.058
Benzothiazole	95-16-9	19	0	6.1	7	3.4	20	20
Benzothiazole, 2-phenyl-	883-93-2	27	0	0.49	0.64	0.25	1.7	2.9
2-Benzothiazolone	934-34-9	5	0	0.76	2	0	5	7.4
Benzyl butyl phthalate	85-68-7	7	0	0.57	1.2	0	3.9	3.9
Butanal	123-72-8	13	0	51	120	0	300	630
Cyclopentasiloxane, decamethyl-	541-02-6	18	0	27	45	8.2	95	220
Cyclotetrasiloxane, octamethyl-	556-67-2	13	0	9.6	15	0	38	54
p-Cymene	99-87-6	21	0	4.2	5.1	2.6	14	20
Decane	124-18-5	11	0	9	16	0	49	51
Dibenz[a,h]anthracene	53-70-3	14	0	0.024	0.047	0	0.12	0.2
Dibenzothiophene	132-65-0	14	0	0.2	0.31	0	0.87	1.1
Dibutyl phthalate	84-74-2	7	0	62	160	0	280	810
Diethyl phthalate	84-66-2	1	0	0.44	2.5	0	0	15
Diisobutyl phthalate	84-69-5	15	0	2.4	4.6	0	7.4	25
Diisooctylphthalate	27554-26-3	9	0	8.2	27	0	21	160
Di-n-octyl phthalate	117-84-0	5	0	0.016	0.042	0	0.091	0.18
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	26	0	5.4	7.3	2.8	21	24
3,5-di-tert-Butyl-4-hydroxybenzaldehyde	1620-98-0	8	0	2.8	5.5	0	14	18

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Dodecane	112-40-3	4	0	1.1	3.8	0	6.4	20
Fluoranthene	206-44-0	21	0	0.63	0.8	0.22	2.2	2.8
Fluorene	86-73-7	15	0	0.99	1.9	0	3.5	10
Furan, 2-methyl	534-22-5	34	0	18	15	13	41	68
Heptanal	111-71-7	7	0	2.4	6.1	0	21	21
Hexadecane	544-76-3	11	0	5.3	9.6	0	28	38
2,5-Hexanedione	110-13-4	5	0	4.5	12	0	29	44
Indan	496-11-7	12	0	2.3	4.2	0	9.8	18
Mesitylene	108-67-8	15	0	4.6	8.1	0	18	38
Methacrolein	78-85-3	20	0	13	16	7.2	37	71
Methyl Isobutyl Ketone	108-10-1	5	0	2.6	7.1	0	20	30
Naphthalene	91-20-3	9	0	4.4	9.2	0	19	43
Naphthalene, 1,2-dimethyl-	573-98-8	4	0	0.062	0.18	0	0.6	0.6
Naphthalene, 1,6-dimethyl-	575-43-9	14	0	0.44	0.68	0	2.1	2.5
Naphthalene, 1-methyl-	90-12-0	15	0	3.6	6.1	0	16	25
Naphthalene, 2-(bromomethyl)-	939-26-4	11	0	0.12	0.19	0	0.42	0.42
Naphthalene, 2,3-dimethyl-	581-40-8	14	0	0.33	0.49	0	1.5	1.7
Naphthalene, 2-methyl-	91-57-6	10	0	5.5	12	0	27	52
1-Octadecene	112-88-9	16	0	0.73	0.94	0	2.5	3
Octanal	124-13-0	24	0	7.4	8.6	4.6	22	34
Octane	111-65-9	10	0	10	18	0	42	70
17-Pentatriacontene	6971-40-0	2	0	0.12	0.52	0	0.48	2.7
N-Phenylbenzamide	93-98-1	6	0	1.5	3.3	0	9.2	9.2
Phenanthrene	85-01-8	17	0	2.2	3.3	1.2	9.4	14
Phenanthrene, 1-methyl	832-69-9	17	0	0.14	0.18	0.061	0.49	0.56
Phenanthrene, 2-methyl-	2531-84-2	18	0	0.25	0.32	0.17	0.91	1
Phenanthrene, 3-methyl	832-71-3	18	0	0.3	0.38	0.16	1.1	1.2
Propionaldehyde	123-38-6	12	0	31	62	0	120	300
Pyrene	129-00-0	20	0	0.53	0.68	0.21	1.9	2.3
Pyridine, 2-(4-methylphenyl)-	4467-06-5	2	0	0.0059	0.029	0	0.01	0.17
Resorcinol	108-46-3	18	0	3.1	4.5	1.3	10	19
m-Tolualdehyde	620-23-5	19	0	45	47	36	120	150
TXIB "Kodaflex"	6846-50-0	1	0	0.33	1.9	0	0	11
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	14	0	0.63	0.88	0	2.2	3.2
Undecane	1120-21-4	5	0	2.2	5.7	0	17	22
Valeraldehyde	110-62-3	11	0	150	270	0	700	760

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Non-Field-Related Chemicals								
Benzene	71-43-2	35	15	100	81	71	250	410
Benzene, 1,4-dichloro	106-46-7	7	0	3.2	7	0	20	20
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	34	0	95	99	63	280	350
2-Butoxyethanol	111-76-2	1	0	0.82	4.9	0	0	29
Cyclotrisiloxane, hexamethyl-	541-05-9	1	0	12	72	0	0	420
Decanal	112-31-2	7	0	4.6	16	0	18	91
Ethylbenzene	100-41-4	13	0	28	48	0	120	190
Heptane	142-82-5	20	0	38	57	7.4	160	250
Hexanal	66-25-1	30	0	130	170	61	510	660
Hexane	110-54-3	26	0	110	250	49	290	1500
1-Hexanol, 2-ethyl-	104-76-7	6	0	1.3	3.3	0	6.5	15
Nonanal	124-19-6	2	0	1.3	5.3	0	6.8	23
Phenol	108-95-2	18	0	9.7	12	5.7	34	34
Tetrachloroethylene	127-18-4	7	0	7.9	19	0	53	69
Tetradecane	629-59-4	3	0	1.3	4.8	0	12	24
m/p-Xylene	106-42-3	25	0	96	140	39	330	580
o-Xylene	95-47-6	13	0	32	54	0	130	210

[a] 35 field-specific $C_{inh\text{-}field}$ values are included in the table.
[b] On-Field field-specific Chronic $C_{inh\text{-}field}$ equals the modified field-specific average concentration of a field ($C_{air\text{-}field}$ x AF_{inh}) of a general chemical (see Section F.4.3 of this Appendix F).
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-164. **On-Field** Field-Specific[a] Chronic Inhalation Exposure Concentration[b] for **All General Chemicals** (Chronic $C_{inh\text{-}field}$, nanograms per cubic meter) —Combined Gender **Spectators 2<6 Years**

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals								
Acenaphthylene	208-96-8	11	0	0.087	0.18	0	0.37	0.76
Acetone	67-64-1	34	140	1700	1900	920	5600	6000
Aniline	62-53-3	10	0	0.56	0.99	0	2.2	3.8
Anthracene	120-12-7	12	0	0.028	0.053	0	0.12	0.21
Anthracene, 2-methyl-	613-12-7	15	0	0.0074	0.011	0	0.029	0.036
Anthracene, 9,10-dimethyl	781-43-1	16	0	0.0085	0.015	0	0.024	0.082
Anthracene, 9-phenyl	602-55-1	1	0	0.00079	0.0046	0	0	0.027
Benz[a]anthracene	56-55-3	1	0	0.00043	0.0025	0	0	0.015
Benzaldehyde	100-52-7	15	0	7.8	12	0	28	47

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Benzene, 1,2,3-trimethyl-	526-73-8	6	0	1.1	3.4	0	5.1	18
Benzene, 1,2,4,5-tetramethyl-	95-93-2	5	0	0.22	0.57	0	1.3	2.3
Benzene, 1,2,4-trimethyl-	95-63-6	13	0	10	18	0	36	84
Benzene, 1-ethyl-2,4-dimethyl-	874-41-9	7	0	0.46	1.2	0	2.4	6.2
Benzene, 2-ethyl-1,4-dimethyl-	1758-88-9	12	0	0.65	1.3	0	2.9	5.9
Benzene, butyl-	104-51-8	2	0	0.23	1.1	0	0.48	6.4
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	26	0	0.33	0.38	0.2	1.1	1.3
Benzo[b]fluoranthene	205-99-2	2	0	0.0021	0.0087	0	0.013	0.037
7H-Benzo[c]fluorene	205-12-9	13	0	0.0047	0.0071	0	0.012	0.031
Benzo[k]fluoranthene	207-08-9	4	0	0.0027	0.0079	0	0.02	0.03
Benzothiazole	95-16-9	19	0	3.2	3.7	1.8	11	11
Benzothiazole, 2-phenyl-	883-93-2	27	0	0.26	0.34	0.13	0.88	1.5
2-Benzothiazolone	934-34-9	5	0	0.4	1.1	0	2.6	3.9
Benzyl butyl phthalate	85-68-7	7	0	0.3	0.64	0	2	2
Butanal	123-72-8	13	0	27	66	0	160	330
Cyclopentasiloxane, decamethyl-	541-02-6	18	0	14	24	4.3	50	110
Cyclotetrasiloxane, octamethyl-	556-67-2	13	0	5	8.1	0	20	29
p-Cymene	99-87-6	21	0	2.2	2.7	1.4	7.3	10
Decane	124-18-5	11	0	4.7	8.4	0	26	27
Dibenz[a,h]anthracene	53-70-3	14	0	0.012	0.025	0	0.062	0.11
Dibenzothiophene	132-65-0	14	0	0.11	0.16	0	0.46	0.59
Dibutyl phthalate	84-74-2	7	0	33	84	0	150	430
Diethyl phthalate	84-66-2	1	0	0.23	1.3	0	0	7.8
Diisobutyl phthalate	84-69-5	15	0	1.2	2.4	0	3.9	13
Diisooctylphthalate	27554-26-3	9	0	4.3	14	0	11	83
Di-n-octyl phthalate	117-84-0	5	0	0.0084	0.022	0	0.048	0.095
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	26	0	2.8	3.8	1.5	11	13
3,5-di-tert-Butyl-4-hydroxybenzaldehyde	1620-98-0	8	0	1.5	2.9	0	7.4	9.6
Dodecane	112-40-3	4	0	0.59	2	0	3.3	10
Fluoranthene	206-44-0	21	0	0.33	0.42	0.12	1.1	1.5
Fluorene	86-73-7	15	0	0.52	1	0	1.8	5.3
Furan, 2-methyl	534-22-5	34	0	9.3	7.8	6.8	22	36
Heptanal	111-71-7	7	0	1.3	3.2	0	11	11
Hexadecane	544-76-3	11	0	2.8	5	0	15	20

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
2,5-Hexanedione	110-13-4	5	0	2.4	6.2	0	16	23
Indan	496-11-7	12	0	1.2	2.2	0	5.1	9.4
Mesitylene	108-67-8	15	0	2.4	4.3	0	9.6	20
Methacrolein	78-85-3	20	0	6.6	8.4	3.8	19	37
Methyl Isobutyl Ketone	108-10-1	5	0	1.4	3.7	0	11	16
Naphthalene	91-20-3	9	0	2.3	4.8	0	10	23
Naphthalene, 1,2-dimethyl-	573-98-8	4	0	0.032	0.093	0	0.31	0.31
Naphthalene, 1,6-dimethyl-	575-43-9	14	0	0.23	0.36	0	1.1	1.3
Naphthalene, 1-methyl-	90-12-0	15	0	1.9	3.2	0	8.4	13
Naphthalene, 2-(bromomethyl)-	939-26-4	11	0	0.064	0.097	0	0.22	0.22
Naphthalene, 2,3-dimethyl-	581-40-8	14	0	0.17	0.26	0	0.8	0.91
Naphthalene, 2-methyl-	91-57-6	10	0	2.9	6.1	0	14	27
1-Octadecene	112-88-9	16	0	0.38	0.5	0	1.3	1.6
Octanal	124-13-0	24	0	3.9	4.5	2.4	12	18
Octane	111-65-9	10	0	5.3	9.6	0	22	37
17-Pentatriacontene	6971-40-0	2	0	0.064	0.27	0	0.25	1.4
N-Phenylbenzamide	93-98-1	6	0	0.78	1.8	0	4.8	4.8
Phenanthrene	85-01-8	17	0	1.1	1.8	0.61	4.9	7.3
Phenanthrene, 1-methyl	832-69-9	17	0	0.072	0.093	0.032	0.26	0.29
Phenanthrene, 2-methyl-	2531-84-2	18	0	0.13	0.17	0.088	0.48	0.55
Phenanthrene, 3-methyl	832-71-3	18	0	0.16	0.2	0.084	0.57	0.65
Propionaldehyde	123-38-6	12	0	16	32	0	64	160
Pyrene	129-00-0	20	0	0.28	0.35	0.11	1	1.2
Pyridine, 2-(4-methylphenyl)-	4467-06-5	2	0	0.0031	0.015	0	0.0054	0.089
Resorcinol	108-46-3	18	0	1.6	2.4	0.66	5.3	10
m-Tolualdehyde	620-23-5	19	0	23	25	19	64	79
TXIB "Kodaflex"	6846-50-0	1	0	0.17	1	0	0	6
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	14	0	0.33	0.46	0	1.2	1.7
Undecane	1120-21-4	5	0	1.1	3	0	8.8	11
Valeraldehyde	110-62-3	11	0	81	140	0	370	400
Non-Field-Related Chemicals								
Benzene	71-43-2	35	7.9	53	43	37	130	210
Benzene, 1,4-dichloro	106-46-7	7	0	1.7	3.7	0	10	10
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	34	0	50	52	33	150	180
2-Butoxyethanol	111-76-2	1	0	0.43	2.6	0	0	15

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Cyclotrisiloxane, hexamethyl-	541-05-9	1	0	6.4	38	0	0	220
Decanal	112-31-2	7	0	2.4	8.3	0	9.2	48
Ethylbenzene	100-41-4	13	0	15	25	0	61	100
Heptane	142-82-5	20	0	20	30	3.9	83	130
Hexanal	66-25-1	30	0	69	88	32	270	350
Hexane	110-54-3	26	0	58	130	26	150	760
1-Hexanol, 2-ethyl-	104-76-7	6	0	0.68	1.7	0	3.4	7.9
Nonanal	124-19-6	2	0	0.68	2.8	0	3.6	12
Phenol	108-95-2	18	0	5.1	6.4	3	18	18
Tetrachloroethylene	127-18-4	7	0	4.2	9.9	0	28	36
Tetradecane	629-59-4	3	0	0.71	2.5	0	6.2	12
m/p-Xylene	106-42-3	25	0	50	72	20	170	300
o-Xylene	95-47-6	13	0	17	28	0	67	110

[a] 35 field-specific $C_{inh\text{-}field}$ values are included in the table.
[b] On-Field field-specific Chronic $C_{inh\text{-}field}$ equals the modified field-specific average concentration of a field ($C_{air\text{-}field}$ x AF_{inh}) of a general chemical (see Section F.4.3 of this Appendix F).
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-165. **On-Field** Field-Specific[a] Chronic Inhalation Exposure Concentration[b] for **All General Chemicals** (Chronic $C_{inh\text{-}field}$, nanograms per cubic meter)—Combined Gender **Spectators 6<11 Years**

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals								
Acenaphthylene	208-96-8	11	0	0.083	0.17	0	0.35	0.73
Acetone	67-64-1	34	130	1600	1800	880	5300	5700
Aniline	62-53-3	10	0	0.54	0.95	0	2.1	3.6
Anthracene	120-12-7	12	0	0.027	0.051	0	0.12	0.2
Anthracene, 2-methyl-	613-12-7	15	0	0.0071	0.01	0	0.027	0.035
Anthracene, 9,10-dimethyl	781-43-1	16	0	0.0081	0.015	0	0.023	0.079
Anthracene, 9-phenyl	602-55-1	1	0	0.00075	0.0044	0	0	0.026
Benz[a]anthracene	56-55-3	1	0	0.00041	0.0024	0	0	0.014
Benzaldehyde	100-52-7	15	0	7.4	11	0	27	45
Benzene, 1,2,3-trimethyl-	526-73-8	6	0	1.1	3.2	0	4.8	17

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Benzene, 1,2,4,5-tetramethyl-	95-93-2	5	0	0.21	0.54	0	1.3	2.2
Benzene, 1,2,4-trimethyl-	95-63-6	13	0	9.8	17	0	35	80
Benzene, 1-ethyl-2,4-dimethyl-	874-41-9	7	0	0.44	1.2	0	2.3	5.9
Benzene, 2-ethyl-1,4-dimethyl-	1758-88-9	12	0	0.62	1.2	0	2.7	5.7
Benzene, butyl-	104-51-8	2	0	0.22	1.1	0	0.46	6.1
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	26	0	0.31	0.36	0.19	1	1.2
Benzo[b]fluoranthene	205-99-2	2	0	0.002	0.0083	0	0.012	0.035
7H-Benzo[c]fluorene	205-12-9	13	0	0.0045	0.0068	0	0.012	0.03
Benzo[k]fluoranthene	207-08-9	4	0	0.0025	0.0075	0	0.019	0.029
Benzothiazole	95-16-9	19	0	3.1	3.5	1.7	10	10
Benzothiazole, 2-phenyl-	883-93-2	27	0	0.24	0.32	0.12	0.84	1.4
2-Benzothiazolone	934-34-9	5	0	0.38	1	0	2.5	3.7
Benzyl butyl phthalate	85-68-7	7	0	0.29	0.61	0	1.9	1.9
Butanal	123-72-8	13	0	25	63	0	150	310
Cyclopentasiloxane, decamethyl-	541-02-6	18	0	13	23	4.1	48	110
Cyclotetrasiloxane, octamethyl-	556-67-2	13	0	4.8	7.7	0	19	27
p-Cymene	99-87-6	21	0	2.1	2.5	1.3	7	9.8
Decane	124-18-5	11	0	4.5	8	0	25	25
Dibenz[a,h]anthracene	53-70-3	14	0	0.012	0.024	0	0.059	0.1
Dibenzothiophene	132-65-0	14	0	0.1	0.16	0	0.44	0.57
Dibutyl phthalate	84-74-2	7	0	31	80	0	140	410
Diethyl phthalate	84-66-2	1	0	0.22	1.3	0	0	7.4
Diisobutyl phthalate	84-69-5	15	0	1.2	2.3	0	3.7	13
Diisooctylphthalate	27554-26-3	9	0	4.1	14	0	11	79
Di-n-octyl phthalate	117-84-0	5	0	0.008	0.021	0	0.045	0.091
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	26	0	2.7	3.7	1.4	11	12
3,5-di-tert-Butyl-4-hydroxybenzaldehyde	1620-98-0	8	0	1.4	2.8	0	7	9.2
Dodecane	112-40-3	4	0	0.56	1.9	0	3.2	9.8

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Fluoranthene	206-44-0	21	0	0.31	0.4	0.11	1.1	1.4
Fluorene	86-73-7	15	0	0.5	0.97	0	1.7	5.1
Furan, 2-methyl	534-22-5	34	0	8.9	7.4	6.5	21	34
Heptanal	111-71-7	7	0	1.2	3.1	0	11	11
Hexadecane	544-76-3	11	0	2.6	4.8	0	14	19
2,5-Hexanedione	110-13-4	5	0	2.3	5.9	0	15	22
Indan	496-11-7	12	0	1.1	2.1	0	4.9	9
Mesitylene	108-67-8	15	0	2.3	4.1	0	9.1	19
Methacrolein	78-85-3	20	0	6.3	8	3.6	19	36
Methyl Isobutyl Ketone	108-10-1	5	0	1.3	3.5	0	10	15
Naphthalene	91-20-3	9	0	2.2	4.6	0	9.5	22
Naphthalene, 1,2-dimethyl-	573-98-8	4	0	0.031	0.089	0	0.3	0.3
Naphthalene, 1,6-dimethyl-	575-43-9	14	0	0.22	0.34	0	1	1.2
Naphthalene, 1-methyl-	90-12-0	15	0	1.8	3.1	0	8.1	12
Naphthalene, 2-(bromomethyl)-	939-26-4	11	0	0.061	0.093	0	0.21	0.21
Naphthalene, 2,3-dimethyl-	581-40-8	14	0	0.17	0.25	0	0.76	0.87
Naphthalene, 2-methyl-	91-57-6	10	0	2.8	5.8	0	13	26
1-Octadecene	112-88-9	16	0	0.37	0.47	0	1.3	1.5
Octanal	124-13-0	24	0	3.7	4.3	2.3	11	17
Octane	111-65-9	10	0	5	9.2	0	21	35
17-Pentatriacontene	6971-40-0	2	0	0.061	0.26	0	0.24	1.4
N-Phenylbenzamide	93-98-1	6	0	0.75	1.7	0	4.6	4.6
Phenanthrene	85-01-8	17	0	1.1	1.7	0.58	4.7	7
Phenanthrene, 1-methyl	832-69-9	17	0	0.068	0.089	0.031	0.25	0.28
Phenanthrene, 2-methyl-	2531-84-2	18	0	0.12	0.16	0.084	0.46	0.52
Phenanthrene, 3-methyl	832-71-3	18	0	0.15	0.19	0.08	0.55	0.62
Propionaldehyde	123-38-6	12	0	15	31	0	61	150
Pyrene	129-00-0	20	0	0.27	0.34	0.1	0.95	1.1

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Pyridine, 2-(4-methylphenyl)-	4467-06-5	2	0	0.0029	0.015	0	0.0052	0.085
Resorcinol	108-46-3	18	0	1.6	2.3	0.63	5.1	9.7
m-Tolualdehyde	620-23-5	19	0	22	24	18	61	75
TXIB "Kodaflex"	6846-50-0	1	0	0.16	0.97	0	0	5.8
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	14	0	0.31	0.44	0	1.1	1.6
Undecane	1120-21-4	5	0	1.1	2.8	0	8.4	11
Valeraldehyde	110-62-3	11	0	78	130	0	350	380
Non-Field-Related Chemicals								
Benzene	71-43-2	35	7.5	50	41	35	130	200
Benzene, 1,4-dichloro	106-46-7	7	0	1.6	3.5	0	9.9	9.9
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	34	0	48	50	32	140	180
2-Butoxyethanol	111-76-2	1	0	0.41	2.4	0	0	14
Cyclotrisiloxane, hexamethyl-	541-05-9	1	0	6.1	36	0	0	210
Decanal	112-31-2	7	0	2.3	8	0	8.8	46
Ethylbenzene	100-41-4	13	0	14	24	0	58	96
Heptane	142-82-5	20	0	19	29	3.7	79	120
Hexanal	66-25-1	30	0	65	84	31	250	330
Hexane	110-54-3	26	0	56	120	25	150	730
1-Hexanol, 2-ethyl-	104-76-7	6	0	0.65	1.7	0	3.3	7.6
Nonanal	124-19-6	2	0	0.65	2.7	0	3.4	11
Phenol	108-95-2	18	0	4.9	6.1	2.9	17	17
Tetrachloroethylene	127-18-4	7	0	4	9.4	0	27	35
Tetradecane	629-59-4	3	0	0.67	2.4	0	5.9	12
m/p-Xylene	106-42-3	25	0	48	69	20	160	290
o-Xylene	95-47-6	13	0	16	27	0	64	110

[a] 35 field-specific $C_{inh\text{-}field}$ values are included in the table.

[b] On-Field field-specific Chronic $C_{inh\text{-}field}$ equals the modified field-specific average concentration of a field ($C_{air\text{-}field}$ x AF_{inh}) of a general chemical (see Section F.4.3 of this Appendix F).

CASRN: Chemical Abstracts Service Registry Number

Values are rounded to two significant figures.

Table F-166. **On-Field** Field-Specific[a] Chronic Inhalation Exposure Concentration[b] for **All General Chemicals** (Chronic $C_{inh\text{-}field}$, nanograms per cubic meter)—Combined Gender **Spectators 11<16 Years**

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals								
Acenaphthylene	208-96-8	11	0	0.036	0.073	0	0.15	0.31
Acetone	67-64-1	34	56	700	790	380	2300	2500
Aniline	62-53-3	10	0	0.23	0.41	0	0.91	1.6
Anthracene	120-12-7	12	0	0.012	0.022	0	0.051	0.087
Anthracene, 2-methyl-	613-12-7	15	0	0.0031	0.0043	0	0.012	0.015
Anthracene, 9,10-dimethyl	781-43-1	16	0	0.0035	0.0063	0	0.0098	0.034
Anthracene, 9-phenyl	602-55-1	1	0	0.00032	0.0019	0	0	0.011
Benz[a]anthracene	56-55-3	1	0	0.00018	0.001	0	0	0.006
Benzaldehyde	100-52-7	15	0	3.2	5	0	12	19
Benzene, 1,2,3-trimethyl-	526-73-8	6	0	0.47	1.4	0	2.1	7.5
Benzene, 1,2,4,5-tetramethyl-	95-93-2	5	0	0.09	0.24	0	0.56	0.97
Benzene, 1,2,4-trimethyl-	95-63-6	13	0	4.2	7.5	0	15	35
Benzene, 1-ethyl-2,4-dimethyl-	874-41-9	7	0	0.19	0.5	0	0.97	2.5
Benzene, 2-ethyl-1,4-dimethyl-	1758-88-9	12	0	0.27	0.54	0	1.2	2.4
Benzene, butyl-	104-51-8	2	0	0.094	0.46	0	0.2	2.6
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	26	0	0.13	0.16	0.081	0.44	0.53
Benzo[b]fluoranthene	205-99-2	2	0	0.00088	0.0036	0	0.0053	0.015
7H-Benzo[c]fluorene	205-12-9	13	0	0.0019	0.0029	0	0.005	0.013
Benzo[k]fluoranthene	207-08-9	4	0	0.0011	0.0032	0	0.0084	0.012
Benzothiazole	95-16-9	19	0	1.3	1.5	0.74	4.4	4.4
Benzothiazole, 2-phenyl-	883-93-2	27	0	0.11	0.14	0.054	0.36	0.63
2-Benzothiazolone	934-34-9	5	0	0.17	0.43	0	1.1	1.6
Benzyl butyl phthalate	85-68-7	7	0	0.12	0.26	0	0.84	0.84
Butanal	123-72-8	13	0	11	27	0	65	140
Cyclopentasiloxane, decamethyl-	541-02-6	18	0	5.8	9.8	1.8	21	47
Cyclotetrasiloxane, octamethyl-	556-67-2	13	0	2.1	3.3	0	8.1	12
p-Cymene	99-87-6	21	0	0.9	1.1	0.57	3	4.2
Decane	124-18-5	11	0	1.9	3.5	0	11	11
Dibenz[a,h]anthracene	53-70-3	14	0	0.0051	0.01	0	0.026	0.043
Dibenzothiophene	132-65-0	14	0	0.044	0.068	0	0.19	0.24

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Dibutyl phthalate	84-74-2	7	0	13	34	0	61	180
Diethyl phthalate	84-66-2	1	0	0.094	0.55	0	0	3.2
Diisobutyl phthalate	84-69-5	15	0	0.51	1	0	1.6	5.4
Diisooctylphthalate	27554-26-3	9	0	1.8	5.9	0	4.6	34
Di-n-octyl phthalate	117-84-0	5	0	0.0035	0.009	0	0.02	0.039
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	26	0	1.2	1.6	0.6	4.6	5.2
3,5-di-tert-Butyl-4-hydroxybenzaldehyde	1620-98-0	8	0	0.61	1.2	0	3	4
Dodecane	112-40-3	4	0	0.24	0.82	0	1.4	4.2
Fluoranthene	206-44-0	21	0	0.14	0.17	0.049	0.47	0.61
Fluorene	86-73-7	15	0	0.21	0.42	0	0.76	2.2
Furan, 2-methyl	534-22-5	34	0	3.8	3.2	2.8	9	15
Heptanal	111-71-7	7	0	0.53	1.3	0	4.6	4.6
Hexadecane	544-76-3	11	0	1.1	2.1	0	6.1	8.1
2,5-Hexanedione	110-13-4	5	0	0.97	2.5	0	6.4	9.5
Indan	496-11-7	12	0	0.49	0.91	0	2.1	3.9
Mesitylene	108-67-8	15	0	0.99	1.8	0	4	8.2
Methacrolein	78-85-3	20	0	2.7	3.5	1.6	8	15
Methyl Isobutyl Ketone	108-10-1	5	0	0.56	1.5	0	4.4	6.6
Naphthalene	91-20-3	9	0	0.95	2	0	4.1	9.3
Naphthalene, 1,2-dimethyl-	573-98-8	4	0	0.013	0.038	0	0.13	0.13
Naphthalene, 1,6-dimethyl-	575-43-9	14	0	0.095	0.15	0	0.45	0.54
Naphthalene, 1-methyl-	90-12-0	15	0	0.78	1.3	0	3.5	5.4
Naphthalene, 2-(bromomethyl)-	939-26-4	11	0	0.026	0.04	0	0.09	0.09
Naphthalene, 2,3-dimethyl-	581-40-8	14	0	0.072	0.11	0	0.33	0.38
Naphthalene, 2-methyl-	91-57-6	10	0	1.2	2.5	0	5.8	11
1-Octadecene	112-88-9	16	0	0.16	0.2	0	0.55	0.65
Octanal	124-13-0	24	0	1.6	1.9	0.99	4.8	7.4
Octane	111-65-9	10	0	2.2	4	0	9	15
17-Pentatriacontene	6971-40-0	2	0	0.026	0.11	0	0.1	0.6
N-Phenylbenzamide	93-98-1	6	0	0.32	0.72	0	2	2
Phenanthrene	85-01-8	17	0	0.47	0.72	0.25	2	3
Phenanthrene, 1-methyl	832-69-9	17	0	0.029	0.038	0.013	0.11	0.12
Phenanthrene, 2-methyl-	2531-84-2	18	0	0.054	0.07	0.036	0.2	0.23
Phenanthrene, 3-methyl	832-71-3	18	0	0.064	0.082	0.035	0.24	0.27
Propionaldehyde	123-38-6	12	0	6.6	13	0	26	64
Pyrene	129-00-0	20	0	0.11	0.15	0.045	0.41	0.49

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Pyridine, 2-(4-methylphenyl)-	4467-06-5	2	0	0.0013	0.0064	0	0.0022	0.037
Resorcinol	108-46-3	18	0	0.67	0.97	0.27	2.2	4.2
m-Tolualdehyde	620-23-5	19	0	9.7	10	7.8	27	32
TXIB "Kodaflex"	6846-50-0	1	0	0.071	0.42	0	0	2.5
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	14	0	0.14	0.19	0	0.48	0.7
Undecane	1120-21-4	5	0	0.47	1.2	0	3.6	4.7
Valeraldehyde	110-62-3	11	0	33	58	0	150	160
Non-Field-Related Chemicals								
Benzene	71-43-2	35	3.2	22	18	15	54	88
Benzene, 1,4-dichloro	106-46-7	7	0	0.69	1.5	0	4.3	4.3
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	34	0	21	21	14	61	76
2-Butoxyethanol	111-76-2	1	0	0.18	1.1	0	0	6.2
Cyclotrisiloxane, hexamethyl-	541-05-9	1	0	2.6	16	0	0	92
Decanal	112-31-2	7	0	1	3.4	0	3.8	20
Ethylbenzene	100-41-4	13	0	6.2	10	0	25	41
Heptane	142-82-5	20	0	8.3	12	1.6	34	54
Hexanal	66-25-1	30	0	28	36	13	110	140
Hexane	110-54-3	26	0	24	54	11	64	310
1-Hexanol, 2-ethyl-	104-76-7	6	0	0.28	0.72	0	1.4	3.3
Nonanal	124-19-6	2	0	0.28	1.2	0	1.5	4.9
Phenol	108-95-2	18	0	2.1	2.6	1.2	7.4	7.4
Tetrachloroethylene	127-18-4	7	0	1.7	4.1	0	12	15
Tetradecane	629-59-4	3	0	0.29	1	0	2.6	5.1
m/p-Xylene	106-42-3	25	0	21	30	8.4	71	120
o-Xylene	95-47-6	13	0	6.9	12	0	28	46

[a] 35 field-specific $C_{inh\text{-}field}$ values are included in the table.
[b] On-Field field-specific Chronic $C_{inh\text{-}field}$ equals the modified field-specific average concentration of a field ($C_{air\text{-}field}$ x AF_{inh}) of a general chemical (see Section F.4.3 of this Appendix F).
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-167. **On-Field** Field-Specific[a] Chronic Inhalation Exposure Concentration[b] for **All General Chemicals** (Chronic $C_{inh\text{-}field}$, nanograms per cubic meter)—Combined Gender **Spectators 16<30 Years**

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals								
Acenaphthylene	208-96-8	11	0	0.024	0.048	0	0.1	0.21

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Acetone	67-64-1	34	37	460	520	250	1500	1600
Aniline	62-53-3	10	0	0.15	0.27	0	0.6	1
Anthracene	120-12-7	12	0	0.0077	0.015	0	0.034	0.057
Anthracene, 2-methyl-	613-12-7	15	0	0.002	0.0029	0	0.0078	0.0099
Anthracene, 9,10-dimethyl	781-43-1	16	0	0.0023	0.0041	0	0.0064	0.022
Anthracene, 9-phenyl	602-55-1	1	0	0.00021	0.0012	0	0	0.0073
Benz[a]anthracene	56-55-3	1	0	0.00012	0.00068	0	0	0.004
Benzaldehyde	100-52-7	15	0	2.1	3.3	0	7.6	13
Benzene, 1,2,3-trimethyl-	526-73-8	6	0	0.31	0.92	0	1.4	4.9
Benzene, 1,2,4,5-tetramethyl-	95-93-2	5	0	0.059	0.16	0	0.37	0.64
Benzene, 1,2,4-trimethyl-	95-63-6	13	0	2.8	4.9	0	9.9	23
Benzene, 1-ethyl-2,4-dimethyl-	874-41-9	7	0	0.12	0.33	0	0.64	1.7
Benzene, 2-ethyl-1,4-dimethyl-	1758-88-9	12	0	0.18	0.35	0	0.78	1.6
Benzene, butyl-	104-51-8	2	0	0.062	0.3	0	0.13	1.7
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	26	0	0.088	0.1	0.053	0.29	0.35
Benzo[b]fluoranthene	205-99-2	2	0	0.00058	0.0024	0	0.0035	0.0099
7H-Benzo[c]fluorene	205-12-9	13	0	0.0013	0.0019	0	0.0033	0.0084
Benzo[k]fluoranthene	207-08-9	4	0	0.00073	0.0021	0	0.0056	0.0082
Benzothiazole	95-16-9	19	0	0.88	1	0.49	2.9	2.9
Benzothiazole, 2-phenyl-	883-93-2	27	0	0.07	0.092	0.035	0.24	0.41
2-Benzothiazolone	934-34-9	5	0	0.11	0.29	0	0.72	1.1
Benzyl butyl phthalate	85-68-7	7	0	0.081	0.17	0	0.55	0.55
Butanal	123-72-8	13	0	7.2	18	0	43	89
Cyclopentasiloxane, decamethyl-	541-02-6	18	0	3.8	6.5	1.2	14	31
Cyclotetrasiloxane, octamethyl-	556-67-2	13	0	1.4	2.2	0	5.4	7.8
p-Cymene	99-87-6	21	0	0.59	0.72	0.38	2	2.8
Decane	124-18-5	11	0	1.3	2.3	0	7	7.2
Dibenz[a,h]anthracene	53-70-3	14	0	0.0034	0.0068	0	0.017	0.029
Dibenzothiophene	132-65-0	14	0	0.029	0.045	0	0.12	0.16
Dibutyl phthalate	84-74-2	7	0	8.9	23	0	40	120
Diethyl phthalate	84-66-2	1	0	0.062	0.36	0	0	2.1
Diisobutyl phthalate	84-69-5	15	0	0.34	0.66	0	1.1	3.6
Diisooctylphthalate	27554-26-3	9	0	1.2	3.9	0	3.1	23
Di-n-octyl phthalate	117-84-0	5	0	0.0023	0.0059	0	0.013	0.026
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	26	0	0.77	1	0.4	3	3.4

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
3,5-di-tert-Butyl-4-hydroxybenzaldehyde	1620-98-0	8	0	0.4	0.79	0	2	2.6
Dodecane	112-40-3	4	0	0.16	0.54	0	0.91	2.8
Fluoranthene	206-44-0	21	0	0.089	0.11	0.032	0.31	0.4
Fluorene	86-73-7	15	0	0.14	0.28	0	0.5	1.4
Furan, 2-methyl	534-22-5	34	0	2.5	2.1	1.9	5.9	9.7
Heptanal	111-71-7	7	0	0.35	0.87	0	3	3
Hexadecane	544-76-3	11	0	0.75	1.4	0	4	5.4
2,5-Hexanedione	110-13-4	5	0	0.64	1.7	0	4.2	6.2
Indan	496-11-7	12	0	0.32	0.6	0	1.4	2.6
Mesitylene	108-67-8	15	0	0.65	1.2	0	2.6	5.4
Methacrolein	78-85-3	20	0	1.8	2.3	1	5.3	10
Methyl Isobutyl Ketone	108-10-1	5	0	0.37	1	0	2.9	4.3
Naphthalene	91-20-3	9	0	0.63	1.3	0	2.7	6.1
Naphthalene, 1,2-dimethyl-	573-98-8	4	0	0.0088	0.025	0	0.085	0.085
Naphthalene, 1,6-dimethyl-	575-43-9	14	0	0.063	0.097	0	0.3	0.35
Naphthalene, 1-methyl-	90-12-0	15	0	0.51	0.88	0	2.3	3.5
Naphthalene, 2-(bromomethyl)-	939-26-4	11	0	0.017	0.026	0	0.059	0.059
Naphthalene, 2,3-dimethyl-	581-40-8	14	0	0.047	0.07	0	0.22	0.25
Naphthalene, 2-methyl-	91-57-6	10	0	0.78	1.7	0	3.8	7.5
1-Octadecene	112-88-9	16	0	0.1	0.13	0	0.36	0.43
Octanal	124-13-0	24	0	1.1	1.2	0.66	3.2	4.9
Octane	111-65-9	10	0	1.4	2.6	0	6	10
17-Pentatriacontene	6971-40-0	2	0	0.017	0.074	0	0.069	0.39
N-Phenylbenzamide	93-98-1	6	0	0.21	0.48	0	1.3	1.3
Phenanthrene	85-01-8	17	0	0.31	0.48	0.16	1.3	2
Phenanthrene, 1-methyl	832-69-9	17	0	0.019	0.025	0.0088	0.07	0.08
Phenanthrene, 2-methyl-	2531-84-2	18	0	0.035	0.046	0.024	0.13	0.15
Phenanthrene, 3-methyl	832-71-3	18	0	0.042	0.054	0.023	0.16	0.18
Propionaldehyde	123-38-6	12	0	4.4	8.8	0	17	42
Pyrene	129-00-0	20	0	0.076	0.096	0.03	0.27	0.33
Pyridine, 2-(4-methylphenyl)-	4467-06-5	2	0	0.00084	0.0042	0	0.0015	0.024
Resorcinol	108-46-3	18	0	0.44	0.64	0.18	1.5	2.8
m-Tolualdehyde	620-23-5	19	0	6.4	6.7	5.2	17	21
TXIB "Kodaflex"	6846-50-0	1	0	0.047	0.28	0	0	1.6
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	14	0	0.09	0.13	0	0.32	0.46
Undecane	1120-21-4	5	0	0.31	0.81	0	2.4	3.1

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Valeraldehyde	110-62-3	11	0	22	38	0	100	110
Non-Field-Related Chemicals								
Benzene	71-43-2	35	2.1	14	12	10	36	58
Benzene, 1,4-dichloro	106-46-7	7	0	0.45	1	0	2.8	2.8
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	34	0	14	14	9	41	50
2-Butoxyethanol	111-76-2	1	0	0.12	0.69	0	0	4.1
Cyclotrisiloxane, hexamethyl-	541-05-9	1	0	1.7	10	0	0	61
Decanal	112-31-2	7	0	0.66	2.3	0	2.5	13
Ethylbenzene	100-41-4	13	0	4.1	6.9	0	17	27
Heptane	142-82-5	20	0	5.5	8.1	1.1	23	35
Hexanal	66-25-1	30	0	19	24	8.7	72	94
Hexane	110-54-3	26	0	16	35	7	42	210
1-Hexanol, 2-ethyl-	104-76-7	6	0	0.18	0.47	0	0.93	2.2
Nonanal	124-19-6	2	0	0.18	0.76	0	0.97	3.2
Phenol	108-95-2	18	0	1.4	1.7	0.82	4.9	4.9
Tetrachloroethylene	127-18-4	7	0	1.1	2.7	0	7.6	9.9
Tetradecane	629-59-4	3	0	0.19	0.68	0	1.7	3.4
m/p-Xylene	106-42-3	25	0	14	20	5.6	47	82
o-Xylene	95-47-6	13	0	4.6	7.7	0	18	30

[a] 35 field-specific $C_{inh\text{-}field}$ values are included in the table.
[b] On-Field field-specific Chronic $C_{inh\text{-}field}$ equals the modified field-specific average concentration of a field ($C_{air\text{-}field}$ x AF_{inh}) of a general chemical (see Section F.4.3 of this Appendix F).
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-168. **On-Field** Field-Specific[a] Chronic Inhalation Exposure Concentration[b] for **All General Chemicals** (Chronic $C_{inh\text{-}field}$, nanograms per cubic meter)—Combined Gender **Spectators 30<40 Years**

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals								
Acenaphthylene	208-96-8	11	0	0.021	0.042	0	0.088	0.18
Acetone	67-64-1	34	32	400	450	220	1300	1400
Aniline	62-53-3	10	0	0.13	0.24	0	0.52	0.9
Anthracene	120-12-7	12	0	0.0068	0.013	0	0.03	0.05
Anthracene, 2-methyl-	613-12-7	15	0	0.0018	0.0025	0	0.0068	0.0087
Anthracene, 9,10-dimethyl	781-43-1	16	0	0.002	0.0036	0	0.0056	0.02
Anthracene, 9-phenyl	602-55-1	1	0	0.00019	0.0011	0	0	0.0064
Benz[a]anthracene	56-55-3	1	0	0.0001	0.00059	0	0	0.0035

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Benzaldehyde	100-52-7	15	0	1.8	2.9	0	6.7	11
Benzene, 1,2,3-trimethyl-	526-73-8	6	0	0.27	0.81	0	1.2	4.3
Benzene, 1,2,4,5-tetramethyl-	95-93-2	5	0	0.052	0.14	0	0.32	0.56
Benzene, 1,2,4-trimethyl-	95-63-6	13	0	2.4	4.3	0	8.6	20
Benzene, 1-ethyl-2,4-dimethyl-	874-41-9	7	0	0.11	0.29	0	0.56	1.5
Benzene, 2-ethyl-1,4-dimethyl-	1758-88-9	12	0	0.15	0.31	0	0.68	1.4
Benzene, butyl-	104-51-8	2	0	0.054	0.26	0	0.11	1.5
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	26	0	0.077	0.09	0.046	0.25	0.3
Benzo[b]fluoranthene	205-99-2	2	0	0.00051	0.0021	0	0.003	0.0087
7H-Benzo[c]fluorene	205-12-9	13	0	0.0011	0.0017	0	0.0029	0.0074
Benzo[k]fluoranthene	207-08-9	4	0	0.00063	0.0019	0	0.0049	0.0072
Benzothiazole	95-16-9	19	0	0.77	0.88	0.43	2.6	2.6
Benzothiazole, 2-phenyl-	883-93-2	27	0	0.061	0.08	0.031	0.21	0.36
2-Benzothiazolone	934-34-9	5	0	0.095	0.25	0	0.63	0.93
Benzyl butyl phthalate	85-68-7	7	0	0.071	0.15	0	0.48	0.48
Butanal	123-72-8	13	0	6.3	16	0	37	78
Cyclopentasiloxane, decamethyl-	541-02-6	18	0	3.3	5.6	1	12	27
Cyclotetrasiloxane, octamethyl-	556-67-2	13	0	1.2	1.9	0	4.7	6.8
p-Cymene	99-87-6	21	0	0.52	0.63	0.33	1.7	2.4
Decane	124-18-5	11	0	1.1	2	0	6.1	6.3
Dibenz[a,h]anthracene	53-70-3	14	0	0.003	0.0059	0	0.015	0.025
Dibenzothiophene	132-65-0	14	0	0.026	0.039	0	0.11	0.14
Dibutyl phthalate	84-74-2	7	0	7.8	20	0	35	100
Diethyl phthalate	84-66-2	1	0	0.054	0.32	0	0	1.8
Diisobutyl phthalate	84-69-5	15	0	0.29	0.58	0	0.93	3.1
Diisooctylphthalate	27554-26-3	9	0	1	3.4	0	2.7	20
Di-n-octyl phthalate	117-84-0	5	0	0.002	0.0052	0	0.011	0.023
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	26	0	0.67	0.91	0.35	2.6	3
3,5-di-tert-Butyl-4-hydroxybenzaldehyde	1620-98-0	8	0	0.35	0.69	0	1.8	2.3
Dodecane	112-40-3	4	0	0.14	0.47	0	0.79	2.4
Fluoranthene	206-44-0	21	0	0.078	0.1	0.028	0.27	0.35
Fluorene	86-73-7	15	0	0.12	0.24	0	0.44	1.3
Furan, 2-methyl	534-22-5	34	0	2.2	1.8	1.6	5.2	8.5
Heptanal	111-71-7	7	0	0.3	0.76	0	2.7	2.7

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Hexadecane	544-76-3	11	0	0.66	1.2	0	3.5	4.7
2,5-Hexanedione	110-13-4	5	0	0.56	1.5	0	3.7	5.5
Indan	496-11-7	12	0	0.28	0.53	0	1.2	2.2
Mesitylene	108-67-8	15	0	0.57	1	0	2.3	4.7
Methacrolein	78-85-3	20	0	1.6	2	0.89	4.6	8.9
Methyl Isobutyl Ketone	108-10-1	5	0	0.32	0.88	0	2.5	3.8
Naphthalene	91-20-3	9	0	0.55	1.1	0	2.4	5.4
Naphthalene, 1,2-dimethyl-	573-98-8	4	0	0.0077	0.022	0	0.075	0.075
Naphthalene, 1,6-dimethyl-	575-43-9	14	0	0.055	0.085	0	0.26	0.31
Naphthalene, 1-methyl-	90-12-0	15	0	0.45	0.77	0	2	3.1
Naphthalene, 2-(bromomethyl)-	939-26-4	11	0	0.015	0.023	0	0.052	0.052
Naphthalene, 2,3-dimethyl-	581-40-8	14	0	0.041	0.061	0	0.19	0.22
Naphthalene, 2-methyl-	91-57-6	10	0	0.68	1.4	0	3.3	6.5
1-Octadecene	112-88-9	16	0	0.091	0.12	0	0.32	0.38
Octanal	124-13-0	24	0	0.93	1.1	0.57	2.8	4.3
Octane	111-65-9	10	0	1.3	2.3	0	5.2	8.7
17-Pentatriacontene	6971-40-0	2	0	0.015	0.065	0	0.06	0.34
N-Phenylbenzamide	93-98-1	6	0	0.19	0.42	0	1.1	1.1
Phenanthrene	85-01-8	17	0	0.27	0.42	0.14	1.2	1.7
Phenanthrene, 1-methyl	832-69-9	17	0	0.017	0.022	0.0077	0.061	0.07
Phenanthrene, 2-methyl-	2531-84-2	18	0	0.031	0.04	0.021	0.11	0.13
Phenanthrene, 3-methyl	832-71-3	18	0	0.037	0.048	0.02	0.14	0.15
Propionaldehyde	123-38-6	12	0	3.8	7.7	0	15	37
Pyrene	129-00-0	20	0	0.066	0.084	0.026	0.24	0.28
Pyridine, 2-(4-methylphenyl)-	4467-06-5	2	0	0.00073	0.0037	0	0.0013	0.021
Resorcinol	108-46-3	18	0	0.39	0.56	0.16	1.3	2.4
m-Tolualdehyde	620-23-5	19	0	5.6	5.9	4.5	15	19
TXIB "Kodaflex"	6846-50-0	1	0	0.041	0.24	0	0	1.4
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	14	0	0.078	0.11	0	0.28	0.4
Undecane	1120-21-4	5	0	0.27	0.71	0	2.1	2.7
Valeraldehyde	110-62-3	11	0	19	33	0	87	95
Non-Field-Related Chemicals								
Benzene	71-43-2	35	1.9	13	10	8.8	31	51
Benzene, 1,4-dichloro	106-46-7	7	0	0.4	0.87	0	2.5	2.5

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	34	0	12	12	7.9	35	44
2-Butoxyethanol	111-76-2	1	0	0.1	0.61	0	0	3.6
Cyclotrisiloxane, hexamethyl-	541-05-9	1	0	1.5	9	0	0	53
Decanal	112-31-2	7	0	0.58	2	0	2.2	11
Ethylbenzene	100-41-4	13	0	3.6	6	0	15	24
Heptane	142-82-5	20	0	4.8	7.1	0.92	20	31
Hexanal	66-25-1	30	0	16	21	7.6	63	82
Hexane	110-54-3	26	0	14	31	6.1	37	180
1-Hexanol, 2-ethyl-	104-76-7	6	0	0.16	0.41	0	0.82	1.9
Nonanal	124-19-6	2	0	0.16	0.66	0	0.85	2.8
Phenol	108-95-2	18	0	1.2	1.5	0.71	4.3	4.3
Tetrachloroethylene	127-18-4	7	0	0.99	2.3	0	6.6	8.7
Tetradecane	629-59-4	3	0	0.17	0.59	0	1.5	2.9
m/p-Xylene	106-42-3	25	0	12	17	4.9	41	72
o-Xylene	95-47-6	13	0	4	6.7	0	16	26

[a] 35 field-specific $C_{inh\text{-}field}$ values are included in the table.
[b] On-Field field-specific Chronic $C_{inh\text{-}field}$ equals the modified field-specific average concentration of a field ($C_{air\text{-}field}$ x AF_{inh}) of a general chemical (see Section F.4.3 of this Appendix F).
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-169. **On-Field** Field-Specific[a] Chronic Inhalation Exposure Concentration[b] for **All General Chemicals** (Chronic $C_{inh\text{-}field}$, nanograms per cubic meter)—Combined Gender **Spectators 40<50 Years**

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals								
Acenaphthylene	208-96-8	11	0	0.021	0.042	0	0.089	0.18
Acetone	67-64-1	34	33	410	460	220	1300	1400
Aniline	62-53-3	10	0	0.14	0.24	0	0.53	0.91
Anthracene	120-12-7	12	0	0.0068	0.013	0	0.03	0.05
Anthracene, 2-methyl-	613-12-7	15	0	0.0018	0.0025	0	0.0069	0.0087
Anthracene, 9,10-dimethyl	781-43-1	16	0	0.002	0.0037	0	0.0057	0.02
Anthracene, 9-phenyl	602-55-1	1	0	0.00019	0.0011	0	0	0.0064
Benz[a]anthracene	56-55-3	1	0	0.0001	0.0006	0	0	0.0035
Benzaldehyde	100-52-7	15	0	1.9	2.9	0	6.7	11
Benzene, 1,2,3-trimethyl-	526-73-8	6	0	0.28	0.81	0	1.2	4.4
Benzene, 1,2,4,5-tetramethyl-	95-93-2	5	0	0.052	0.14	0	0.32	0.56
Benzene, 1,2,4-trimethyl-	95-63-6	13	0	2.5	4.3	0	8.7	20

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Benzene, 1-ethyl-2,4-dimethyl-	874-41-9	7	0	0.11	0.29	0	0.57	1.5
Benzene, 2-ethyl-1,4-dimethyl-	1758-88-9	12	0	0.16	0.31	0	0.69	1.4
Benzene, butyl-	104-51-8	2	0	0.055	0.27	0	0.12	1.5
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	26	0	0.078	0.091	0.047	0.25	0.31
Benzo[b]fluoranthene	205-99-2	2	0	0.00052	0.0021	0	0.0031	0.0088
7H-Benzo[c]fluorene	205-12-9	13	0	0.0011	0.0017	0	0.0029	0.0075
Benzo[k]fluoranthene	207-08-9	4	0	0.00064	0.0019	0	0.0049	0.0073
Benzothiazole	95-16-9	19	0	0.77	0.89	0.43	2.6	2.6
Benzothiazole, 2-phenyl-	883-93-2	27	0	0.062	0.081	0.031	0.21	0.36
2-Benzothiazolone	934-34-9	5	0	0.096	0.25	0	0.63	0.94
Benzyl butyl phthalate	85-68-7	7	0	0.072	0.15	0	0.49	0.49
Butanal	123-72-8	13	0	6.4	16	0	38	79
Cyclopentasiloxane, decamethyl-	541-02-6	18	0	3.4	5.7	1	12	27
Cyclotetrasiloxane, octamethyl-	556-67-2	13	0	1.2	1.9	0	4.7	6.8
p-Cymene	99-87-6	21	0	0.52	0.64	0.33	1.7	2.5
Decane	124-18-5	11	0	1.1	2	0	6.2	6.4
Dibenz[a,h]anthracene	53-70-3	14	0	0.003	0.006	0	0.015	0.025
Dibenzothiophene	132-65-0	14	0	0.026	0.04	0	0.11	0.14
Dibutyl phthalate	84-74-2	7	0	7.9	20	0	35	100
Diethyl phthalate	84-66-2	1	0	0.055	0.32	0	0	1.9
Diisobutyl phthalate	84-69-5	15	0	0.3	0.59	0	0.94	3.1
Diisooctylphthalate	27554-26-3	9	0	1	3.5	0	2.7	20
Di-n-octyl phthalate	117-84-0	5	0	0.002	0.0052	0	0.011	0.023
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	26	0	0.68	0.92	0.35	2.7	3
3,5-di-tert-Butyl-4-hydroxybenzaldehyde	1620-98-0	8	0	0.35	0.7	0	1.8	2.3
Dodecane	112-40-3	4	0	0.14	0.48	0	0.8	2.5
Fluoranthene	206-44-0	21	0	0.079	0.1	0.028	0.27	0.36
Fluorene	86-73-7	15	0	0.12	0.24	0	0.44	1.3
Furan, 2-methyl	534-22-5	34	0	2.2	1.9	1.6	5.2	8.5
Heptanal	111-71-7	7	0	0.31	0.77	0	2.7	2.7
Hexadecane	544-76-3	11	0	0.66	1.2	0	3.5	4.7
2,5-Hexanedione	110-13-4	5	0	0.57	1.5	0	3.7	5.5
Indan	496-11-7	12	0	0.28	0.53	0	1.2	2.3
Mesitylene	108-67-8	15	0	0.58	1	0	2.3	4.8
Methacrolein	78-85-3	20	0	1.6	2	0.9	4.7	9

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Methyl Isobutyl Ketone	108-10-1	5	0	0.33	0.89	0	2.5	3.8
Naphthalene	91-20-3	9	0	0.56	1.2	0	2.4	5.4
Naphthalene, 1,2-dimethyl-	573-98-8	4	0	0.0078	0.022	0	0.075	0.075
Naphthalene, 1,6-dimethyl-	575-43-9	14	0	0.056	0.086	0	0.26	0.31
Naphthalene, 1-methyl-	90-12-0	15	0	0.45	0.78	0	2	3.1
Naphthalene, 2-(bromomethyl)-	939-26-4	11	0	0.015	0.023	0	0.052	0.052
Naphthalene, 2,3-dimethyl-	581-40-8	14	0	0.042	0.062	0	0.19	0.22
Naphthalene, 2-methyl-	91-57-6	10	0	0.69	1.5	0	3.4	6.6
1-Octadecene	112-88-9	16	0	0.092	0.12	0	0.32	0.38
Octanal	124-13-0	24	0	0.94	1.1	0.58	2.8	4.3
Octane	111-65-9	10	0	1.3	2.3	0	5.3	8.8
17-Pentatriacontene	6971-40-0	2	0	0.015	0.066	0	0.061	0.35
N-Phenylbenzamide	93-98-1	6	0	0.19	0.42	0	1.2	1.2
Phenanthrene	85-01-8	17	0	0.27	0.42	0.15	1.2	1.8
Phenanthrene, 1-methyl	832-69-9	17	0	0.017	0.022	0.0077	0.062	0.071
Phenanthrene, 2-methyl-	2531-84-2	18	0	0.031	0.041	0.021	0.11	0.13
Phenanthrene, 3-methyl	832-71-3	18	0	0.037	0.048	0.02	0.14	0.16
Propionaldehyde	123-38-6	12	0	3.9	7.8	0	15	37
Pyrene	129-00-0	20	0	0.067	0.085	0.026	0.24	0.29
Pyridine, 2-(4-methylphenyl)-	4467-06-5	2	0	0.00074	0.0037	0	0.0013	0.021
Resorcinol	108-46-3	18	0	0.39	0.57	0.16	1.3	2.4
m-Tolualdehyde	620-23-5	19	0	5.6	5.9	4.6	15	19
TXIB "Kodaflex"	6846-50-0	1	0	0.041	0.24	0	0	1.4
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	14	0	0.079	0.11	0	0.28	0.41
Undecane	1120-21-4	5	0	0.27	0.72	0	2.1	2.7
Valeraldehyde	110-62-3	11	0	20	34	0	88	96
Non-Field-Related Chemicals								
Benzene	71-43-2	35	1.9	13	10	8.9	32	51
Benzene, 1,4-dichloro	106-46-7	7	0	0.4	0.88	0	2.5	2.5
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	34	0	12	12	8	36	44
2-Butoxyethanol	111-76-2	1	0	0.1	0.61	0	0	3.6
Cyclotrisiloxane, hexamethyl-	541-05-9	1	0	1.5	9.1	0	0	54
Decanal	112-31-2	7	0	0.59	2	0	2.2	12
Ethylbenzene	100-41-4	13	0	3.6	6.1	0	15	24
Heptane	142-82-5	20	0	4.8	7.2	0.93	20	31

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Hexanal	66-25-1	30	0	16	21	7.7	64	83
Hexane	110-54-3	26	0	14	31	6.2	37	180
1-Hexanol, 2-ethyl-	104-76-7	6	0	0.16	0.42	0	0.82	1.9
Nonanal	124-19-6	2	0	0.16	0.67	0	0.85	2.8
Phenol	108-95-2	18	0	1.2	1.5	0.72	4.3	4.3
Tetrachloroethylene	127-18-4	7	0	1	2.4	0	6.7	8.7
Tetradecane	629-59-4	3	0	0.17	0.6	0	1.5	3
m/p-Xylene	106-42-3	25	0	12	17	4.9	41	73
o-Xylene	95-47-6	13	0	4	6.8	0	16	27

[a] 35 field-specific $C_{inh\text{-}field}$ values are included in the table.
[b] On-Field field-specific Chronic $C_{inh\text{-}field}$ equals the modified field-specific average concentration of a field ($C_{air\text{-}field}$ x AF_{inh}) of a general chemical (see Section F.4.3 of this Appendix F).
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-170. **On-Field** Field-Specific[a] Chronic Inhalation Exposure Concentration[b] for **All General Chemicals** (Chronic $C_{inh\text{-}field}$, nanograms per cubic meter)—Combined Gender **Spectators 50<70 Years**

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals								
Acenaphthylene	208-96-8	11	0	0.021	0.043	0	0.089	0.18
Acetone	67-64-1	34	33	410	460	220	1300	1400
Aniline	62-53-3	10	0	0.14	0.24	0	0.53	0.91
Anthracene	120-12-7	12	0	0.0069	0.013	0	0.03	0.051
Anthracene, 2-methyl-	613-12-7	15	0	0.0018	0.0025	0	0.0069	0.0088
Anthracene, 9,10-dimethyl	781-43-1	16	0	0.002	0.0037	0	0.0057	0.02
Anthracene, 9-phenyl	602-55-1	1	0	0.00019	0.0011	0	0	0.0064
Benz[a]anthracene	56-55-3	1	0	0.0001	0.0006	0	0	0.0035
Benzaldehyde	100-52-7	15	0	1.9	2.9	0	6.8	11
Benzene, 1,2,3-trimethyl-	526-73-8	6	0	0.28	0.82	0	1.2	4.4
Benzene, 1,2,4,5-tetramethyl-	95-93-2	5	0	0.052	0.14	0	0.32	0.56
Benzene, 1,2,4-trimethyl-	95-63-6	13	0	2.5	4.4	0	8.8	20
Benzene, 1-ethyl-2,4-dimethyl-	874-41-9	7	0	0.11	0.29	0	0.57	1.5
Benzene, 2-ethyl-1,4-dimethyl-	1758-88-9	12	0	0.16	0.31	0	0.69	1.4
Benzene, butyl-	104-51-8	2	0	0.055	0.27	0	0.12	1.5

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	26	0	0.078	0.092	0.047	0.26	0.31
Benzo[b]fluoranthene	205-99-2	2	0	0.00052	0.0021	0	0.0031	0.0088
7H-Benzo[c]fluorene	205-12-9	13	0	0.0011	0.0017	0	0.0029	0.0075
Benzo[k]fluoranthene	207-08-9	4	0	0.00064	0.0019	0	0.0049	0.0073
Benzothiazole	95-16-9	19	0	0.78	0.89	0.43	2.6	2.6
Benzothiazole, 2-phenyl-	883-93-2	27	0	0.062	0.081	0.031	0.21	0.37
2-Benzothiazolone	934-34-9	5	0	0.097	0.25	0	0.63	0.94
Benzyl butyl phthalate	85-68-7	7	0	0.072	0.15	0	0.49	0.49
Butanal	123-72-8	13	0	6.4	16	0	38	79
Cyclopentasiloxane, decamethyl-	541-02-6	18	0	3.4	5.7	1	12	27
Cyclotetrasiloxane, octamethyl-	556-67-2	13	0	1.2	1.9	0	4.7	6.9
p-Cymene	99-87-6	21	0	0.53	0.64	0.33	1.8	2.5
Decane	124-18-5	11	0	1.1	2	0	6.2	6.4
Dibenz[a,h]anthracene	53-70-3	14	0	0.003	0.006	0	0.015	0.025
Dibenzothiophene	132-65-0	14	0	0.026	0.04	0	0.11	0.14
Dibutyl phthalate	84-74-2	7	0	7.9	20	0	36	100
Diethyl phthalate	84-66-2	1	0	0.055	0.32	0	0	1.9
Diisobutyl phthalate	84-69-5	15	0	0.3	0.59	0	0.94	3.2
Diisooctylphthalate	27554-26-3	9	0	1	3.5	0	2.7	20
Di-n-octyl phthalate	117-84-0	5	0	0.002	0.0053	0	0.011	0.023
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	26	0	0.68	0.92	0.35	2.7	3
3,5-di-tert-Butyl-4-hydroxybenzaldehyde	1620-98-0	8	0	0.36	0.7	0	1.8	2.3
Dodecane	112-40-3	4	0	0.14	0.48	0	0.81	2.5
Fluoranthene	206-44-0	21	0	0.079	0.1	0.028	0.27	0.36
Fluorene	86-73-7	15	0	0.13	0.24	0	0.44	1.3
Furan, 2-methyl	534-22-5	34	0	2.2	1.9	1.6	5.2	8.6
Heptanal	111-71-7	7	0	0.31	0.77	0	2.7	2.7
Hexadecane	544-76-3	11	0	0.67	1.2	0	3.6	4.8
2,5-Hexanedione	110-13-4	5	0	0.57	1.5	0	3.7	5.5
Indan	496-11-7	12	0	0.29	0.53	0	1.2	2.3
Mesitylene	108-67-8	15	0	0.58	1	0	2.3	4.8
Methacrolein	78-85-3	20	0	1.6	2	0.91	4.7	9
Methyl Isobutyl Ketone	108-10-1	5	0	0.33	0.89	0	2.6	3.8
Naphthalene	91-20-3	9	0	0.56	1.2	0	2.4	5.4
Naphthalene, 1,2-dimethyl-	573-98-8	4	0	0.0078	0.022	0	0.076	0.076

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Naphthalene, 1,6-dimethyl-	575-43-9	14	0	0.056	0.086	0	0.26	0.31
Naphthalene, 1-methyl-	90-12-0	15	0	0.45	0.78	0	2	3.1
Naphthalene, 2-(bromomethyl)-	939-26-4	11	0	0.015	0.023	0	0.053	0.053
Naphthalene, 2,3-dimethyl-	581-40-8	14	0	0.042	0.062	0	0.19	0.22
Naphthalene, 2-methyl-	91-57-6	10	0	0.69	1.5	0	3.4	6.6
1-Octadecene	112-88-9	16	0	0.093	0.12	0	0.32	0.38
Octanal	124-13-0	24	0	0.94	1.1	0.58	2.8	4.3
Octane	111-65-9	10	0	1.3	2.3	0	5.3	8.8
17-Pentatriacontene	6971-40-0	2	0	0.015	0.066	0	0.061	0.35
N-Phenylbenzamide	93-98-1	6	0	0.19	0.42	0	1.2	1.2
Phenanthrene	85-01-8	17	0	0.27	0.42	0.15	1.2	1.8
Phenanthrene, 1-methyl	832-69-9	17	0	0.017	0.022	0.0078	0.062	0.071
Phenanthrene, 2-methyl-	2531-84-2	18	0	0.031	0.041	0.021	0.11	0.13
Phenanthrene, 3-methyl	832-71-3	18	0	0.037	0.048	0.02	0.14	0.16
Propionaldehyde	123-38-6	12	0	3.9	7.8	0	15	38
Pyrene	129-00-0	20	0	0.067	0.085	0.026	0.24	0.29
Pyridine, 2-(4-methylphenyl)-	4467-06-5	2	0	0.00074	0.0037	0	0.0013	0.021
Resorcinol	108-46-3	18	0	0.39	0.57	0.16	1.3	2.5
m-Tolualdehyde	620-23-5	19	0	5.7	6	4.6	15	19
TXIB "Kodaflex"	6846-50-0	1	0	0.041	0.25	0	0	1.5
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	14	0	0.079	0.11	0	0.28	0.41
Undecane	1120-21-4	5	0	0.28	0.72	0	2.1	2.7
Valeraldehyde	110-62-3	11	0	20	34	0	88	96
Non-Field-Related Chemicals								
Benzene	71-43-2	35	1.9	13	10	8.9	32	52
Benzene, 1,4-dichloro	106-46-7	7	0	0.4	0.88	0	2.5	2.5
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	34	0	12	13	8	36	44
2-Butoxyethanol	111-76-2	1	0	0.1	0.61	0	0	3.6
Cyclotrisiloxane, hexamethyl-	541-05-9	1	0	1.5	9.1	0	0	54
Decanal	112-31-2	7	0	0.59	2	0	2.2	12
Ethylbenzene	100-41-4	13	0	3.6	6.1	0	15	24
Heptane	142-82-5	20	0	4.8	7.2	0.93	20	31
Hexanal	66-25-1	30	0	17	21	7.7	64	83
Hexane	110-54-3	26	0	14	31	6.2	37	180
1-Hexanol, 2-ethyl-	104-76-7	6	0	0.16	0.42	0	0.83	1.9
Nonanal	124-19-6	2	0	0.16	0.67	0	0.86	2.9

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Phenol	108-95-2	18	0	1.2	1.5	0.72	4.3	4.3
Tetrachloroethylene	127-18-4	7	0	1	2.4	0	6.7	8.8
Tetradecane	629-59-4	3	0	0.17	0.6	0	1.5	3
m/p-Xylene	106-42-3	25	0	12	17	4.9	41	73
o-Xylene	95-47-6	13	0	4.1	6.8	0	16	27

[a] 35 field-specific $C_{inh\text{-}field}$ values are included in the table.
[b] On-Field field-specific Chronic $C_{inh\text{-}field}$ equals the modified field-specific average concentration of a field ($C_{air\text{-}field}$ x AF_{inh}) of a general chemical (see Section F.4.3 of this Appendix F).
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-171. **Off-Field** Field-Specific[a] Chronic Inhalation Exposure Concentration[b] for **All General Chemicals** (Chronic $C_{inh\text{-}field}$, nanograms per cubic meter)—Combined Gender **Spectators Third Trimester<0 Years**

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals								
Acenaphthylene	208-96-8	8	0	0.022	0.047	0	0.13	0.19
Acetone	67-64-1	8	0	0.15	0.29	0	0.52	1.2
Aniline	62-53-3	4	0	0.0041	0.013	0	0.028	0.057
Anthracene	120-12-7	11	0	0.0011	0.002	0	0.0054	0.0076
Anthracene, 2-methyl-	613-12-7	12	0	0.0017	0.0031	0	0.0072	0.014
Anthracene, 9,10-dimethyl	781-43-1	2	0	0.00077	0.0031	0	0.0051	0.013
Anthracene, 9-phenyl	602-55-1	0	0	0	0	0	0	0
Benz[a]anthracene	56-55-3	14	0	2	3.1	0	8	12
Benzaldehyde	100-52-7	6	0	0.34	0.83	0	2.1	3.4
Benzene, 1,2,3-trimethyl-	526-73-8	5	0	0.066	0.18	0	0.37	0.84
Benzene, 1,2,4,5-tetramethyl-	95-93-2	12	0	2.6	4.5	0	11	18
Benzene, 1,2,4-trimethyl-	95-63-6	7	0	0.12	0.28	0	0.7	1.1
Benzene, 1-ethyl-2,4-dimethyl-	874-41-9	11	0	0.17	0.34	0	0.71	1.6
Benzene, 2-ethyl-1,4-dimethyl-	1758-88-9	3	0	0.089	0.31	0	0.76	1.5
Benzene, butyl-	104-51-8	3	0	0.00079	0.0025	0	0.0086	0.0086
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	19	0	0.087	0.11	0.036	0.3	0.33
Benzo[b]fluoranthene	205-99-2	3	0	0.00065	0.0021	0	0.0072	0.0072
7H-Benzo[c]fluorene	205-12-9	6	0	0.00065	0.0015	0	0.0029	0.0068
Benzo[k]fluoranthene	207-08-9	2	0	0.1	0.4	0	0.59	1.7
Benzothiazole	95-16-9	15	0	0.0089	0.012	0	0.035	0.037

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Benzothiazole, 2-phenyl-	883-93-2	5	0	0.09	0.24	0	0.48	1.1
2-Benzothiazolone	934-34-9	3	0	0.084	0.27	0	0.92	0.92
Benzyl butyl phthalate	85-68-7	12	0	5.9	15	0	41	71
Butanal	123-72-8	14	0	3.1	5.4	0	12	24
Cyclopentasiloxane, decamethyl-	541-02-6	13	0	1.1	1.7	0	4.5	6.5
Cyclotetrasiloxane, octamethyl-	556-67-2	12	0	1.2	2	0	5	7.3
p-Cymene	99-87-6	13	0	0.01	0.017	0	0.046	0.07
Decane	124-18-5	9	0	0.0019	0.0041	0	0.012	0.015
Dibenz[a,h]anthracene	53-70-3	12	0	0.024	0.042	0	0.12	0.18
Dibenzothiophene	132-65-0	5	0	6.2	22	0	24	120
Dibutyl phthalate	84-74-2	2	0	0.22	0.89	0	1.5	3.7
Diethyl phthalate	84-66-2	14	0	0.32	0.52	0	1.5	1.9
Diisobutyl phthalate	84-69-5	6	0	0.3	0.66	0	1.7	1.7
Diisooctylphthalate	27554-26-3	3	0	0.002	0.0066	0	0.023	0.023
Di-n-octyl phthalate	117-84-0	3	0	0.18	0.61	0	1.6	2.4
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	26	0	0.81	1.4	0.3	3.1	6.4
3,5-di-tert-Butyl-4-hydroxybenzaldehyde	1620-98-0	3	0	0.23	0.8	0	1.7	4
Dodecane	112-40-3	14	0	0.046	0.085	0	0.22	0.39
Fluoranthene	206-44-0	11	0	0.1	0.22	0	0.45	1.1
Fluorene	86-73-7	21	0	0.78	1.2	0.61	2.8	5.6
Furan, 2-methyl	534-22-5	5	0	0.31	0.8	0	2.7	2.7
Heptanal	111-71-7	9	0	0.94	1.9	0	4	8.6
Hexadecane	544-76-3	12	0	0.28	0.54	0	1.3	2.2
2,5-Hexanedione	110-13-4	3	0	0.73	2.6	0	5.4	13
Indan	496-11-7	13	0	0.59	1	0	2.6	4.1
Mesitylene	108-67-8	16	0	1.4	1.9	0	4.6	8.3
Methacrolein	78-85-3	1	0	0.074	0.43	0	0	2.5
Methyl Isobutyl Ketone	108-10-1	9	0	0.6	1.2	0	2.7	5.3
Naphthalene	91-20-3	12	0	0.057	0.1	0	0.28	0.42
Naphthalene, 1,2-dimethyl-	573-98-8	12	0	0.44	0.73	0	2	2.4
Naphthalene, 1,6-dimethyl-	575-43-9	8	0	0.016	0.034	0	0.052	0.16
Naphthalene, 1-methyl-	90-12-0	12	0	0.043	0.074	0	0.21	0.3
Naphthalene, 2-(bromomethyl)-	939-26-4	12	0	0.73	1.2	0	3.4	4
Naphthalene, 2,3-dimethyl-	581-40-8	4	0	0.18	0.55	0	1.1	2.6
Naphthalene, 2-methyl-	91-57-6	16	0	0.9	1.3	0	3.5	5
1-Octadecene	112-88-9	14	0	0.084	0.13	0	0.38	0.39
Octanal	124-13-0	18	0	0.54	0.68	0.33	1.9	2.4

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Octane	111-65-9	12	0	0.22	0.46	0	1.4	1.9
17-Pentatriacontene	6971-40-0	1	0	0.01	0.059	0	0	0.34
N-Phenylbenzamide	93-98-1	9	0	1.5	2.8	0	7.3	10
Phenanthrene	85-01-8	13	0	0.02	0.034	0	0.1	0.13
Phenanthrene, 1-methyl	832-69-9	13	0	0.023	0.04	0	0.11	0.16
Phenanthrene, 2-methyl-	2531-84-2	14	0	0.033	0.056	0	0.16	0.21
Phenanthrene, 3-methyl	832-71-3	1	0	0.00011	0.00064	0	0	0.0037
Propionaldehyde	123-38-6	18	0	0.66	1.1	0.31	2.4	5.4
Pyrene	129-00-0	2	0	0.084	0.34	0	0.5	1.4
Pyridine, 2-(4-methylphenyl)-	4467-06-5	7	0	0.37	0.83	0	2.1	3.3
Resorcinol	108-46-3	34	0.58	5.4	5.9	2.7	16	22
m-Tolualdehyde	620-23-5	6	0	0.016	0.037	0	0.074	0.16
TXIB "Kodaflex"	6846-50-0	7	0	0.36	0.93	0	1.3	4.8
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	13	0	0.056	0.076	0	0.13	0.3
Undecane	1120-21-4	1	0	0.098	0.57	0	0	3.3
Valeraldehyde	110-62-3	34	3.7	13	11	8.2	31	56
Non-Field-Related Chemicals								
Benzene	71-43-2	1	0	0.35	2.1	0	0	12
Benzene, 1,4-dichloro	106-46-7	13	0	3.7	6.4	0	16	27
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	17	0	4.8	7.5	0.91	18	34
2-Butoxyethanol	111-76-2	3	0	1.6	6.1	0	11	33
Cyclotrisiloxane, hexamethyl-	541-05-9	27	0	18	25	8.8	59	120
Decanal	112-31-2	28	0	9.4	11	5.5	29	42
Ethylbenzene	100-41-4	24	0	13	18	4.8	45	71
Heptane	142-82-5	0	0	0	0	0	0	0
Hexanal	66-25-1	11	0	3.9	7.1	0	18	29
Hexane	110-54-3	12	0	1.1	1.7	0	4.3	4.3
1-Hexanol, 2-ethyl-	104-76-7	33	0	12	13	4.8	39	41
Nonanal	124-19-6	2	0	0.13	0.55	0	0.51	2.9
Phenol	108-95-2	34	4.1	29	32	15	83	150
Tetrachloroethylene	127-18-4	11	0	0.2	0.38	0	0.79	1.7
Tetradecane	629-59-4	7	0	0.76	1.6	0	4.8	4.8
m/p-Xylene	106-42-3	7	0	1	2.3	0	6.7	8.6
o-Xylene	95-47-6	11	0	2.1	8.3	0	6.9	48

[a] 35 field-specific $C_{inh\text{-}field}$ values are included in the table.
[b] Off-Field field-specific Chronic $C_{inh\text{-}field}$ equals the modified field-specific average concentration of a field ($C_{air\text{-}field}$ x AF_{inh}) of a general chemical (see Section F.4.3 of this Appendix F).
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-172. **Off-Field** Field-Specific[a] Chronic Inhalation Exposure Concentration[b] for **All General Chemicals** (Chronic $C_{inh\text{-}field}$, nanograms per cubic meter)—Combined Gender **Spectators 0<2 Years**

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals								
Acenaphthylene	208-96-8	8	0	0.18	0.38	0	1	1.6
Acetone	67-64-1	8	0	1.2	2.3	0	4.2	9.9
Aniline	62-53-3	4	0	0.033	0.1	0	0.23	0.46
Anthracene	120-12-7	11	0	0.0087	0.016	0	0.044	0.061
Anthracene, 2-methyl-	613-12-7	12	0	0.014	0.025	0	0.058	0.11
Anthracene, 9,10-dimethyl	781-43-1	2	0	0.0062	0.025	0	0.041	0.1
Anthracene, 9-phenyl	602-55-1	0	0	0	0	0	0	0
Benz[a]anthracene	56-55-3	14	0	16	25	0	64	97
Benzaldehyde	100-52-7	6	0	2.8	6.7	0	17	27
Benzene, 1,2,3-trimethyl-	526-73-8	5	0	0.53	1.5	0	3	6.8
Benzene, 1,2,4,5-tetramethyl-	95-93-2	12	0	21	36	0	90	150
Benzene, 1,2,4-trimethyl-	95-63-6	7	0	0.99	2.3	0	5.6	8.6
Benzene, 1-ethyl-2,4-dimethyl-	874-41-9	11	0	1.4	2.8	0	5.8	13
Benzene, 2-ethyl-1,4-dimethyl-	1758-88-9	3	0	0.72	2.5	0	6.1	12
Benzene, butyl-	104-51-8	3	0	0.0063	0.02	0	0.069	0.069
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	19	0	0.7	0.9	0.29	2.4	2.7
Benzo[b]fluoranthene	205-99-2	3	0	0.0052	0.017	0	0.058	0.058
7H-Benzo[c]fluorene	205-12-9	6	0	0.0052	0.012	0	0.023	0.055
Benzo[k]fluoranthene	207-08-9	2	0	0.8	3.3	0	4.8	14
Benzothiazole	95-16-9	15	0	0.071	0.099	0	0.28	0.3
Benzothiazole, 2-phenyl-	883-93-2	5	0	0.73	1.9	0	3.9	8.5
2-Benzothiazolone	934-34-9	3	0	0.67	2.2	0	7.4	7.4
Benzyl butyl phthalate	85-68-7	12	0	47	120	0	330	570
Butanal	123-72-8	14	0	25	44	0	99	200
Cyclopentasiloxane, decamethyl-	541-02-6	13	0	8.6	14	0	36	53
Cyclotetrasiloxane, octamethyl-	556-67-2	12	0	10	16	0	40	59
p-Cymene	99-87-6	13	0	0.082	0.14	0	0.37	0.57
Decane	124-18-5	9	0	0.015	0.033	0	0.096	0.12
Dibenz[a,h]anthracene	53-70-3	12	0	0.19	0.34	0	0.95	1.4
Dibenzothiophene	132-65-0	5	0	50	180	0	190	970
Dibutyl phthalate	84-74-2	2	0	1.8	7.2	0	12	30

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Diethyl phthalate	84-66-2	14	0	2.5	4.2	0	12	15
Diisobutyl phthalate	84-69-5	6	0	2.4	5.3	0	13	13
Diisooctylphthalate	27554-26-3	3	0	0.016	0.053	0	0.18	0.18
Di-n-octyl phthalate	117-84-0	3	0	1.4	4.9	0	13	20
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	26	0	6.5	11	2.4	25	51
3,5-di-tert-Butyl-4-hydroxybenzaldehyde	1620-98-0	3	0	1.8	6.4	0	14	32
Dodecane	112-40-3	14	0	0.37	0.68	0	1.7	3.1
Fluoranthene	206-44-0	11	0	0.83	1.8	0	3.6	8.8
Fluorene	86-73-7	21	0	6.3	10	4.9	23	45
Furan, 2-methyl	534-22-5	5	0	2.5	6.5	0	21	21
Heptanal	111-71-7	9	0	7.6	16	0	32	69
Hexadecane	544-76-3	12	0	2.2	4.3	0	10	18
2,5-Hexanedione	110-13-4	3	0	5.9	21	0	44	110
Indan	496-11-7	13	0	4.7	8.2	0	21	33
Mesitylene	108-67-8	16	0	12	16	0	37	67
Methacrolein	78-85-3	1	0	0.59	3.5	0	0	20
Methyl Isobutyl Ketone	108-10-1	9	0	4.8	9.7	0	22	42
Naphthalene	91-20-3	12	0	0.46	0.82	0	2.3	3.4
Naphthalene, 1,2-dimethyl-	573-98-8	12	0	3.6	5.8	0	16	19
Naphthalene, 1,6-dimethyl-	575-43-9	8	0	0.13	0.27	0	0.42	1.3
Naphthalene, 1-methyl-	90-12-0	12	0	0.34	0.6	0	1.7	2.4
Naphthalene, 2-(bromomethyl)-	939-26-4	12	0	5.8	9.8	0	28	32
Naphthalene, 2,3-dimethyl-	581-40-8	4	0	1.5	4.4	0	9.2	21
Naphthalene, 2-methyl-	91-57-6	16	0	7.2	10	0	28	40
1-Octadecene	112-88-9	14	0	0.67	1	0	3	3.2
Octanal	124-13-0	18	0	4.3	5.5	2.6	15	20
Octane	111-65-9	12	0	1.8	3.7	0	11	15
17-Pentatriacontene	6971-40-0	1	0	0.083	0.48	0	0	2.7
N-Phenylbenzamide	93-98-1	9	0	12	22	0	58	80
Phenanthrene	85-01-8	13	0	0.16	0.28	0	0.8	1
Phenanthrene, 1-methyl	832-69-9	13	0	0.18	0.32	0	0.86	1.3
Phenanthrene, 2-methyl-	2531-84-2	14	0	0.26	0.45	0	1.3	1.7
Phenanthrene, 3-methyl	832-71-3	1	0	0.00089	0.0051	0	0	0.029
Propionaldehyde	123-38-6	18	0	5.3	9	2.5	20	43
Pyrene	129-00-0	2	0	0.67	2.7	0	4	11
Pyridine, 2-(4-methylphenyl)-	4467-06-5	7	0	3	6.6	0	17	27

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Resorcinol	108-46-3	34	4.6	44	47	22	130	180
m-Tolualdehyde	620-23-5	6	0	0.13	0.3	0	0.6	1.3
TXIB "Kodaflex"	6846-50-0	7	0	2.9	7.5	0	10	39
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	13	0	0.45	0.61	0	1	2.4
Undecane	1120-21-4	1	0	0.79	4.6	0	0	27
Valeraldehyde	110-62-3	34	30	110	88	66	250	450
Non-Field-Related Chemicals								
Benzene	71-43-2	1	0	2.8	17	0	0	97
Benzene, 1,4-dichloro	106-46-7	13	0	30	52	0	130	220
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	17	0	38	60	7.4	150	280
2-Butoxyethanol	111-76-2	3	0	13	49	0	87	260
Cyclotrisiloxane, hexamethyl-	541-05-9	27	0	140	200	71	480	960
Decanal	112-31-2	28	0	76	85	44	240	340
Ethylbenzene	100-41-4	24	0	100	150	39	370	570
Heptane	142-82-5	0	0	0	0	0	0	0
Hexanal	66-25-1	11	0	32	57	0	140	230
Hexane	110-54-3	12	0	8.8	14	0	34	34
1-Hexanol, 2-ethyl-	104-76-7	33	0	96	110	38	320	330
Nonanal	124-19-6	2	0	1	4.5	0	4.1	24
Phenol	108-95-2	34	33	230	260	120	670	1200
Tetrachloroethylene	127-18-4	11	0	1.6	3.1	0	6.3	14
Tetradecane	629-59-4	7	0	6.1	13	0	39	39
m/p-Xylene	106-42-3	7	0	8.2	19	0	54	69
o-Xylene	95-47-6	11	0	17	66	0	55	380

[a] 35 field-specific $C_{inh\text{-}field}$ values are included in the table.
[b] Off-Field field-specific Chronic $C_{inh\text{-}field}$ equals the modified field-specific average concentration of a field ($C_{air\text{-}field}$ x AF_{inh}) of a general chemical (see Section F.4.3 of this Appendix F).
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-173. **Off-Field** Field-Specific[a] Chronic Inhalation Exposure Concentration[b] for **All General Chemicals** (Chronic $C_{inh\text{-}field}$, nanograms per cubic meter)—Combined Gender **Spectators 2<6 Years**

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals								
Acenaphthylene	208-96-8	8	0	0.092	0.2	0	0.53	0.82
Acetone	67-64-1	8	0	0.62	1.2	0	2.2	5.2
Aniline	62-53-3	4	0	0.018	0.054	0	0.12	0.24

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Anthracene	120-12-7	11	0	0.0046	0.0085	0	0.023	0.032
Anthracene, 2-methyl-	613-12-7	12	0	0.0073	0.013	0	0.031	0.058
Anthracene, 9,10-dimethyl	781-43-1	2	0	0.0032	0.013	0	0.021	0.054
Anthracene, 9-phenyl	602-55-1	0	0	0	0	0	0	0
Benz[a]anthracene	56-55-3	14	0	8.5	13	0	34	51
Benzaldehyde	100-52-7	6	0	1.5	3.5	0	8.8	14
Benzene, 1,2,3-trimethyl-	526-73-8	5	0	0.28	0.77	0	1.6	3.6
Benzene, 1,2,4,5-tetramethyl-	95-93-2	12	0	11	19	0	47	77
Benzene, 1,2,4-trimethyl-	95-63-6	7	0	0.52	1.2	0	3	4.5
Benzene, 1-ethyl-2,4-dimethyl-	874-41-9	11	0	0.73	1.5	0	3	6.8
Benzene, 2-ethyl-1,4-dimethyl-	1758-88-9	3	0	0.38	1.3	0	3.2	6.4
Benzene, butyl-	104-51-8	3	0	0.0033	0.011	0	0.037	0.037
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	19	0	0.37	0.48	0.15	1.3	1.4
Benzo[b]fluoranthene	205-99-2	3	0	0.0028	0.0088	0	0.03	0.03
7H-Benzo[c]fluorene	205-12-9	6	0	0.0027	0.0065	0	0.012	0.029
Benzo[k]fluoranthene	207-08-9	2	0	0.42	1.7	0	2.5	7.2
Benzothiazole	95-16-9	15	0	0.037	0.052	0	0.15	0.16
Benzothiazole, 2-phenyl-	883-93-2	5	0	0.38	1	0	2	4.5
2-Benzothiazolone	934-34-9	3	0	0.35	1.1	0	3.9	3.9
Benzyl butyl phthalate	85-68-7	12	0	25	65	0	170	300
Butanal	123-72-8	14	0	13	23	0	52	100
Cyclopentasiloxane, decamethyl-	541-02-6	13	0	4.5	7.2	0	19	28
Cyclotetrasiloxane, octamethyl-	556-67-2	12	0	5.2	8.6	0	21	31
p-Cymene	99-87-6	13	0	0.043	0.073	0	0.2	0.3
Decane	124-18-5	9	0	0.0078	0.017	0	0.05	0.064
Dibenz[a,h]anthracene	53-70-3	12	0	0.1	0.18	0	0.5	0.75
Dibenzothiophene	132-65-0	5	0	26	92	0	100	510
Dibutyl phthalate	84-74-2	2	0	0.94	3.8	0	6.2	16
Diethyl phthalate	84-66-2	14	0	1.3	2.2	0	6.4	7.9
Diisobutyl phthalate	84-69-5	6	0	1.3	2.8	0	7.1	7.1
Diisooctylphthalate	27554-26-3	3	0	0.0087	0.028	0	0.095	0.095
Di-n-octyl phthalate	117-84-0	3	0	0.76	2.6	0	6.9	10
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	26	0	3.4	5.7	1.3	13	27
3,5-di-tert-Butyl-4-hydroxybenzaldehyde	1620-98-0	3	0	0.96	3.4	0	7.4	17
Dodecane	112-40-3	14	0	0.19	0.36	0	0.91	1.6
Fluoranthene	206-44-0	11	0	0.43	0.93	0	1.9	4.6

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Fluorene	86-73-7	21	0	3.3	5.2	2.6	12	24
Furan, 2-methyl	534-22-5	5	0	1.3	3.4	0	11	11
Heptanal	111-71-7	9	0	4	8.2	0	17	36
Hexadecane	544-76-3	12	0	1.2	2.3	0	5.5	9.3
2,5-Hexanedione	110-13-4	3	0	3.1	11	0	23	56
Indan	496-11-7	13	0	2.5	4.3	0	11	17
Mesitylene	108-67-8	16	0	6.1	8.2	0	19	35
Methacrolein	78-85-3	1	0	0.31	1.8	0	0	11
Methyl Isobutyl Ketone	108-10-1	9	0	2.5	5.1	0	11	22
Naphthalene	91-20-3	12	0	0.24	0.43	0	1.2	1.8
Naphthalene, 1,2-dimethyl-	573-98-8	12	0	1.9	3.1	0	8.4	10
Naphthalene, 1,6-dimethyl-	575-43-9	8	0	0.067	0.14	0	0.22	0.68
Naphthalene, 1-methyl-	90-12-0	12	0	0.18	0.31	0	0.87	1.3
Naphthalene, 2-(bromomethyl)-	939-26-4	12	0	3.1	5.1	0	15	17
Naphthalene, 2,3-dimethyl-	581-40-8	4	0	0.77	2.3	0	4.8	11
Naphthalene, 2-methyl-	91-57-6	16	0	3.8	5.5	0	15	21
1-Octadecene	112-88-9	14	0	0.35	0.53	0	1.6	1.7
Octanal	124-13-0	18	0	2.3	2.9	1.4	8	10
Octane	111-65-9	12	0	0.94	2	0	5.8	8
17-Pentatriacontene	6971-40-0	1	0	0.044	0.25	0	0	1.4
N-Phenylbenzamide	93-98-1	9	0	6.3	12	0	31	42
Phenanthrene	85-01-8	13	0	0.083	0.15	0	0.42	0.55
Phenanthrene, 1-methyl	832-69-9	13	0	0.095	0.17	0	0.45	0.67
Phenanthrene, 2-methyl-	2531-84-2	14	0	0.14	0.24	0	0.67	0.89
Phenanthrene, 3-methyl	832-71-3	1	0	0.00047	0.0027	0	0	0.015
Propionaldehyde	123-38-6	18	0	2.8	4.8	1.3	10	23
Pyrene	129-00-0	2	0	0.35	1.4	0	2.1	6
Pyridine, 2-(4-methylphenyl)-	4467-06-5	7	0	1.6	3.5	0	8.8	14
Resorcinol	108-46-3	34	2.4	23	25	11	69	95
m-Tolualdehyde	620-23-5	6	0	0.068	0.16	0	0.31	0.66
TXIB "Kodaflex"	6846-50-0	7	0	1.5	3.9	0	5.3	20
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	13	0	0.24	0.32	0	0.54	1.3
Undecane	1120-21-4	1	0	0.41	2.4	0	0	14
Valeraldehyde	110-62-3	34	16	55	46	34	130	240
Non-Field-Related Chemicals								
Benzene	71-43-2	1	0	1.5	8.7	0	0	51
Benzene, 1,4-dichloro	106-46-7	13	0	16	27	0	69	110
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	17	0	20	32	3.9	78	150

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
2-Butoxyethanol	111-76-2	3	0	6.8	26	0	46	140
Cyclotrisiloxane, hexamethyl-	541-05-9	27	0	75	110	37	250	500
Decanal	112-31-2	28	0	40	45	23	120	180
Ethylbenzene	100-41-4	24	0	54	77	20	190	300
Heptane	142-82-5	0	0	0	0	0	0	0
Hexanal	66-25-1	11	0	17	30	0	74	120
Hexane	110-54-3	12	0	4.6	7.1	0	18	18
1-Hexanol, 2-ethyl-	104-76-7	33	0	50	55	20	170	170
Nonanal	124-19-6	2	0	0.55	2.3	0	2.2	12
Phenol	108-95-2	34	17	120	140	62	350	620
Tetrachloroethylene	127-18-4	11	0	0.86	1.6	0	3.3	7.3
Tetradecane	629-59-4	7	0	3.2	7	0	20	20
m/p-Xylene	106-42-3	7	0	4.3	9.9	0	29	36
o-Xylene	95-47-6	11	0	8.8	35	0	29	200

[a] 35 field-specific $C_{inh\text{-}field}$ values are included in the table.
[b] Off-Field field-specific Chronic $C_{inh\text{-}field}$ equals the modified field-specific average concentration of a field ($C_{air\text{-}field}$ x AF_{inh}) of a general chemical (see Section F.4.3 of this Appendix F).
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-174. **Off-Field** Field-Specific[a] Chronic Inhalation Exposure Concentration[b] for **All General Chemicals** (Chronic $C_{inh\text{-}field}$, nanograms per cubic meter)—Combined Gender **Spectators 6<11 Years**

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals								
Acenaphthylene	208-96-8	8	0	0.088	0.19	0	0.51	0.79
Acetone	67-64-1	8	0	0.6	1.2	0	2.1	5
Aniline	62-53-3	4	0	0.017	0.051	0	0.11	0.23
Anthracene	120-12-7	11	0	0.0044	0.0081	0	0.022	0.031
Anthracene, 2-methyl-	613-12-7	12	0	0.007	0.012	0	0.029	0.056
Anthracene, 9,10-dimethyl	781-43-1	2	0	0.0031	0.012	0	0.02	0.051
Anthracene, 9-phenyl	602-55-1	0	0	0	0	0	0	0
Benz[a]anthracene	56-55-3	14	0	8.1	12	0	32	49
Benzaldehyde	100-52-7	6	0	1.4	3.3	0	8.4	14
Benzene, 1,2,3-trimethyl-	526-73-8	5	0	0.26	0.74	0	1.5	3.4
Benzene, 1,2,4,5-tetramethyl-	95-93-2	12	0	11	18	0	45	74
Benzene, 1,2,4-trimethyl-	95-63-6	7	0	0.5	1.1	0	2.8	4.3
Benzene, 1-ethyl-2,4-dimethyl-	874-41-9	11	0	0.7	1.4	0	2.9	6.4

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Benzene, 2-ethyl-1,4-dimethyl-	1758-88-9	3	0	0.36	1.2	0	3.1	6.1
Benzene, butyl-	104-51-8	3	0	0.0032	0.01	0	0.035	0.035
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	19	0	0.35	0.45	0.15	1.2	1.3
Benzo[b]fluoranthene	205-99-2	3	0	0.0026	0.0084	0	0.029	0.029
7H-Benzo[c]fluorene	205-12-9	6	0	0.0026	0.0062	0	0.012	0.028
Benzo[k]fluoranthene	207-08-9	2	0	0.4	1.6	0	2.4	6.8
Benzothiazole	95-16-9	15	0	0.036	0.049	0	0.14	0.15
Benzothiazole, 2-phenyl-	883-93-2	5	0	0.36	0.95	0	1.9	4.3
2-Benzothiazolone	934-34-9	3	0	0.34	1.1	0	3.7	3.7
Benzyl butyl phthalate	85-68-7	12	0	24	62	0	160	290
Butanal	123-72-8	14	0	12	22	0	50	98
Cyclopentasiloxane, decamethyl-	541-02-6	13	0	4.3	6.9	0	18	26
Cyclotetrasiloxane, octamethyl-	556-67-2	12	0	5	8.2	0	20	29
p-Cymene	99-87-6	13	0	0.041	0.069	0	0.19	0.28
Decane	124-18-5	9	0	0.0075	0.017	0	0.048	0.061
Dibenz[a,h]anthracene	53-70-3	12	0	0.098	0.17	0	0.47	0.71
Dibenzothiophene	132-65-0	5	0	25	88	0	97	480
Dibutyl phthalate	84-74-2	2	0	0.9	3.6	0	5.9	15
Diethyl phthalate	84-66-2	14	0	1.3	2.1	0	6.1	7.6
Diisobutyl phthalate	84-69-5	6	0	1.2	2.6	0	6.7	6.7
Diisooctylphthalate	27554-26-3	3	0	0.0083	0.027	0	0.091	0.091
Di-n-octyl phthalate	117-84-0	3	0	0.72	2.5	0	6.6	9.8
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	26	0	3.3	5.5	1.2	13	26
3,5-di-tert-Butyl-4-hydroxybenzaldehyde	1620-98-0	3	0	0.91	3.2	0	7	16
Dodecane	112-40-3	14	0	0.19	0.34	0	0.87	1.6
Fluoranthene	206-44-0	11	0	0.41	0.89	0	1.8	4.4
Fluorene	86-73-7	21	0	3.2	5	2.5	11	22
Furan, 2-methyl	534-22-5	5	0	1.3	3.2	0	11	11
Heptanal	111-71-7	9	0	3.8	7.8	0	16	35
Hexadecane	544-76-3	12	0	1.1	2.2	0	5.2	8.8
2,5-Hexanedione	110-13-4	3	0	2.9	10	0	22	53
Indan	496-11-7	13	0	2.4	4.1	0	11	17
Mesitylene	108-67-8	16	0	5.8	7.8	0	19	33
Methacrolein	78-85-3	1	0	0.3	1.7	0	0	10
Methyl Isobutyl Ketone	108-10-1	9	0	2.4	4.9	0	11	21
Naphthalene	91-20-3	12	0	0.23	0.41	0	1.1	1.7

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Naphthalene, 1,2-dimethyl-	573-98-8	12	0	1.8	2.9	0	8	9.6
Naphthalene, 1,6-dimethyl-	575-43-9	8	0	0.064	0.14	0	0.21	0.65
Naphthalene, 1-methyl-	90-12-0	12	0	0.17	0.3	0	0.83	1.2
Naphthalene, 2-(bromomethyl)-	939-26-4	12	0	2.9	4.9	0	14	16
Naphthalene, 2,3-dimethyl-	581-40-8	4	0	0.74	2.2	0	4.6	11
Naphthalene, 2-methyl-	91-57-6	16	0	3.6	5.3	0	14	20
1-Octadecene	112-88-9	14	0	0.34	0.51	0	1.5	1.6
Octanal	124-13-0	18	0	2.2	2.7	1.3	7.6	9.9
Octane	111-65-9	12	0	0.9	1.9	0	5.6	7.7
17-Pentatriacontene	6971-40-0	1	0	0.042	0.24	0	0	1.4
N-Phenylbenzamide	93-98-1	9	0	6	11	0	29	40
Phenanthrene	85-01-8	13	0	0.08	0.14	0	0.4	0.52
Phenanthrene, 1-methyl	832-69-9	13	0	0.091	0.16	0	0.43	0.64
Phenanthrene, 2-methyl-	2531-84-2	14	0	0.13	0.23	0	0.64	0.85
Phenanthrene, 3-methyl	832-71-3	1	0	0.00045	0.0026	0	0	0.015
Propionaldehyde	123-38-6	18	0	2.7	4.5	1.3	9.9	22
Pyrene	129-00-0	2	0	0.34	1.4	0	2	5.8
Pyridine, 2-(4-methylphenyl)-	4467-06-5	7	0	1.5	3.3	0	8.4	13
Resorcinol	108-46-3	34	2.3	22	24	11	66	90
m-Tolualdehyde	620-23-5	6	0	0.065	0.15	0	0.3	0.63
TXIB "Kodaflex"	6846-50-0	7	0	1.5	3.7	0	5	20
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	13	0	0.22	0.31	0	0.51	1.2
Undecane	1120-21-4	1	0	0.4	2.3	0	0	13
Valeraldehyde	110-62-3	34	15	53	44	33	130	230
Non-Field-Related Chemicals								
Benzene	71-43-2	1	0	1.4	8.3	0	0	48
Benzene, 1,4-dichloro	106-46-7	13	0	15	26	0	66	110
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	17	0	19	30	3.7	75	140
2-Butoxyethanol	111-76-2	3	0	6.4	24	0	44	130
Cyclotrisiloxane, hexamethyl-	541-05-9	27	0	72	100	35	240	480
Decanal	112-31-2	28	0	38	43	22	120	170
Ethylbenzene	100-41-4	24	0	51	73	20	180	280
Heptane	142-82-5	0	0	0	0	0	0	0
Hexanal	66-25-1	11	0	16	29	0	71	120
Hexane	110-54-3	12	0	4.4	6.8	0	17	17
1-Hexanol, 2-ethyl-	104-76-7	33	0	48	53	19	160	160
Nonanal	124-19-6	2	0	0.52	2.2	0	2.1	12

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Phenol	108-95-2	34	17	120	130	59	340	590
Tetrachloroethylene	127-18-4	11	0	0.82	1.6	0	3.2	7
Tetradecane	629-59-4	7	0	3.1	6.7	0	20	20
m/p-Xylene	106-42-3	7	0	4.1	9.4	0	27	35
o-Xylene	95-47-6	11	0	8.4	33	0	28	190

[a] 35 field-specific $C_{inh\text{-}field}$ values are included in the table.
[b] Off-Field field-specific Chronic $C_{inh\text{-}field}$ equals the modified field-specific average concentration of a field ($C_{air\text{-}field}$ x AF_{inh}) of a general chemical (see Section F.4.3 of this Appendix F).
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-175. **Off-Field** Field-Specific[a] Chronic Inhalation Exposure Concentration[b] for **All General Chemicals** (Chronic $C_{inh\text{-}field}$, nanograms per cubic meter)—Combined Gender **Spectators 11<16 Years**

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals								
Acenaphthylene	208-96-8	8	0	0.038	0.082	0	0.22	0.34
Acetone	67-64-1	8	0	0.26	0.5	0	0.91	2.1
Aniline	62-53-3	4	0	0.0072	0.022	0	0.049	0.1
Anthracene	120-12-7	11	0	0.0019	0.0035	0	0.0095	0.013
Anthracene, 2-methyl-	613-12-7	12	0	0.003	0.0053	0	0.013	0.024
Anthracene, 9,10-dimethyl	781-43-1	2	0	0.0013	0.0053	0	0.0088	0.022
Anthracene, 9-phenyl	602-55-1	0	0	0	0	0	0	0
Benz[a]anthracene	56-55-3	14	0	3.5	5.4	0	14	21
Benzaldehyde	100-52-7	6	0	0.6	1.4	0	3.6	5.9
Benzene, 1,2,3-trimethyl-	526-73-8	5	0	0.11	0.32	0	0.65	1.5
Benzene, 1,2,4,5-tetramethyl-	95-93-2	12	0	4.6	7.8	0	20	32
Benzene, 1,2,4-trimethyl-	95-63-6	7	0	0.21	0.49	0	1.2	1.9
Benzene, 1-ethyl-2,4-dimethyl-	874-41-9	11	0	0.3	0.6	0	1.2	2.8
Benzene, 2-ethyl-1,4-dimethyl-	1758-88-9	3	0	0.16	0.54	0	1.3	2.6
Benzene, butyl-	104-51-8	3	0	0.0014	0.0044	0	0.015	0.015
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	19	0	0.15	0.2	0.063	0.52	0.58
Benzo[b]fluoranthene	205-99-2	3	0	0.0011	0.0036	0	0.012	0.012
7H-Benzo[c]fluorene	205-12-9	6	0	0.0011	0.0027	0	0.005	0.012
Benzo[k]fluoranthene	207-08-9	2	0	0.17	0.7	0	1	3
Benzothiazole	95-16-9	15	0	0.015	0.021	0	0.061	0.064
Benzothiazole, 2-phenyl-	883-93-2	5	0	0.16	0.41	0	0.84	1.8
2-Benzothiazolone	934-34-9	3	0	0.15	0.47	0	1.6	1.6
Benzyl butyl phthalate	85-68-7	12	0	10	27	0	71	120

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Butanal	123-72-8	14	0	5.3	9.5	0	21	42
Cyclopentasiloxane, decamethyl-	541-02-6	13	0	1.9	3	0	7.8	11
Cyclotetrasiloxane, octamethyl-	556-67-2	12	0	2.2	3.5	0	8.7	13
p-Cymene	99-87-6	13	0	0.018	0.03	0	0.081	0.12
Decane	124-18-5	9	0	0.0032	0.0072	0	0.021	0.026
Dibenz[a,h]anthracene	53-70-3	12	0	0.042	0.074	0	0.2	0.31
Dibenzothiophene	132-65-0	5	0	11	38	0	42	210
Dibutyl phthalate	84-74-2	2	0	0.39	1.6	0	2.6	6.4
Diethyl phthalate	84-66-2	14	0	0.55	0.91	0	2.6	3.3
Diisobutyl phthalate	84-69-5	6	0	0.53	1.1	0	2.9	2.9
Diisooctylphthalate	27554-26-3	3	0	0.0036	0.011	0	0.039	0.039
Di-n-octyl phthalate	117-84-0	3	0	0.31	1.1	0	2.9	4.2
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	26	0	1.4	2.4	0.52	5.4	11
3,5-di-tert-Butyl-4-hydroxybenzaldehyde	1620-98-0	3	0	0.4	1.4	0	3	7
Dodecane	112-40-3	14	0	0.08	0.15	0	0.38	0.67
Fluoranthene	206-44-0	11	0	0.18	0.38	0	0.78	1.9
Fluorene	86-73-7	21	0	1.4	2.2	1.1	4.9	9.7
Furan, 2-methyl	534-22-5	5	0	0.54	1.4	0	4.6	4.6
Heptanal	111-71-7	9	0	1.6	3.4	0	7	15
Hexadecane	544-76-3	12	0	0.48	0.94	0	2.3	3.8
2,5-Hexanedione	110-13-4	3	0	1.3	4.5	0	9.5	23
Indan	496-11-7	13	0	1	1.8	0	4.6	7.2
Mesitylene	108-67-8	16	0	2.5	3.4	0	8	14
Methacrolein	78-85-3	1	0	0.13	0.75	0	0	4.4
Methyl Isobutyl Ketone	108-10-1	9	0	1	2.1	0	4.7	9.2
Naphthalene	91-20-3	12	0	0.099	0.18	0	0.49	0.73
Naphthalene, 1,2-dimethyl-	573-98-8	12	0	0.77	1.3	0	3.5	4.1
Naphthalene, 1,6-dimethyl-	575-43-9	8	0	0.028	0.059	0	0.09	0.28
Naphthalene, 1-methyl-	90-12-0	12	0	0.075	0.13	0	0.36	0.52
Naphthalene, 2-(bromomethyl)-	939-26-4	12	0	1.3	2.1	0	6	7
Naphthalene, 2,3-dimethyl-	581-40-8	4	0	0.32	0.96	0	2	4.6
Naphthalene, 2-methyl-	91-57-6	16	0	1.6	2.3	0	6.1	8.7
1-Octadecene	112-88-9	14	0	0.15	0.22	0	0.66	0.68
Octanal	124-13-0	18	0	0.94	1.2	0.57	3.3	4.3
Octane	111-65-9	12	0	0.39	0.81	0	2.4	3.3
17-Pentatriacontene	6971-40-0	1	0	0.018	0.1	0	0	0.6
N-Phenylbenzamide	93-98-1	9	0	2.6	4.8	0	13	17
Phenanthrene	85-01-8	13	0	0.034	0.06	0	0.17	0.23

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Phenanthrene, 1-methyl	832-69-9	13	0	0.039	0.069	0	0.19	0.28
Phenanthrene, 2-methyl-	2531-84-2	14	0	0.057	0.097	0	0.28	0.37
Phenanthrene, 3-methyl	832-71-3	1	0	0.00019	0.0011	0	0	0.0064
Propionaldehyde	123-38-6	18	0	1.2	2	0.54	4.3	9.4
Pyrene	129-00-0	2	0	0.15	0.59	0	0.87	2.5
Pyridine, 2-(4-methylphenyl)-	4467-06-5	7	0	0.65	1.4	0	3.6	5.7
Resorcinol	108-46-3	34	1	9.5	10	4.7	29	39
m-Tolualdehyde	620-23-5	6	0	0.028	0.064	0	0.13	0.27
TXIB "Kodaflex"	6846-50-0	7	0	0.63	1.6	0	2.2	8.4
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	13	0	0.097	0.13	0	0.22	0.53
Undecane	1120-21-4	1	0	0.17	0.99	0	0	5.8
Valeraldehyde	110-62-3	34	6.5	23	19	14	54	98
Non-Field-Related Chemicals								
Benzene	71-43-2	1	0	0.62	3.6	0	0	21
Benzene, 1,4-dichloro	106-46-7	13	0	6.5	11	0	29	47
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	17	0	8.3	13	1.6	32	60
2-Butoxyethanol	111-76-2	3	0	2.8	11	0	19	57
Cyclotrisiloxane, hexamethyl-	541-05-9	27	0	31	43	15	100	210
Decanal	112-31-2	28	0	16	18	9.6	51	73
Ethylbenzene	100-41-4	24	0	22	32	8.4	79	120
Heptane	142-82-5	0	0	0	0	0	0	0
Hexanal	66-25-1	11	0	6.8	12	0	31	50
Hexane	110-54-3	12	0	1.9	2.9	0	7.4	7.4
1-Hexanol, 2-ethyl-	104-76-7	33	0	21	23	8.3	69	71
Nonanal	124-19-6	2	0	0.23	0.97	0	0.89	5.1
Phenol	108-95-2	34	7.2	50	56	25	140	260
Tetrachloroethylene	127-18-4	11	0	0.35	0.67	0	1.4	3
Tetradecane	629-59-4	7	0	1.3	2.9	0	8.4	8.4
m/p-Xylene	106-42-3	7	0	1.8	4.1	0	12	15
o-Xylene	95-47-6	11	0	3.6	14	0	12	83

[a] 35 field-specific $C_{inh\text{-}field}$ values are included in the table.
[b] Off-Field field-specific Chronic $C_{inh\text{-}field}$ equals the modified field-specific average concentration of a field ($C_{air\text{-}field}$ x AF_{inh}) of a general chemical (see Section F.4.3 of this Appendix F).
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-176. **Off-Field** Field-Specific[a] Chronic Inhalation Exposure Concentration[b] for **All General Chemicals** (Chronic $C_{inh\text{-}field}$, nanograms per cubic meter)—Combined Gender **Spectators 16<30 Years**

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals								
Acenaphthylene	208-96-8	8	0	0.025	0.054	0	0.14	0.22
Acetone	67-64-1	8	0	0.17	0.33	0	0.6	1.4
Aniline	62-53-3	4	0	0.0048	0.015	0	0.032	0.066
Anthracene	120-12-7	11	0	0.0012	0.0023	0	0.0063	0.0087
Anthracene, 2-methyl-	613-12-7	12	0	0.002	0.0035	0	0.0083	0.016
Anthracene, 9,10-dimethyl	781-43-1	2	0	0.00088	0.0035	0	0.0058	0.015
Anthracene, 9-phenyl	602-55-1	0	0	0	0	0	0	0
Benz[a]anthracene	56-55-3	14	0	2.3	3.5	0	9.2	14
Benzaldehyde	100-52-7	6	0	0.4	0.95	0	2.4	3.9
Benzene, 1,2,3-trimethyl-	526-73-8	5	0	0.075	0.21	0	0.43	0.97
Benzene, 1,2,4,5-tetramethyl-	95-93-2	12	0	3	5.2	0	13	21
Benzene, 1,2,4-trimethyl-	95-63-6	7	0	0.14	0.33	0	0.8	1.2
Benzene, 1-ethyl-2,4-dimethyl-	874-41-9	11	0	0.2	0.39	0	0.82	1.8
Benzene, 2-ethyl-1,4-dimethyl-	1758-88-9	3	0	0.1	0.36	0	0.87	1.7
Benzene, butyl-	104-51-8	3	0	0.0009	0.0029	0	0.0099	0.0099
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	19	0	0.099	0.13	0.042	0.34	0.38
Benzo[b]fluoranthene	205-99-2	3	0	0.00075	0.0024	0	0.0082	0.0082
7H-Benzo[c]fluorene	205-12-9	6	0	0.00074	0.0018	0	0.0033	0.0079
Benzo[k]fluoranthene	207-08-9	2	0	0.11	0.46	0	0.68	1.9
Benzothiazole	95-16-9	15	0	0.01	0.014	0	0.041	0.042
Benzothiazole, 2-phenyl-	883-93-2	5	0	0.1	0.27	0	0.55	1.2
2-Benzothiazolone	934-34-9	3	0	0.096	0.31	0	1.1	1.1
Benzyl butyl phthalate	85-68-7	12	0	6.7	18	0	47	81
Butanal	123-72-8	14	0	3.5	6.3	0	14	28
Cyclopentasiloxane, decamethyl-	541-02-6	13	0	1.2	2	0	5.1	7.5
Cyclotetrasiloxane, octamethyl-	556-67-2	12	0	1.4	2.3	0	5.8	8.4
p-Cymene	99-87-6	13	0	0.012	0.02	0	0.053	0.081
Decane	124-18-5	9	0	0.0021	0.0048	0	0.014	0.017
Dibenz[a,h]anthracene	53-70-3	12	0	0.028	0.049	0	0.14	0.2
Dibenzothiophene	132-65-0	5	0	7.2	25	0	28	140
Dibutyl phthalate	84-74-2	2	0	0.26	1	0	1.7	4.2
Diethyl phthalate	84-66-2	14	0	0.36	0.6	0	1.7	2.2

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Diisobutyl phthalate	84-69-5	6	0	0.35	0.75	0	1.9	1.9
Diisooctylphthalate	27554-26-3	3	0	0.0024	0.0076	0	0.026	0.026
Di-n-octyl phthalate	117-84-0	3	0	0.21	0.7	0	1.9	2.8
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	26	0	0.93	1.6	0.34	3.6	7.3
3,5-di-tert-Butyl-4-hydroxybenzaldehyde	1620-98-0	3	0	0.26	0.92	0	2	4.6
Dodecane	112-40-3	14	0	0.053	0.097	0	0.25	0.44
Fluoranthene	206-44-0	11	0	0.12	0.25	0	0.52	1.3
Fluorene	86-73-7	21	0	0.9	1.4	0.7	3.2	6.4
Furan, 2-methyl	534-22-5	5	0	0.36	0.92	0	3	3
Heptanal	111-71-7	9	0	1.1	2.2	0	4.6	9.9
Hexadecane	544-76-3	12	0	0.32	0.62	0	1.5	2.5
2,5-Hexanedione	110-13-4	3	0	0.84	3	0	6.2	15
Indan	496-11-7	13	0	0.67	1.2	0	3	4.7
Mesitylene	108-67-8	16	0	1.6	2.2	0	5.3	9.5
Methacrolein	78-85-3	1	0	0.085	0.49	0	0	2.9
Methyl Isobutyl Ketone	108-10-1	9	0	0.69	1.4	0	3.1	6.1
Naphthalene	91-20-3	12	0	0.066	0.12	0	0.33	0.48
Naphthalene, 1,2-dimethyl-	573-98-8	12	0	0.51	0.84	0	2.3	2.7
Naphthalene, 1,6-dimethyl-	575-43-9	8	0	0.018	0.039	0	0.059	0.18
Naphthalene, 1-methyl-	90-12-0	12	0	0.049	0.085	0	0.24	0.34
Naphthalene, 2-(bromomethyl)-	939-26-4	12	0	0.83	1.4	0	4	4.6
Naphthalene, 2,3-dimethyl-	581-40-8	4	0	0.21	0.63	0	1.3	3
Naphthalene, 2-methyl-	91-57-6	16	0	1	1.5	0	4	5.7
1-Octadecene	112-88-9	14	0	0.096	0.15	0	0.43	0.45
Octanal	124-13-0	18	0	0.62	0.78	0.38	2.2	2.8
Octane	111-65-9	12	0	0.26	0.53	0	1.6	2.2
17-Pentatriacontene	6971-40-0	1	0	0.012	0.068	0	0	0.39
N-Phenylbenzamide	93-98-1	9	0	1.7	3.2	0	8.3	11
Phenanthrene	85-01-8	13	0	0.023	0.04	0	0.11	0.15
Phenanthrene, 1-methyl	832-69-9	13	0	0.026	0.046	0	0.12	0.18
Phenanthrene, 2-methyl-	2531-84-2	14	0	0.038	0.064	0	0.18	0.24
Phenanthrene, 3-methyl	832-71-3	1	0	0.00013	0.00073	0	0	0.0042
Propionaldehyde	123-38-6	18	0	0.76	1.3	0.36	2.8	6.2
Pyrene	129-00-0	2	0	0.096	0.39	0	0.57	1.6
Pyridine, 2-(4-methylphenyl)-	4467-06-5	7	0	0.43	0.95	0	2.4	3.8
Resorcinol	108-46-3	34	0.66	6.3	6.8	3.1	19	26

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
m-Tolualdehyde	620-23-5	6	0	0.018	0.042	0	0.085	0.18
TXIB "Kodaflex"	6846-50-0	7	0	0.42	1.1	0	1.4	5.6
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	13	0	0.064	0.088	0	0.15	0.35
Undecane	1120-21-4	1	0	0.11	0.66	0	0	3.8
Valeraldehyde	110-62-3	34	4.3	15	13	9.4	36	64
Non-Field-Related Chemicals								
Benzene	71-43-2	1	0	0.41	2.4	0	0	14
Benzene, 1,4-dichloro	106-46-7	13	0	4.3	7.4	0	19	31
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	17	0	5.5	8.6	1.1	21	40
2-Butoxyethanol	111-76-2	3	0	1.8	7	0	12	37
Cyclotrisiloxane, hexamethyl-	541-05-9	27	0	21	29	10	68	140
Decanal	112-31-2	28	0	11	12	6.3	34	48
Ethylbenzene	100-41-4	24	0	15	21	5.6	52	81
Heptane	142-82-5	0	0	0	0	0	0	0
Hexanal	66-25-1	11	0	4.5	8.2	0	20	33
Hexane	110-54-3	12	0	1.3	1.9	0	4.9	4.9
1-Hexanol, 2-ethyl-	104-76-7	33	0	14	15	5.5	45	47
Nonanal	124-19-6	2	0	0.15	0.64	0	0.59	3.4
Phenol	108-95-2	34	4.7	33	37	17	96	170
Tetrachloroethylene	127-18-4	11	0	0.23	0.44	0	0.9	2
Tetradecane	629-59-4	7	0	0.87	1.9	0	5.6	5.6
m/p-Xylene	106-42-3	7	0	1.2	2.7	0	7.8	9.9
o-Xylene	95-47-6	11	0	2.4	9.5	0	7.9	55

[a] 35 field-specific $C_{inh\text{-}field}$ values are included in the table.
[b] Off-Field field-specific Chronic $C_{inh\text{-}field}$ equals the modified field-specific average concentration of a field ($C_{air\text{-}field}$ x AF_{inh}) of a general chemical (see Section F.4.3 of this Appendix F).
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-177. **Off-Field** Field-Specific[a] Chronic Inhalation Exposure Concentration[b] for **All General Chemicals** (Chronic $C_{inh\text{-}field}$, nanograms per cubic meter)—Combined Gender **Spectators 30<40 Years**

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals								
Acenaphthylene	208-96-8	8	0	0.022	0.047	0	0.13	0.2
Acetone	67-64-1	8	0	0.15	0.29	0	0.52	1.2
Aniline	62-53-3	4	0	0.0042	0.013	0	0.028	0.058

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Anthracene	120-12-7	11	0	0.0011	0.002	0	0.0055	0.0076
Anthracene, 2-methyl-	613-12-7	12	0	0.0017	0.0031	0	0.0073	0.014
Anthracene, 9,10-dimethyl	781-43-1	2	0	0.00077	0.0031	0	0.0051	0.013
Anthracene, 9-phenyl	602-55-1	0	0	0	0	0	0	0
Benz[a]anthracene	56-55-3	14	0	2	3.1	0	8	12
Benzaldehyde	100-52-7	6	0	0.35	0.83	0	2.1	3.4
Benzene, 1,2,3-trimethyl-	526-73-8	5	0	0.066	0.18	0	0.38	0.85
Benzene, 1,2,4,5-tetramethyl-	95-93-2	12	0	2.6	4.5	0	11	18
Benzene, 1,2,4-trimethyl-	95-63-6	7	0	0.12	0.28	0	0.7	1.1
Benzene, 1-ethyl-2,4-dimethyl-	874-41-9	11	0	0.17	0.34	0	0.72	1.6
Benzene, 2-ethyl-1,4-dimethyl-	1758-88-9	3	0	0.089	0.31	0	0.76	1.5
Benzene, butyl-	104-51-8	3	0	0.00079	0.0025	0	0.0087	0.0087
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	19	0	0.087	0.11	0.036	0.3	0.34
Benzo[b]fluoranthene	205-99-2	3	0	0.00065	0.0021	0	0.0072	0.0072
7H-Benzo[c]fluorene	205-12-9	6	0	0.00065	0.0015	0	0.0029	0.0069
Benzo[k]fluoranthene	207-08-9	2	0	0.1	0.41	0	0.6	1.7
Benzothiazole	95-16-9	15	0	0.0089	0.012	0	0.035	0.037
Benzothiazole, 2-phenyl-	883-93-2	5	0	0.091	0.24	0	0.48	1.1
2-Benzothiazolone	934-34-9	3	0	0.084	0.27	0	0.93	0.93
Benzyl butyl phthalate	85-68-7	12	0	5.9	15	0	41	71
Butanal	123-72-8	14	0	3.1	5.5	0	12	24
Cyclopentasiloxane, decamethyl-	541-02-6	13	0	1.1	1.7	0	4.5	6.6
Cyclotetrasiloxane, octamethyl-	556-67-2	12	0	1.2	2	0	5	7.3
p-Cymene	99-87-6	13	0	0.01	0.017	0	0.046	0.071
Decane	124-18-5	9	0	0.0019	0.0042	0	0.012	0.015
Dibenz[a,h]anthracene	53-70-3	12	0	0.024	0.043	0	0.12	0.18
Dibenzothiophene	132-65-0	5	0	6.3	22	0	24	120
Dibutyl phthalate	84-74-2	2	0	0.22	0.9	0	1.5	3.7
Diethyl phthalate	84-66-2	14	0	0.32	0.52	0	1.5	1.9
Diisobutyl phthalate	84-69-5	6	0	0.31	0.66	0	1.7	1.7
Diisooctylphthalate	27554-26-3	3	0	0.0021	0.0066	0	0.023	0.023
Di-n-octyl phthalate	117-84-0	3	0	0.18	0.61	0	1.7	2.4
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	26	0	0.81	1.4	0.3	3.1	6.4
3,5-di-tert-Butyl-4-hydroxybenzaldehyde	1620-98-0	3	0	0.23	0.8	0	1.8	4
Dodecane	112-40-3	14	0	0.046	0.085	0	0.22	0.39
Fluoranthene	206-44-0	11	0	0.1	0.22	0	0.45	1.1

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Fluorene	86-73-7	21	0	0.79	1.2	0.61	2.8	5.6
Furan, 2-methyl	534-22-5	5	0	0.31	0.81	0	2.7	2.7
Heptanal	111-71-7	9	0	0.94	1.9	0	4.1	8.7
Hexadecane	544-76-3	12	0	0.28	0.54	0	1.3	2.2
2,5-Hexanedione	110-13-4	3	0	0.73	2.6	0	5.5	13
Indan	496-11-7	13	0	0.59	1	0	2.6	4.1
Mesitylene	108-67-8	16	0	1.4	2	0	4.6	8.3
Methacrolein	78-85-3	1	0	0.074	0.43	0	0	2.5
Methyl Isobutyl Ketone	108-10-1	9	0	0.6	1.2	0	2.7	5.3
Naphthalene	91-20-3	12	0	0.057	0.1	0	0.28	0.42
Naphthalene, 1,2-dimethyl-	573-98-8	12	0	0.45	0.73	0	2	2.4
Naphthalene, 1,6-dimethyl-	575-43-9	8	0	0.016	0.034	0	0.052	0.16
Naphthalene, 1-methyl-	90-12-0	12	0	0.043	0.074	0	0.21	0.3
Naphthalene, 2-(bromomethyl)-	939-26-4	12	0	0.73	1.2	0	3.5	4
Naphthalene, 2,3-dimethyl-	581-40-8	4	0	0.18	0.55	0	1.1	2.6
Naphthalene, 2-methyl-	91-57-6	16	0	0.9	1.3	0	3.5	5
1-Octadecene	112-88-9	14	0	0.084	0.13	0	0.38	0.39
Octanal	124-13-0	18	0	0.54	0.68	0.33	1.9	2.5
Octane	111-65-9	12	0	0.22	0.46	0	1.4	1.9
17-Pentatriacontene	6971-40-0	1	0	0.01	0.06	0	0	0.34
N-Phenylbenzamide	93-98-1	9	0	1.5	2.8	0	7.3	10
Phenanthrene	85-01-8	13	0	0.02	0.035	0	0.1	0.13
Phenanthrene, 1-methyl	832-69-9	13	0	0.023	0.04	0	0.11	0.16
Phenanthrene, 2-methyl-	2531-84-2	14	0	0.033	0.056	0	0.16	0.21
Phenanthrene, 3-methyl	832-71-3	1	0	0.00011	0.00064	0	0	0.0037
Propionaldehyde	123-38-6	18	0	0.66	1.1	0.31	2.5	5.4
Pyrene	129-00-0	2	0	0.084	0.34	0	0.5	1.4
Pyridine, 2-(4-methylphenyl)-	4467-06-5	7	0	0.37	0.83	0	2.1	3.3
Resorcinol	108-46-3	34	0.58	5.5	5.9	2.7	16	22
m-Tolualdehyde	620-23-5	6	0	0.016	0.037	0	0.075	0.16
TXIB "Kodaflex"	6846-50-0	7	0	0.36	0.93	0	1.3	4.9
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	13	0	0.056	0.077	0	0.13	0.31
Undecane	1120-21-4	1	0	0.098	0.57	0	0	3.3
Valeraldehyde	110-62-3	34	3.7	13	11	8.2	31	56
Non-Field-Related Chemicals								
Benzene	71-43-2	1	0	0.35	2.1	0	0	12
Benzene, 1,4-dichloro	106-46-7	13	0	3.8	6.4	0	16	27
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	17	0	4.8	7.5	0.92	19	35

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
2-Butoxyethanol	111-76-2	3	0	1.6	6.1	0	11	33
Cyclotrisiloxane, hexamethyl-	541-05-9	27	0	18	25	8.8	59	120
Decanal	112-31-2	28	0	9.4	11	5.5	30	42
Ethylbenzene	100-41-4	24	0	13	18	4.9	46	71
Heptane	142-82-5	0	0	0	0	0	0	0
Hexanal	66-25-1	11	0	3.9	7.2	0	18	29
Hexane	110-54-3	12	0	1.1	1.7	0	4.3	4.3
1-Hexanol, 2-ethyl-	104-76-7	33	0	12	13	4.8	40	41
Nonanal	124-19-6	2	0	0.13	0.56	0	0.51	2.9
Phenol	108-95-2	34	4.1	29	32	15	84	150
Tetrachloroethylene	127-18-4	11	0	0.2	0.39	0	0.79	1.7
Tetradecane	629-59-4	7	0	0.76	1.7	0	4.9	4.9
m/p-Xylene	106-42-3	7	0	1	2.3	0	6.8	8.7
o-Xylene	95-47-6	11	0	2.1	8.3	0	6.9	48

[a] 35 field-specific $C_{inh\text{-}field}$ values are included in the table.
[b] Off-Field field-specific Chronic $C_{inh\text{-}field}$ equals the modified field-specific average concentration of a field ($C_{air\text{-}field}$ x AF_{inh}) of a general chemical (see Section F.4.3 of this Appendix F).
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-178. **Off-Field** Field-Specific[a] Chronic Inhalation Exposure Concentration[b] for **All General Chemicals** (Chronic $C_{inh\text{-}field}$, nanograms per cubic meter)—Combined Gender **Spectators 40<50 Years**

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals								
Acenaphthylene	208-96-8	8	0	0.022	0.048	0	0.13	0.2
Acetone	67-64-1	8	0	0.15	0.29	0	0.53	1.2
Aniline	62-53-3	4	0	0.0042	0.013	0	0.028	0.058
Anthracene	120-12-7	11	0	0.0011	0.002	0	0.0055	0.0077
Anthracene, 2-methyl-	613-12-7	12	0	0.0017	0.0031	0	0.0073	0.014
Anthracene, 9,10-dimethyl	781-43-1	2	0	0.00078	0.0031	0	0.0051	0.013
Anthracene, 9-phenyl	602-55-1	0	0	0	0	0	0	0
Benz[a]anthracene	56-55-3	14	0	2	3.1	0	8.1	12
Benzaldehyde	100-52-7	6	0	0.35	0.84	0	2.1	3.4
Benzene, 1,2,3-trimethyl-	526-73-8	5	0	0.067	0.19	0	0.38	0.86
Benzene, 1,2,4,5-tetramethyl-	95-93-2	12	0	2.7	4.6	0	11	19
Benzene, 1,2,4-trimethyl-	95-63-6	7	0	0.12	0.29	0	0.71	1.1
Benzene, 1-ethyl-2,4-dimethyl-	874-41-9	11	0	0.18	0.35	0	0.73	1.6

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Benzene, 2-ethyl-1,4-dimethyl-	1758-88-9	3	0	0.09	0.31	0	0.77	1.5
Benzene, butyl-	104-51-8	3	0	0.0008	0.0026	0	0.0088	0.0088
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	19	0	0.088	0.11	0.037	0.3	0.34
Benzo[b]fluoranthene	205-99-2	3	0	0.00066	0.0021	0	0.0073	0.0073
7H-Benzo[c]fluorene	205-12-9	6	0	0.00066	0.0016	0	0.0029	0.0069
Benzo[k]fluoranthene	207-08-9	2	0	0.1	0.41	0	0.6	1.7
Benzothiazole	95-16-9	15	0	0.009	0.012	0	0.036	0.037
Benzothiazole, 2-phenyl-	883-93-2	5	0	0.092	0.24	0	0.49	1.1
2-Benzothiazolone	934-34-9	3	0	0.085	0.27	0	0.94	0.94
Benzyl butyl phthalate	85-68-7	12	0	6	16	0	41	72
Butanal	123-72-8	14	0	3.1	5.5	0	12	25
Cyclopentasiloxane, decamethyl-	541-02-6	13	0	1.1	1.7	0	4.5	6.6
Cyclotetrasiloxane, octamethyl-	556-67-2	12	0	1.3	2.1	0	5.1	7.4
p-Cymene	99-87-6	13	0	0.01	0.017	0	0.047	0.071
Decane	124-18-5	9	0	0.0019	0.0042	0	0.012	0.015
Dibenz[a,h]anthracene	53-70-3	12	0	0.025	0.043	0	0.12	0.18
Dibenzothiophene	132-65-0	5	0	6.3	22	0	24	120
Dibutyl phthalate	84-74-2	2	0	0.23	0.9	0	1.5	3.7
Diethyl phthalate	84-66-2	14	0	0.32	0.53	0	1.5	1.9
Diisobutyl phthalate	84-69-5	6	0	0.31	0.66	0	1.7	1.7
Diisooctylphthalate	27554-26-3	3	0	0.0021	0.0067	0	0.023	0.023
Di-n-octyl phthalate	117-84-0	3	0	0.18	0.62	0	1.7	2.5
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	26	0	0.82	1.4	0.3	3.2	6.4
3,5-di-tert-Butyl-4-hydroxybenzaldehyde	1620-98-0	3	0	0.23	0.81	0	1.8	4.1
Dodecane	112-40-3	14	0	0.047	0.086	0	0.22	0.39
Fluoranthene	206-44-0	11	0	0.1	0.22	0	0.46	1.1
Fluorene	86-73-7	21	0	0.79	1.3	0.62	2.9	5.7
Furan, 2-methyl	534-22-5	5	0	0.32	0.82	0	2.7	2.7
Heptanal	111-71-7	9	0	0.95	2	0	4.1	8.8
Hexadecane	544-76-3	12	0	0.28	0.55	0	1.3	2.2
2,5-Hexanedione	110-13-4	3	0	0.74	2.6	0	5.5	13
Indan	496-11-7	13	0	0.59	1	0	2.7	4.2
Mesitylene	108-67-8	16	0	1.5	2	0	4.7	8.4
Methacrolein	78-85-3	1	0	0.075	0.44	0	0	2.5
Methyl Isobutyl Ketone	108-10-1	9	0	0.61	1.2	0	2.7	5.3

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Naphthalene	91-20-3	12	0	0.058	0.1	0	0.29	0.42
Naphthalene, 1,2-dimethyl-	573-98-8	12	0	0.45	0.74	0	2	2.4
Naphthalene, 1,6-dimethyl-	575-43-9	8	0	0.016	0.034	0	0.052	0.16
Naphthalene, 1-methyl-	90-12-0	12	0	0.043	0.075	0	0.21	0.3
Naphthalene, 2-(bromomethyl)-	939-26-4	12	0	0.74	1.2	0	3.5	4.1
Naphthalene, 2,3-dimethyl-	581-40-8	4	0	0.19	0.56	0	1.2	2.7
Naphthalene, 2-methyl-	91-57-6	16	0	0.91	1.3	0	3.6	5.1
1-Octadecene	112-88-9	14	0	0.085	0.13	0	0.38	0.4
Octanal	124-13-0	18	0	0.55	0.69	0.33	1.9	2.5
Octane	111-65-9	12	0	0.23	0.47	0	1.4	1.9
17-Pentatriacontene	6971-40-0	1	0	0.011	0.06	0	0	0.35
N-Phenylbenzamide	93-98-1	9	0	1.5	2.8	0	7.4	10
Phenanthrene	85-01-8	13	0	0.02	0.035	0	0.1	0.13
Phenanthrene, 1-methyl	832-69-9	13	0	0.023	0.04	0	0.11	0.16
Phenanthrene, 2-methyl-	2531-84-2	14	0	0.033	0.057	0	0.16	0.21
Phenanthrene, 3-methyl	832-71-3	1	0	0.00011	0.00065	0	0	0.0037
Propionaldehyde	123-38-6	18	0	0.67	1.1	0.32	2.5	5.5
Pyrene	129-00-0	2	0	0.085	0.35	0	0.51	1.4
Pyridine, 2-(4-methylphenyl)-	4467-06-5	7	0	0.38	0.84	0	2.1	3.3
Resorcinol	108-46-3	34	0.59	5.5	6	2.8	17	23
m-Tolualdehyde	620-23-5	6	0	0.016	0.038	0	0.075	0.16
TXIB "Kodaflex"	6846-50-0	7	0	0.37	0.94	0	1.3	4.9
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	13	0	0.056	0.077	0	0.13	0.31
Undecane	1120-21-4	1	0	0.099	0.58	0	0	3.4
Valeraldehyde	110-62-3	34	3.8	13	11	8.3	32	57
Non-Field-Related Chemicals								
Benzene	71-43-2	1	0	0.36	2.1	0	0	12
Benzene, 1,4-dichloro	106-46-7	13	0	3.8	6.5	0	17	27
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	17	0	4.8	7.6	0.93	19	35
2-Butoxyethanol	111-76-2	3	0	1.6	6.1	0	11	33
Cyclotrisiloxane, hexamethyl-	541-05-9	27	0	18	25	8.9	60	120
Decanal	112-31-2	28	0	9.5	11	5.6	30	42
Ethylbenzene	100-41-4	24	0	13	18	4.9	46	72
Heptane	142-82-5	0	0	0	0	0	0	0
Hexanal	66-25-1	11	0	4	7.2	0	18	29
Hexane	110-54-3	12	0	1.1	1.7	0	4.3	4.3

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
1-Hexanol, 2-ethyl-	104-76-7	33	0	12	13	4.8	40	41
Nonanal	124-19-6	2	0	0.13	0.56	0	0.52	3
Phenol	108-95-2	34	4.2	29	33	15	84	150
Tetrachloroethylene	127-18-4	11	0	0.21	0.39	0	0.8	1.8
Tetradecane	629-59-4	7	0	0.77	1.7	0	4.9	4.9
m/p-Xylene	106-42-3	7	0	1	2.4	0	6.8	8.7
o-Xylene	95-47-6	11	0	2.1	8.4	0	7	48

[a] 35 field-specific $C_{inh\text{-}field}$ values are included in the table.
[b] Off-Field field-specific Chronic $C_{inh\text{-}field}$ equals the modified field-specific average concentration of a field ($C_{air\text{-}field}$ x AF_{inh}) of a general chemical (see Section F.4.3 of this Appendix F).
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-179. **Off-Field** Field-Specific[a] Chronic Inhalation Exposure Concentration[b] for **All General Chemicals** (Chronic $C_{inh\text{-}field}$, nanograms per cubic meter)—Combined Gender **Spectators 50<70 Years**

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals								
Acenaphthylene	208-96-8	8	0	0.022	0.048	0	0.13	0.2
Acetone	67-64-1	8	0	0.15	0.29	0	0.53	1.3
Aniline	62-53-3	4	0	0.0042	0.013	0	0.029	0.058
Anthracene	120-12-7	11	0	0.0011	0.002	0	0.0055	0.0077
Anthracene, 2-methyl-	613-12-7	12	0	0.0018	0.0031	0	0.0074	0.014
Anthracene, 9,10-dimethyl	781-43-1	2	0	0.00078	0.0031	0	0.0052	0.013
Anthracene, 9-phenyl	602-55-1	0	0	0	0	0	0	0
Benz[a]anthracene	56-55-3	14	0	2	3.1	0	8.1	12
Benzaldehyde	100-52-7	6	0	0.35	0.84	0	2.1	3.5
Benzene, 1,2,3-trimethyl-	526-73-8	5	0	0.067	0.19	0	0.38	0.86
Benzene, 1,2,4,5-tetramethyl-	95-93-2	12	0	2.7	4.6	0	11	19
Benzene, 1,2,4-trimethyl-	95-63-6	7	0	0.12	0.29	0	0.71	1.1
Benzene, 1-ethyl-2,4-dimethyl-	874-41-9	11	0	0.18	0.35	0	0.73	1.6
Benzene, 2-ethyl-1,4-dimethyl-	1758-88-9	3	0	0.091	0.32	0	0.77	1.5
Benzene, butyl-	104-51-8	3	0	0.0008	0.0026	0	0.0088	0.0088
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	19	0	0.088	0.11	0.037	0.3	0.34
Benzo[b]fluoranthene	205-99-2	3	0	0.00066	0.0021	0	0.0073	0.0073
7H-Benzo[c]fluorene	205-12-9	6	0	0.00066	0.0016	0	0.0029	0.007
Benzo[k]fluoranthene	207-08-9	2	0	0.1	0.41	0	0.6	1.7
Benzothiazole	95-16-9	15	0	0.009	0.012	0	0.036	0.037

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Benzothiazole, 2-phenyl-	883-93-2	5	0	0.092	0.24	0	0.49	1.1
2-Benzothiazolone	934-34-9	3	0	0.085	0.27	0	0.94	0.94
Benzyl butyl phthalate	85-68-7	12	0	6	16	0	42	72
Butanal	123-72-8	14	0	3.1	5.5	0	13	25
Cyclopentasiloxane, decamethyl-	541-02-6	13	0	1.1	1.7	0	4.6	6.6
Cyclotetrasiloxane, octamethyl-	556-67-2	12	0	1.3	2.1	0	5.1	7.4
p-Cymene	99-87-6	13	0	0.01	0.017	0	0.047	0.072
Decane	124-18-5	9	0	0.0019	0.0042	0	0.012	0.015
Dibenz[a,h]anthracene	53-70-3	12	0	0.025	0.043	0	0.12	0.18
Dibenzothiophene	132-65-0	5	0	6.3	22	0	24	120
Dibutyl phthalate	84-74-2	2	0	0.23	0.91	0	1.5	3.7
Diethyl phthalate	84-66-2	14	0	0.32	0.53	0	1.5	1.9
Diisobutyl phthalate	84-69-5	6	0	0.31	0.67	0	1.7	1.7
Diisooctylphthalate	27554-26-3	3	0	0.0021	0.0067	0	0.023	0.023
Di-n-octyl phthalate	117-84-0	3	0	0.18	0.62	0	1.7	2.5
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	26	0	0.83	1.4	0.3	3.2	6.5
3,5-di-tert-Butyl-4-hydroxybenzaldehyde	1620-98-0	3	0	0.23	0.81	0	1.8	4.1
Dodecane	112-40-3	14	0	0.047	0.086	0	0.22	0.39
Fluoranthene	206-44-0	11	0	0.1	0.22	0	0.46	1.1
Fluorene	86-73-7	21	0	0.8	1.3	0.62	2.9	5.7
Furan, 2-methyl	534-22-5	5	0	0.32	0.82	0	2.7	2.7
Heptanal	111-71-7	9	0	0.96	2	0	4.1	8.8
Hexadecane	544-76-3	12	0	0.28	0.55	0	1.3	2.2
2,5-Hexanedione	110-13-4	3	0	0.74	2.6	0	5.5	13
Indan	496-11-7	13	0	0.6	1	0	2.7	4.2
Mesitylene	108-67-8	16	0	1.5	2	0	4.7	8.4
Methacrolein	78-85-3	1	0	0.075	0.44	0	0	2.6
Methyl Isobutyl Ketone	108-10-1	9	0	0.61	1.2	0	2.7	5.4
Naphthalene	91-20-3	12	0	0.058	0.1	0	0.29	0.43
Naphthalene, 1,2-dimethyl-	573-98-8	12	0	0.45	0.74	0	2	2.4
Naphthalene, 1,6-dimethyl-	575-43-9	8	0	0.016	0.034	0	0.053	0.16
Naphthalene, 1-methyl-	90-12-0	12	0	0.044	0.075	0	0.21	0.3
Naphthalene, 2-(bromomethyl)-	939-26-4	12	0	0.74	1.2	0	3.5	4.1
Naphthalene, 2,3-dimethyl-	581-40-8	4	0	0.19	0.56	0	1.2	2.7
Naphthalene, 2-methyl-	91-57-6	16	0	0.91	1.3	0	3.6	5.1
1-Octadecene	112-88-9	14	0	0.085	0.13	0	0.38	0.4
Octanal	124-13-0	18	0	0.55	0.69	0.33	1.9	2.5

Chemical	CASRN	Detection	Chronic $C_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Octane	111-65-9	12	0	0.23	0.47	0	1.4	1.9
17-Pentatriacontene	6971-40-0	1	0	0.011	0.061	0	0	0.35
N-Phenylbenzamide	93-98-1	9	0	1.5	2.8	0	7.4	10
Phenanthrene	85-01-8	13	0	0.02	0.035	0	0.1	0.13
Phenanthrene, 1-methyl	832-69-9	13	0	0.023	0.041	0	0.11	0.16
Phenanthrene, 2-methyl-	2531-84-2	14	0	0.033	0.057	0	0.16	0.21
Phenanthrene, 3-methyl	832-71-3	1	0	0.00011	0.00065	0	0	0.0037
Propionaldehyde	123-38-6	18	0	0.67	1.1	0.32	2.5	5.5
Pyrene	129-00-0	2	0	0.085	0.35	0	0.51	1.5
Pyridine, 2-(4-methylphenyl)-	4467-06-5	7	0	0.38	0.84	0	2.1	3.4
Resorcinol	108-46-3	34	0.59	5.5	6	2.8	17	23
m-Tolualdehyde	620-23-5	6	0	0.016	0.038	0	0.076	0.16
TXIB "Kodaflex"	6846-50-0	7	0	0.37	0.94	0	1.3	4.9
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	13	0	0.057	0.078	0	0.13	0.31
Undecane	1120-21-4	1	0	0.1	0.58	0	0	3.4
Valeraldehyde	110-62-3	34	3.8	13	11	8.3	32	57
Non-Field-Related Chemicals								
Benzene	71-43-2	1	0	0.36	2.1	0	0	12
Benzene, 1,4-dichloro	106-46-7	13	0	3.8	6.5	0	17	27
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	17	0	4.8	7.6	0.93	19	35
2-Butoxyethanol	111-76-2	3	0	1.6	6.2	0	11	33
Cyclotrisiloxane, hexamethyl-	541-05-9	27	0	18	25	8.9	60	120
Decanal	112-31-2	28	0	9.6	11	5.6	30	43
Ethylbenzene	100-41-4	24	0	13	18	4.9	46	72
Heptane	142-82-5	0	0	0	0	0	0	0
Hexanal	66-25-1	11	0	4	7.3	0	18	29
Hexane	110-54-3	12	0	1.1	1.7	0	4.3	4.3
1-Hexanol, 2-ethyl-	104-76-7	33	0	12	13	4.8	40	42
Nonanal	124-19-6	2	0	0.13	0.56	0	0.52	3
Phenol	108-95-2	34	4.2	29	33	15	85	150
Tetrachloroethylene	127-18-4	11	0	0.21	0.39	0	0.8	1.8
Tetradecane	629-59-4	7	0	0.77	1.7	0	4.9	4.9
m/p-Xylene	106-42-3	7	0	1	2.4	0	6.9	8.8
o-Xylene	95-47-6	11	0	2.1	8.4	0	7	49

[a] 35 field-specific $C_{inh\text{-}field}$ values are included in the table.

[b] Off-Field field-specific Chronic $C_{inh\text{-}field}$ equals the modified field-specific average concentration of a field ($C_{air\text{-}field}$ x AF_{inh}) of a general chemical (see Section F.4.3 of this Appendix F).

CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

F.5. Average Daily Dose (ADD) and Average One-Day Dose (AD)

This section presents the average daily doses (ADD) or average one-day dose (AD) of all detected chemicals (with available toxicity criteria) on synthetic turf fields for the inhalation, dermal, and ingestion pathways. ADD and AD values are used to calculate the non-cancer hazard or cancer risk for exposure to chemicals through the inhalation, dermal, or ingestion pathway. Details of each exposure pathway and how to calculate the ADD or AD are presented in Main Report Sections 5.4.4 and 5.4.5 and Appendix Sections 3, 4, and 5. An example calculation for each pathway is presented in Appendix G.1.

F.5.1. Average Inhalation Daily Dose (ADD_{inh}) for Lifetime Cancer Risk Assessment of Chemicals

Table F-180. Average **On-Field** Inhalation Daily Dose[a] (ADD_{inh}, milligrams per kilogram BW per day) for Lifetime Cancer Risk Assessment of Chemicals—Combined Gender **Athletes**

Chemical	CASRN	ADD_{inh}						
		2<6 years	6<11 years	11<16 years	16<30 years	30<40 years	40<50 years	50<70 years
Field-Related Chemicals								
Aniline	62-53-3	2.9E-07	3.7E-07	3.6E-07	6.9E-07	4.5E-07	4.4E-07	4.3E-07
Benz[a]anthracene	56-55-3	2.2E-10	2.8E-10	2.8E-10	5.2E-10	3.4E-10	3.4E-10	3.3E-10
Benzo[a]pyrene	50-32-8	5.1E-08	6.6E-08	6.4E-08	1.2E-07	7.9E-08	7.8E-08	7.6E-08
Benzo[b]fluoranthene	205-99-2	1.1E-09	1.4E-09	1.4E-09	2.6E-09	1.7E-09	1.7E-09	1.7E-09
Benzo[k]fluoranthene	207-08-9	1.4E-09	1.8E-09	1.7E-09	3.2E-09	2.1E-09	2.1E-09	2.1E-09
Chrysene	218-01-9	9.1E-09	1.2E-08	1.2E-08	2.2E-08	1.4E-08	1.4E-08	1.4E-08
Cyclopenta[cd]pyrene	27208-37-3	3.2E-09	4.2E-09	4.1E-09	7.7E-09	5.0E-09	5.0E-09	4.9E-09
Dibenz[a,h]anthracene	53-70-3	6.4E-09	8.2E-09	8.1E-09	1.5E-08	9.9E-09	9.8E-09	9.6E-09
Indeno[1,2,3-cd]pyrene	193-39-5	4.8E-09	6.2E-09	6.0E-09	1.1E-08	7.4E-09	7.3E-09	7.2E-09
Methyl Isobutyl Ketone	108-10-1	6.9E-07	9.0E-07	8.8E-07	1.7E-06	1.1E-06	1.1E-06	1.0E-06
Naphthalene	91-20-3	1.2E-06	1.5E-06	1.5E-06	2.8E-06	1.8E-06	1.8E-06	1.8E-06
Styrene	100-42-5	2.6E-06	3.4E-06	3.3E-06	6.2E-06	4.1E-06	4.0E-06	3.9E-06
Non-Field-Related Chemicals								
Acetaldehyde	75-07-0	1.1E-04	1.4E-04	1.4E-04	2.7E-04	1.7E-04	1.7E-04	1.7E-04
Benzene	71-43-2	2.7E-05	3.5E-05	3.4E-05	6.4E-05	4.2E-05	4.1E-05	4.1E-05
Benzene, 1,4-dichloro	106-46-7	8.5E-07	1.1E-06	1.1E-06	2.0E-06	1.3E-06	1.3E-06	1.3E-06
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	2.5E-05	3.3E-05	3.2E-05	6.1E-05	4.0E-05	3.9E-05	3.9E-05
Ethylbenzene	100-41-4	7.6E-06	9.9E-06	9.6E-06	1.8E-05	1.2E-05	1.2E-05	1.1E-05
Formaldehyde	50-00-0	1.7E-04	2.2E-04	2.2E-04	4.1E-04	2.6E-04	2.6E-04	2.6E-04
Tetrachloroethylene	127-18-4	2.1E-06	2.7E-06	2.7E-06	5.1E-06	3.3E-06	3.3E-06	3.2E-06

[a] On-Field ADD_{inh} was calculated from the 35 individual field average concentrations (C_{air}) of a chemical detected in air on the fields.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-181. Average **On-Field** Inhalation Daily Dose[a] (ADD_{inh}, milligrams per kilogram BW per day) for Lifetime Cancer Risk Assessment of Chemicals—Combined Gender
Coaches

Chemical	CASRN	ADD_{inh}			
		16<30 years	30<40 years	40<50 years	50<70 years
Field-Related Chemicals					
Aniline	62-53-3	2.8E-07	2.5E-07	2.5E-07	2.5E-07
Benz[a]anthracene	56-55-3	2.2E-10	1.9E-10	1.9E-10	1.9E-10
Benzo[a]pyrene	50-32-8	5.0E-08	4.4E-08	4.4E-08	4.4E-08
Benzo[b]fluoranthene	205-99-2	1.1E-09	9.4E-10	9.5E-10	9.5E-10
Benzo[k]fluoranthene	207-08-9	1.3E-09	1.2E-09	1.2E-09	1.2E-09
Chrysene	218-01-9	9.0E-09	7.8E-09	7.9E-09	7.9E-09
Cyclopenta[cd]pyrene	27208-37-3	3.2E-09	2.8E-09	2.8E-09	2.8E-09
Dibenz[a,h]anthracene	53-70-3	6.3E-09	5.5E-09	5.5E-09	5.6E-09
Indeno[1,2,3-cd]pyrene	193-39-5	4.7E-09	4.1E-09	4.2E-09	4.2E-09
Methyl Isobutyl Ketone	108-10-1	6.8E-07	6.0E-07	6.0E-07	6.1E-07
Naphthalene	91-20-3	1.2E-06	1.0E-06	1.0E-06	1.0E-06
Styrene	100-42-5	2.6E-06	2.2E-06	2.3E-06	2.3E-06
Non-Field-Related Chemicals					
Acetaldehyde	75-07-0	1.1E-04	9.6E-05	9.7E-05	9.8E-05
Benzene	71-43-2	2.6E-05	2.3E-05	2.3E-05	2.3E-05
Benzene, 1,4-dichloro	106-46-7	8.4E-07	7.3E-07	7.4E-07	7.4E-07
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	2.5E-05	2.2E-05	2.2E-05	2.2E-05
Ethylbenzene	100-41-4	7.5E-06	6.6E-06	6.6E-06	6.7E-06
Formaldehyde	50-00-0	1.7E-04	1.5E-04	1.5E-04	1.5E-04
Tetrachloroethylene	127-18-4	2.1E-06	1.8E-06	1.8E-06	1.9E-06

[a] On-Field ADD_{inh} was calculated from the 35 individual field average concentrations (C_{air}) of a chemical detected in air on the fields.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-182. Average **On-Field** Inhalation Daily Dose[a] (ADD_{inh}, milligrams per kilogram BW per day) for Lifetime Cancer Risk Assessment of Chemicals—Combined Gender
Referees

Chemical	CASRN	ADD_{inh}			
		16<30 years	30<40 years	40<50 years	50<70 years
Field-Related Chemicals					
Aniline	62-53-3	1.1E-07	9.2E-08	9.3E-08	9.3E-08
Benz[a]anthracene	56-55-3	8.0E-11	7.0E-11	7.1E-11	7.1E-11

Chemical	CASRN	ADD_{inh}			
		16<30 years	30<40 years	40<50 years	50<70 years
Benzo[a]pyrene	50-32-8	1.9E-08	1.6E-08	1.6E-08	1.6E-08
Benzo[b]fluoranthene	205-99-2	4.0E-10	3.5E-10	3.5E-10	3.5E-10
Benzo[k]fluoranthene	207-08-9	5.0E-10	4.3E-10	4.4E-10	4.4E-10
Chrysene	218-01-9	3.3E-09	2.9E-09	2.9E-09	2.9E-09
Cyclopenta[cd]pyrene	27208-37-3	1.2E-09	1.0E-09	1.0E-09	1.0E-09
Dibenz[a,h]anthracene	53-70-3	2.3E-09	2.0E-09	2.1E-09	2.1E-09
Indeno[1,2,3-cd]pyrene	193-39-5	1.7E-09	1.5E-09	1.5E-09	1.5E-09
Methyl Isobutyl Ketone	108-10-1	2.5E-07	2.2E-07	2.2E-07	2.3E-07
Naphthalene	91-20-3	4.3E-07	3.8E-07	3.8E-07	3.8E-07
Styrene	100-42-5	9.6E-07	8.4E-07	8.4E-07	8.5E-07
Non-Field-Related Chemicals					
Acetaldehyde	75-07-0	4.1E-05	3.6E-05	3.6E-05	3.6E-05
Benzene	71-43-2	9.8E-06	8.6E-06	8.7E-06	8.7E-06
Benzene, 1,4-dichloro	106-46-7	3.1E-07	2.7E-07	2.8E-07	2.8E-07
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	9.3E-06	8.2E-06	8.2E-06	8.3E-06
Ethylbenzene	100-41-4	2.8E-06	2.4E-06	2.5E-06	2.5E-06
Formaldehyde	50-00-0	6.2E-05	5.4E-05	5.5E-05	5.5E-05
Tetrachloroethylene	127-18-4	7.8E-07	6.8E-07	6.9E-07	6.9E-07

[a] On-Field ADD_{inh} was calculated from the 35 individual field average concentrations (C_{air}) of a chemical detected in air on the fields.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-183. Average **On-Field** Inhalation Daily Dose[a] (ADD_{inh}, milligrams per kilogram BW per day) for Lifetime Cancer Risk Assessment of Chemicals—Combined Gender **Spectators**

Chemical	CASRN	ADD_{inh}								
		Third trimester fetus	0<2 years	2<6 years	6<11 years	11<16 years	16<30 years	30<40 years	40<50 years	50<70 years
Field-Related Chemicals										
Aniline	62-53-3	3.8E-08	3.1E-07	1.6E-07	1.5E-07	6.6E-08	4.4E-08	3.8E-08	3.9E-08	3.9E-08
Benz[a]anthracene	56-55-3	2.9E-11	2.3E-10	1.2E-10	1.2E-10	5.1E-11	3.3E-11	2.9E-11	2.9E-11	3.0E-11
Benzo[a]pyrene	50-32-8	6.7E-09	5.4E-08	2.8E-08	2.7E-08	1.2E-08	7.7E-09	6.7E-09	6.8E-09	6.8E-09
Benzo[b]fluoranthene	205-99-2	1.5E-10	1.2E-09	6.1E-10	5.9E-10	2.5E-10	1.7E-10	1.5E-10	1.5E-10	1.5E-10
Benzo[k]fluoranthene	207-08-9	1.8E-10	1.5E-09	7.6E-10	7.3E-10	3.1E-10	2.1E-10	1.8E-10	1.8E-10	1.8E-10
Chrysene	218-01-9	1.2E-09	9.7E-09	5.1E-09	4.9E-09	2.1E-09	1.4E-09	1.2E-09	1.2E-09	1.2E-09
Cyclopenta[cd]pyrene	27208-37-3	4.3E-10	3.4E-09	1.8E-09	1.7E-09	7.4E-10	4.9E-10	4.3E-10	4.3E-10	4.4E-10
Dibenz[a,h]anthracene	53-70-3	8.4E-10	6.8E-09	3.6E-09	3.4E-09	1.5E-09	9.7E-10	8.5E-10	8.6E-10	8.6E-10
Indeno[1,2,3-cd]pyrene	193-39-5	6.3E-10	5.1E-09	2.7E-09	2.6E-09	1.1E-09	7.3E-10	6.4E-10	6.4E-10	6.4E-10
Methyl Isobutyl Ketone	108-10-1	9.2E-08	7.4E-07	3.9E-07	3.7E-07	1.6E-07	1.1E-07	9.3E-08	9.3E-08	9.4E-08
Naphthalene	91-20-3	1.6E-07	1.3E-06	6.6E-07	6.3E-07	2.7E-07	1.8E-07	1.6E-07	1.6E-07	1.6E-07
Styrene	100-42-5	3.5E-07	2.8E-06	1.5E-06	1.4E-06	6.0E-07	4.0E-07	3.5E-07	3.5E-07	3.5E-07

Chemical	CASRN	ADD_{inh}								
		Third trimester fetus	0<2 years	2<6 years	6<11 years	11<16 years	16<30 years	30<40 years	40<50 years	50<70 years
Non-Field-Related Chemicals										
Acetaldehyde	75-07-0	1.5E-05	1.2E-04	6.3E-05	6.0E-05	2.6E-05	1.7E-05	1.5E-05	1.5E-05	1.5E-05
Benzene	71-43-2	3.6E-06	2.9E-05	1.5E-05	1.4E-05	6.2E-06	4.1E-06	3.6E-06	3.6E-06	3.6E-06
Benzene, 1,4-dichloro	106-46-7	1.1E-07	9.1E-07	4.8E-07	4.6E-07	2.0E-07	1.3E-07	1.1E-07	1.1E-07	1.1E-07
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	3.4E-06	2.7E-05	1.4E-05	1.4E-05	5.9E-06	3.9E-06	3.4E-06	3.4E-06	3.4E-06
Ethylbenzene	100-41-4	1.0E-06	8.1E-06	4.3E-06	4.1E-06	1.8E-06	1.2E-06	1.0E-06	1.0E-06	1.0E-06
Formaldehyde	50-00-0	2.3E-05	1.8E-04	9.5E-05	9.1E-05	3.9E-05	2.6E-05	2.3E-05	2.3E-05	2.3E-05
Tetrachloroethylene	127-18-4	2.8E-07	2.3E-06	1.2E-06	1.1E-06	4.9E-07	3.2E-07	2.8E-07	2.9E-07	2.9E-07

[a] On-Field ADD_{inh} was calculated from the 35 individual field average concentrations (C_{air}) of a chemical detected in air on the fields.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-184. Average **Off-Field** Inhalation Daily Dose[a] (ADD_{inh}, milligrams per kilogram BW per day) for Lifetime Cancer Risk Assessment of Chemicals—Combined Gender **Spectators**

Chemical	CASRN	ADD_{inh}								
		Third trimester fetus	0<2 years	2<6 years	6<11 years	11<16 years	16<30 years	30<40 years	40<50 years	50<70 years
Field-Related Chemicals										
Aniline	62-53-3	4.2E-08	3.4E-07	1.8E-07	1.7E-07	7.3E-08	4.8E-08	4.2E-08	4.3E-08	4.3E-08
Benz[a]anthracene	56-55-3	0	0	0	0	0	0	0	0	0
Benzo[a]pyrene	50-32-8	8.3E-09	6.6E-08	3.5E-08	3.3E-08	1.4E-08	9.5E-09	8.3E-09	8.4E-09	8.4E-09
Benzo[b]fluoranthene	205-99-2	2.2E-10	1.8E-09	9.5E-10	9.0E-10	3.9E-10	2.6E-10	2.3E-10	2.3E-10	2.3E-10
Benzo[k]fluoranthene	207-08-9	1.9E-10	1.5E-09	7.9E-10	7.5E-10	3.2E-10	2.1E-10	1.9E-10	1.9E-10	1.9E-10
Chrysene	218-01-9	6.2E-10	5.0E-09	2.6E-09	2.5E-09	1.1E-09	7.1E-10	6.2E-10	6.3E-10	6.3E-10
Cyclopenta[cd]pyrene	27208-37-3	3.7E-10	3.0E-09	1.6E-09	1.5E-09	6.5E-10	4.3E-10	3.8E-10	3.8E-10	3.8E-10
Dibenz[a,h]anthracene	53-70-3	5.3E-10	4.3E-09	2.2E-09	2.1E-09	9.2E-10	6.1E-10	5.3E-10	5.4E-10	5.4E-10
Indeno[1,2,3-cd]pyrene	193-39-5	4.4E-10	3.5E-09	1.8E-09	1.8E-09	7.6E-10	5.0E-10	4.4E-10	4.4E-10	4.4E-10
Methyl Isobutyl Ketone	108-10-1	2.1E-08	1.7E-07	8.9E-08	8.5E-08	3.7E-08	2.4E-08	2.1E-08	2.1E-08	2.1E-08
Naphthalene	91-20-3	1.7E-07	1.4E-06	7.3E-07	6.9E-07	3.0E-07	2.0E-07	1.7E-07	1.7E-07	1.7E-07
Styrene	100-42-5	3.5E-07	2.8E-06	1.5E-06	1.4E-06	6.2E-07	4.1E-07	3.6E-07	3.6E-07	3.6E-07
Non-Field-Related Chemicals										
Benzene	71-43-2	3.6E-06	3.7E-06	3.0E-05	1.6E-05	1.5E-05	6.5E-06	4.3E-06	3.8E-06	3.8E-06
Benzene, 1,4-dichloro	106-46-7	1.1E-07	1.0E-07	8.3E-07	4.3E-07	4.1E-07	1.8E-07	1.2E-07	1.0E-07	1.0E-07
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	3.4E-06	3.4E-06	2.7E-05	1.4E-05	1.4E-05	5.9E-06	3.9E-06	3.4E-06	3.5E-06
Ethylbenzene	100-41-4	1.0E-06	1.1E-06	8.6E-06	4.5E-06	4.3E-06	1.9E-06	1.2E-06	1.1E-06	1.1E-06
Tetrachloroethylene	127-18-4	2.8E-07	2.9E-07	2.3E-06	1.2E-06	1.2E-06	5.0E-07	3.3E-07	2.9E-07	2.9E-07

[a] Off-Field ADD_{inh} was calculated from the 35 individual field average concentrations (C_{air}) of a chemical detected in air off the fields. Carbonyl samples were not collected at off-field locations.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

INDIVIDUAL FIELD ASSESSMENT (Table F-185 to Table F-217)

Table F-185. Field-Specific Average **On-Field** Inhalation Daily Dose[a] ($ADD_{inh\text{-}field}$, milligrams per kilogram BW per day) for Lifetime Cancer Risk Assessment of Chemicals—Combined Gender **Athletes 2<6 Years**

Chemical	CASRN	Detection	$ADD_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals								
Aniline	62-53-3	10	0	2.9E-07	5.1E-07	0	1.1E-06	1.9E-06
Benz[a]anthracene	56-55-3	1	0	2.2E-10	1.3E-09	0	0	7.4E-09
Benzo[a]pyrene	50-32-8	28	0	5.1E-08	5.3E-08	2.7E-08	1.4E-07	2.1E-07
Benzo[b]fluoranthene	205-99-2	2	0	1.1E-09	4.4E-09	0	6.5E-09	1.9E-08
Benzo[k]fluoranthene	207-08-9	4	0	1.4E-09	4.0E-09	0	1.0E-08	1.5E-08
Chrysene	218-01-9	13	0	9.1E-09	1.4E-08	0	3.4E-08	5.9E-08
Cyclopenta[cd]pyrene	27208-37-3	28	0	3.2E-09	3.9E-09	1.2E-09	9.3E-09	1.8E-08
Dibenz[a,h]anthracene	53-70-3	14	0	6.4E-09	1.3E-08	0	3.2E-08	5.4E-08
Indeno[1,2,3-cd]pyrene	193-39-5	3	0	4.8E-09	1.6E-08	0	5.4E-08	5.4E-08
Methyl Isobutyl Ketone	108-10-1	5	0	6.9E-07	1.9E-06	0	5.4E-06	8.1E-06
Naphthalene	91-20-3	9	0	1.2E-06	2.5E-06	0	5.1E-06	1.1E-05
Styrene	100-42-5	17	0	2.6E-06	5.4E-06	0	8.8E-06	2.9E-05
Non-Field-Related Chemicals								
Acetaldehyde	75-07-0	34	1.2E-05	1.1E-04	8.2E-05	8.5E-05	2.1E-04	4.2E-04
Benzene	71-43-2	35	4.0E-06	2.7E-05	2.2E-05	1.9E-05	6.7E-05	1.1E-04
Benzene, 1,4-dichloro	106-46-7	7	0	8.5E-07	1.9E-06	0	5.3E-06	5.3E-06
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	34	0	2.5E-05	2.6E-05	1.7E-05	7.6E-05	9.4E-05
Ethylbenzene	100-41-4	13	0	7.6E-06	1.3E-05	0	3.1E-05	5.1E-05
Formaldehyde	50-00-0	34	3.6E-05	1.7E-04	1.3E-04	1.4E-04	2.8E-04	7.3E-04
Tetrachloroethylene	127-18-4	7	0	2.1E-06	5.0E-06	0	1.4E-05	1.9E-05

[a] 35 field-specific $ADD_{inh\text{-}field}$ values are included in the table.
[b] On-Field ADD_{inh} was calculated from the individual field concentrations ($C_{air\text{-}field}$) of a chemical detected in air on the fields.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-186. Field-Specific Average **On-Field** Inhalation Daily Dose[a] milligrams per kilogram BW per day) for Lifetime Cancer Risk Assessment of Chemicals—Combined Gender **Athletes 6<11 Years**

Chemical	CASRN	Detection	$ADD_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals								

Chemical	CASRN	Detection	$ADD_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	10	0	3.7E-07	6.6E-07	0	1.5E-06	2.5E-06
Benz[a]anthracene	56-55-3	1	0	2.8E-10	1.7E-09	0	0	9.6E-09
Benzo[a]pyrene	50-32-8	28	0	6.6E-08	6.9E-08	3.5E-08	1.8E-07	2.7E-07
Benzo[b]fluoranthene	205-99-2	2	0	1.4E-09	5.8E-09	0	8.4E-09	2.4E-08
Benzo[k]fluoranthene	207-08-9	4	0	1.8E-09	5.2E-09	0	1.3E-08	2.0E-08
Chrysene	218-01-9	13	0	1.2E-08	1.8E-08	0	4.4E-08	7.6E-08
Cyclopenta[cd]pyrene	27208-37-3	28	0	4.2E-09	5.1E-09	1.6E-09	1.2E-08	2.4E-08
Dibenz[a,h]anthracene	53-70-3	14	0	8.2E-09	1.6E-08	0	4.1E-08	6.9E-08
Indeno[1,2,3-cd]pyrene	193-39-5	3	0	6.2E-09	2.0E-08	0	7.0E-08	7.0E-08
Methyl Isobutyl Ketone	108-10-1	5	0	9.0E-07	2.5E-06	0	7.0E-06	1.0E-05
Naphthalene	91-20-3	9	0	1.5E-06	3.2E-06	0	6.6E-06	1.5E-05
Styrene	100-42-5	17	0	3.4E-06	7.0E-06	0	1.1E-05	3.8E-05
Non-Field-Related Chemicals								
Acetaldehyde	75-07-0	34	1.5E-05	1.4E-04	1.1E-04	1.1E-04	2.8E-04	5.5E-04
Benzene	71-43-2	35	5.2E-06	3.5E-05	2.8E-05	2.4E-05	8.7E-05	1.4E-04
Benzene, 1,4-dichloro	106-46-7	7	0	1.1E-06	2.4E-06	0	6.8E-06	6.8E-06
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	34	0	3.3E-05	3.4E-05	2.2E-05	9.8E-05	1.2E-04
Ethylbenzene	100-41-4	13	0	9.9E-06	1.7E-05	0	4.0E-05	6.6E-05
Formaldehyde	50-00-0	34	4.7E-05	2.2E-04	1.7E-04	1.8E-04	3.7E-04	9.4E-04
Tetrachloroethylene	127-18-4	7	0	2.7E-06	6.5E-06	0	1.8E-05	2.4E-05

[a] 35 field-specific $ADD_{inh\text{-}field}$ values are included in the table.
[b] On-Field ADD_{inh} was calculated from the individual field concentrations ($C_{air\text{-}field}$) of a chemical detected in air on the fields.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-187. Field-Specific Average **On-Field** Inhalation Daily Dose[a] ($ADD_{inh\text{-}field}$, milligrams per kilogram BW per day) for Lifetime Cancer Risk Assessment of Chemicals—Combined Gender **Athletes 11<16 Years**

Chemical	CASRN	Detection	$ADD_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals								
Aniline	62-53-3	10	0	3.6E-07	6.4E-07	0	1.4E-06	2.5E-06
Benz[a]anthracene	56-55-3	1	0	2.8E-10	1.6E-09	0	0	9.4E-09
Benzo[a]pyrene	50-32-8	28	0	6.4E-08	6.7E-08	3.4E-08	1.7E-07	2.7E-07
Benzo[b]fluoranthene	205-99-2	2	0	1.4E-09	5.6E-09	0	8.2E-09	2.4E-08
Benzo[k]fluoranthene	207-08-9	4	0	1.7E-09	5.1E-09	0	1.3E-08	2.0E-08
Chrysene	218-01-9	13	0	1.2E-08	1.8E-08	0	4.3E-08	7.4E-08
Cyclopenta[cd]pyrene	27208-37-3	28	0	4.1E-09	5.0E-09	1.5E-09	1.2E-08	2.3E-08
Dibenz[a,h]anthracene	53-70-3	14	0	8.1E-09	1.6E-08	0	4.0E-08	6.8E-08

Chemical	CASRN	Detection	$ADD_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Indeno[1,2,3-cd]pyrene	193-39-5	3	0	6.0E-09	2.0E-08	0	6.9E-08	6.9E-08
Methyl Isobutyl Ketone	108-10-1	5	0	8.8E-07	2.4E-06	0	6.8E-06	1.0E-05
Naphthalene	91-20-3	9	0	1.5E-06	3.1E-06	0	6.4E-06	1.5E-05
Styrene	100-42-5	17	0	3.3E-06	6.8E-06	0	1.1E-05	3.7E-05
Non-Field-Related Chemicals								
Acetaldehyde	75-07-0	34	1.5E-05	1.4E-04	1.0E-04	1.1E-04	2.7E-04	5.4E-04
Benzene	71-43-2	35	5.1E-06	3.4E-05	2.7E-05	2.4E-05	8.5E-05	1.4E-04
Benzene, 1,4-dichloro	106-46-7	7	0	1.1E-06	2.4E-06	0	6.7E-06	6.7E-06
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	34	0	3.2E-05	3.4E-05	2.1E-05	9.6E-05	1.2E-04
Ethylbenzene	100-41-4	13	0	9.6E-06	1.6E-05	0	3.9E-05	6.5E-05
Formaldehyde	50-00-0	34	4.6E-05	2.2E-04	1.6E-04	1.8E-04	3.6E-04	9.2E-04
Tetrachloroethylene	127-18-4	7	0	2.7E-06	6.4E-06	0	1.8E-05	2.3E-05

[a] 35 field-specific $ADD_{inh\text{-}field}$ values are included in the table.
[b] On-Field ADD_{inh} was calculated from the individual field concentrations ($C_{air\text{-}field}$) of a chemical detected in air on the fields.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-188. Field-Specific Average **On-Field** Inhalation Daily Dose[a] ($ADD_{inh\text{-}field}$, milligrams per kilogram BW per day) for Lifetime Cancer Risk Assessment of Chemicals—Combined Gender **Athletes 16<30 Years**

Chemical	CASRN	Detection	$ADD_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals								
Aniline	62-53-3	10	0	6.9E-07	1.2E-06	0	2.7E-06	4.6E-06
Benz[a]anthracene	56-55-3	1	0	5.2E-10	3.0E-09	0	0	1.8E-08
Benzo[a]pyrene	50-32-8	28	0	1.2E-07	1.3E-07	6.5E-08	3.3E-07	5.0E-07
Benzo[b]fluoranthene	205-99-2	2	0	2.6E-09	1.1E-08	0	1.6E-08	4.4E-08
Benzo[k]fluoranthene	207-08-9	4	0	3.2E-09	9.6E-09	0	2.5E-08	3.7E-08
Chrysene	218-01-9	13	0	2.2E-08	3.4E-08	0	8.1E-08	1.4E-07
Cyclopenta[cd]pyrene	27208-37-3	28	0	7.7E-09	9.3E-09	2.9E-09	2.2E-08	4.4E-08
Dibenz[a,h]anthracene	53-70-3	14	0	1.5E-08	3.0E-08	0	7.6E-08	1.3E-07
Indeno[1,2,3-cd]pyrene	193-39-5	3	0	1.1E-08	3.7E-08	0	1.3E-07	1.3E-07
Methyl Isobutyl Ketone	108-10-1	5	0	1.7E-06	4.5E-06	0	1.3E-05	1.9E-05
Naphthalene	91-20-3	9	0	2.8E-06	5.9E-06	0	1.2E-05	2.7E-05
Styrene	100-42-5	17	0	6.2E-06	1.3E-05	0	2.1E-05	7.0E-05
Non-Field-Related Chemicals								
Acetaldehyde	75-07-0	34	2.8E-05	2.7E-04	2.0E-04	2.0E-04	5.1E-04	1.0E-03
Benzene	71-43-2	35	9.6E-06	6.4E-05	5.2E-05	4.5E-05	1.6E-04	2.6E-04
Benzene, 1,4-dichloro	106-46-7	7	0	2.0E-06	4.5E-06	0	1.3E-05	1.3E-05

Chemical	CASRN	Detection	$ADD_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	34	0	6.1E-05	6.3E-05	4.0E-05	1.8E-04	2.2E-04
Ethylbenzene	100-41-4	13	0	1.8E-05	3.1E-05	0	7.4E-05	1.2E-04
Formaldehyde	50-00-0	34	8.6E-05	4.1E-04	3.0E-04	3.4E-04	6.8E-04	1.7E-03
Tetrachloroethylene	127-18-4	7	0	5.1E-06	1.2E-05	0	3.4E-05	4.4E-05

[a] 35 field-specific $ADD_{inh\text{-}field}$ values are included in the table.
[b] On-Field ADD_{inh} was calculated from the individual field concentrations ($C_{air\text{-}field}$) of a chemical detected in air on the fields.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-189. Field-Specific Average **On-Field** Inhalation Daily Dose[a] ($ADD_{inh\text{-}field}$, milligrams per kilogram BW per day) for Lifetime Cancer Risk Assessment of Chemicals—Combined Gender **Athletes 30<40 Years**

Chemical	CASRN	Detection	$ADD_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals								
Aniline	62-53-3	10	0	4.5E-07	7.9E-07	0	1.7E-06	3.0E-06
Benz[a]anthracene	56-55-3	1	0	3.4E-10	2.0E-09	0	0	1.2E-08
Benzo[a]pyrene	50-32-8	28	0	7.9E-08	8.3E-08	4.2E-08	2.1E-07	3.3E-07
Benzo[b]fluoranthene	205-99-2	2	0	1.7E-09	6.9E-09	0	1.0E-08	2.9E-08
Benzo[k]fluoranthene	207-08-9	4	0	2.1E-09	6.3E-09	0	1.6E-08	2.4E-08
Chrysene	218-01-9	13	0	1.4E-08	2.2E-08	0	5.3E-08	9.1E-08
Cyclopenta[cd]pyrene	27208-37-3	28	0	5.0E-09	6.1E-09	1.9E-09	1.5E-08	2.9E-08
Dibenz[a,h]anthracene	53-70-3	14	0	9.9E-09	2.0E-08	0	4.9E-08	8.4E-08
Indeno[1,2,3-cd]pyrene	193-39-5	3	0	7.4E-09	2.4E-08	0	8.4E-08	8.4E-08
Methyl Isobutyl Ketone	108-10-1	5	0	1.1E-06	2.9E-06	0	8.4E-06	1.3E-05
Naphthalene	91-20-3	9	0	1.8E-06	3.8E-06	0	7.9E-06	1.8E-05
Styrene	100-42-5	17	0	4.1E-06	8.4E-06	0	1.4E-05	4.6E-05
Non-Field-Related Chemicals								
Acetaldehyde	75-07-0	34	1.8E-05	1.7E-04	1.3E-04	1.3E-04	3.3E-04	6.6E-04
Benzene	71-43-2	35	6.2E-06	4.2E-05	3.4E-05	2.9E-05	1.0E-04	1.7E-04
Benzene, 1,4-dichloro	106-46-7	7	0	1.3E-06	2.9E-06	0	8.2E-06	8.2E-06
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	34	0	4.0E-05	4.1E-05	2.6E-05	1.2E-04	1.5E-04
Ethylbenzene	100-41-4	13	0	1.2E-05	2.0E-05	0	4.8E-05	8.0E-05
Formaldehyde	50-00-0	34	5.6E-05	2.6E-04	2.0E-04	2.2E-04	4.4E-04	1.1E-03
Tetrachloroethylene	127-18-4	7	0	3.3E-06	7.8E-06	0	2.2E-05	2.9E-05

[a] 35 field-specific $ADD_{inh\text{-}field}$ values are included in the table.
[b] On-Field ADD_{inh} was calculated from the individual field concentrations ($C_{air\text{-}field}$) of a chemical detected in air on the fields.
CASRN: Chemical Abstracts Service Registry Number

Values are rounded to two significant figures.

Table F-190. Field-Specific Average **On-Field** Inhalation Daily Dose[a] ($ADD_{inh\text{-}field}$, milligrams per kilogram BW per day) for Lifetime Cancer Risk Assessment of Chemicals—Combined Gender **Athletes 40<50 Years**

Chemical	CASRN	Detection	$ADD_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals								
Aniline	62-53-3	10	0	4.4E-07	7.8E-07	0	1.7E-06	3.0E-06
Benz[a]anthracene	56-55-3	1	0	3.4E-10	2.0E-09	0	0	1.1E-08
Benzo[a]pyrene	50-32-8	28	0	7.8E-08	8.2E-08	4.2E-08	2.1E-07	3.2E-07
Benzo[b]fluoranthene	205-99-2	2	0	1.7E-09	6.8E-09	0	1.0E-08	2.9E-08
Benzo[k]fluoranthene	207-08-9	4	0	2.1E-09	6.2E-09	0	1.6E-08	2.4E-08
Chrysene	218-01-9	13	0	1.4E-08	2.2E-08	0	5.2E-08	9.0E-08
Cyclopenta[cd]pyrene	27208-37-3	28	0	5.0E-09	6.0E-09	1.8E-09	1.4E-08	2.8E-08
Dibenz[a,h]anthracene	53-70-3	14	0	9.8E-09	2.0E-08	0	4.9E-08	8.2E-08
Indeno[1,2,3-cd]pyrene	193-39-5	3	0	7.3E-09	2.4E-08	0	8.3E-08	8.3E-08
Methyl Isobutyl Ketone	108-10-1	5	0	1.1E-06	2.9E-06	0	8.3E-06	1.2E-05
Naphthalene	91-20-3	9	0	1.8E-06	3.8E-06	0	7.8E-06	1.8E-05
Styrene	100-42-5	17	0	4.0E-06	8.3E-06	0	1.4E-05	4.5E-05
Non-Field-Related Chemicals								
Acetaldehyde	75-07-0	34	1.8E-05	1.7E-04	1.3E-04	1.3E-04	3.3E-04	6.5E-04
Benzene	71-43-2	35	6.2E-06	4.1E-05	3.3E-05	2.9E-05	1.0E-04	1.7E-04
Benzene, 1,4-dichloro	106-46-7	7	0	1.3E-06	2.9E-06	0	8.1E-06	8.1E-06
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	34	0	3.9E-05	4.1E-05	2.6E-05	1.2E-04	1.4E-04
Ethylbenzene	100-41-4	13	0	1.2E-05	2.0E-05	0	4.8E-05	7.9E-05
Formaldehyde	50-00-0	34	5.5E-05	2.6E-04	2.0E-04	2.2E-04	4.4E-04	1.1E-03
Tetrachloroethylene	127-18-4	7	0	3.3E-06	7.7E-06	0	2.2E-05	2.9E-05

[a] 35 field-specific $ADD_{inh\text{-}field}$ values are included in the table.
[b] On-Field ADD_{inh} was calculated from the individual field concentrations ($C_{air\text{-}field}$) of a chemical detected in air on the fields.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-191. Field-Specific Average **On-Field** Inhalation Daily Dose[a] ($ADD_{inh\text{-}field}$, milligrams per kilogram BW per day) for Lifetime Cancer Risk Assessment of Chemicals—Combined Gender **Athletes 50<70 Years**

Chemical	CASRN	Detection	$ADD_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals								
Aniline	62-53-3	10	0	4.3E-07	7.6E-07	0	1.7E-06	2.9E-06
Benz[a]anthracene	56-55-3	1	0	3.3E-10	1.9E-09	0	0	1.1E-08

Chemical	CASRN	Detection	$ADD_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Benzo[a]pyrene	50-32-8	28	0	7.6E-08	8.0E-08	4.1E-08	2.1E-07	3.2E-07
Benzo[b]fluoranthene	205-99-2	2	0	1.7E-09	6.7E-09	0	9.8E-09	2.8E-08
Benzo[k]fluoranthene	207-08-9	4	0	2.1E-09	6.1E-09	0	1.6E-08	2.3E-08
Chrysene	218-01-9	13	0	1.4E-08	2.1E-08	0	5.1E-08	8.9E-08
Cyclopenta[cd]pyrene	27208-37-3	28	0	4.9E-09	5.9E-09	1.8E-09	1.4E-08	2.8E-08
Dibenz[a,h]anthracene	53-70-3	14	0	9.6E-09	1.9E-08	0	4.8E-08	8.1E-08
Indeno[1,2,3-cd]pyrene	193-39-5	3	0	7.2E-09	2.4E-08	0	8.2E-08	8.2E-08
Methyl Isobutyl Ketone	108-10-1	5	0	1.0E-06	2.9E-06	0	8.1E-06	1.2E-05
Naphthalene	91-20-3	9	0	1.8E-06	3.7E-06	0	7.7E-06	1.7E-05
Styrene	100-42-5	17	0	3.9E-06	8.1E-06	0	1.3E-05	4.4E-05
Non-Field-Related Chemicals								
Acetaldehyde	75-07-0	34	1.7E-05	1.7E-04	1.2E-04	1.3E-04	3.2E-04	6.4E-04
Benzene	71-43-2	35	6.0E-06	4.1E-05	3.3E-05	2.9E-05	1.0E-04	1.6E-04
Benzene, 1,4-dichloro	106-46-7	7	0	1.3E-06	2.8E-06	0	7.9E-06	7.9E-06
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	34	0	3.9E-05	4.0E-05	2.6E-05	1.1E-04	1.4E-04
Ethylbenzene	100-41-4	13	0	1.1E-05	1.9E-05	0	4.7E-05	7.7E-05
Formaldehyde	50-00-0	34	5.4E-05	2.6E-04	1.9E-04	2.1E-04	4.3E-04	1.1E-03
Tetrachloroethylene	127-18-4	7	0	3.2E-06	7.6E-06	0	2.1E-05	2.8E-05

[a] 35 field-specific $ADD_{inh\text{-}field}$ values are included in the table.
[b] On-Field ADD_{inh} was calculated from the individual field concentrations ($C_{air\text{-}field}$) of a chemical detected in air on the fields.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-192. Field-Specific Average **On-Field** Inhalation Daily Dose[a] ($ADD_{inh\text{-}field}$, milligrams per kilogram BW per day) for Lifetime Cancer Risk Assessment of Chemicals—Combined Gender **Coaches 16<30 Years**

Chemical	CASRN	Detection	$ADD_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals								
Aniline	62-53-3	10	0	2.8E-07	5.0E-07	0	1.1E-06	1.9E-06
Benz[a]anthracene	56-55-3	1	0	2.2E-10	1.3E-09	0	0	7.3E-09
Benzo[a]pyrene	50-32-8	28	0	5.0E-08	5.3E-08	2.7E-08	1.3E-07	2.1E-07
Benzo[b]fluoranthene	205-99-2	2	0	1.1E-09	4.4E-09	0	6.4E-09	1.8E-08
Benzo[k]fluoranthene	207-08-9	4	0	1.3E-09	4.0E-09	0	1.0E-08	1.5E-08
Chrysene	218-01-9	13	0	9.0E-09	1.4E-08	0	3.4E-08	5.8E-08
Cyclopenta[cd]pyrene	27208-37-3	28	0	3.2E-09	3.9E-09	1.2E-09	9.2E-09	1.8E-08
Dibenz[a,h]anthracene	53-70-3	14	0	6.3E-09	1.3E-08	0	3.1E-08	5.3E-08
Indeno[1,2,3-cd]pyrene	193-39-5	3	0	4.7E-09	1.5E-08	0	5.3E-08	5.3E-08
Methyl Isobutyl Ketone	108-10-1	5	0	6.8E-07	1.9E-06	0	5.3E-06	8.0E-06

Chemical	CASRN	Detection	$ADD_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Naphthalene	91-20-3	9	0	1.2E-06	2.4E-06	0	5.0E-06	1.1E-05
Styrene	100-42-5	17	0	2.6E-06	5.3E-06	0	8.7E-06	2.9E-05
Non-Field-Related Chemicals								
Acetaldehyde	75-07-0	34	1.1E-05	1.1E-04	8.1E-05	8.4E-05	2.1E-04	4.2E-04
Benzene	71-43-2	35	4.0E-06	2.6E-05	2.1E-05	1.9E-05	6.6E-05	1.1E-04
Benzene, 1,4-dichloro	106-46-7	7	0	8.4E-07	1.8E-06	0	5.2E-06	5.2E-06
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	34	0	2.5E-05	2.6E-05	1.7E-05	7.5E-05	9.3E-05
Ethylbenzene	100-41-4	13	0	7.5E-06	1.3E-05	0	3.1E-05	5.1E-05
Formaldehyde	50-00-0	34	3.5E-05	1.7E-04	1.3E-04	1.4E-04	2.8E-04	7.2E-04
Tetrachloroethylene	127-18-4	7	0	2.1E-06	4.9E-06	0	1.4E-05	1.8E-05

[a] 35 field-specific $ADD_{inh\text{-}field}$ values are included in the table.
[b] On-Field ADD_{inh} was calculated from the individual field concentrations ($C_{air\text{-}field}$) of a chemical detected in air on the fields.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-193. Field-Specific Average **On-Field** Inhalation Daily Dose[a] ($ADD_{inh\text{-}field}$, milligrams per kilogram BW per day) for Lifetime Cancer Risk Assessment of Chemicals—Combined Gender **Coaches 30<40 Years**

Chemical	CASRN	Detection	$ADD_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals								
Aniline	62-53-3	10	0	2.5E-07	4.4E-07	0	9.6E-07	1.7E-06
Benz[a]anthracene	56-55-3	1	0	1.9E-10	1.1E-09	0	0	6.4E-09
Benzo[a]pyrene	50-32-8	28	0	4.4E-08	4.6E-08	2.3E-08	1.2E-07	1.8E-07
Benzo[b]fluoranthene	205-99-2	2	0	9.4E-10	3.8E-09	0	5.6E-09	1.6E-08
Benzo[k]fluoranthene	207-08-9	4	0	1.2E-09	3.5E-09	0	9.0E-09	1.3E-08
Chrysene	218-01-9	13	0	7.8E-09	1.2E-08	0	2.9E-08	5.1E-08
Cyclopenta[cd]pyrene	27208-37-3	28	0	2.8E-09	3.4E-09	1.0E-09	8.0E-09	1.6E-08
Dibenz[a,h]anthracene	53-70-3	14	0	5.5E-09	1.1E-08	0	2.7E-08	4.6E-08
Indeno[1,2,3-cd]pyrene	193-39-5	3	0	4.1E-09	1.3E-08	0	4.7E-08	4.7E-08
Methyl Isobutyl Ketone	108-10-1	5	0	6.0E-07	1.6E-06	0	4.7E-06	7.0E-06
Naphthalene	91-20-3	9	0	1.0E-06	2.1E-06	0	4.4E-06	9.9E-06
Styrene	100-42-5	17	0	2.2E-06	4.6E-06	0	7.6E-06	2.5E-05
Non-Field-Related Chemicals								
Acetaldehyde	75-07-0	34	1.0E-05	9.6E-05	7.1E-05	7.3E-05	1.8E-04	3.7E-04
Benzene	71-43-2	35	3.5E-06	2.3E-05	1.9E-05	1.6E-05	5.8E-05	9.4E-05
Benzene, 1,4-dichloro	106-46-7	7	0	7.3E-07	1.6E-06	0	4.5E-06	4.5E-06
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	34	0	2.2E-05	2.3E-05	1.5E-05	6.5E-05	8.1E-05

Chemical	CASRN	Detection	$ADD_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Ethylbenzene	100-41-4	13	0	6.6E-06	1.1E-05	0	2.7E-05	4.4E-05
Formaldehyde	50-00-0	34	3.1E-05	1.5E-04	1.1E-04	1.2E-04	2.4E-04	6.3E-04
Tetrachloroethylene	127-18-4	7	0	1.8E-06	4.3E-06	0	1.2E-05	1.6E-05

[a] 35 field-specific $ADD_{inh\text{-}field}$ values are included in the table.
[b] On-Field ADD_{inh} was calculated from the individual field concentrations ($C_{air\text{-}field}$) of a chemical detected in air on the fields.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-194. Field-Specific Average **On-Field** Inhalation Daily Dose[a] ($ADD_{inh\text{-}field}$, milligrams per kilogram BW per day) for Lifetime Cancer Risk Assessment of Chemicals—Combined Gender **Coaches 40<50 Years**

Chemical	CASRN	Detection	$ADD_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals								
Aniline	62-53-3	10	0	2.5E-07	4.4E-07	0	9.7E-07	1.7E-06
Benz[a]anthracene	56-55-3	1	0	1.9E-10	1.1E-09	0	0	6.5E-09
Benzo[a]pyrene	50-32-8	28	0	4.4E-08	4.6E-08	2.4E-08	1.2E-07	1.8E-07
Benzo[b]fluoranthene	205-99-2	2	0	9.5E-10	3.9E-09	0	5.7E-09	1.6E-08
Benzo[k]fluoranthene	207-08-9	4	0	1.2E-09	3.5E-09	0	9.1E-09	1.3E-08
Chrysene	218-01-9	13	0	7.9E-09	1.2E-08	0	3.0E-08	5.1E-08
Cyclopenta[cd]pyrene	27208-37-3	28	0	2.8E-09	3.4E-09	1.0E-09	8.1E-09	1.6E-08
Dibenz[a,h]anthracene	53-70-3	14	0	5.5E-09	1.1E-08	0	2.8E-08	4.7E-08
Indeno[1,2,3-cd]pyrene	193-39-5	3	0	4.2E-09	1.4E-08	0	4.7E-08	4.7E-08
Methyl Isobutyl Ketone	108-10-1	5	0	6.0E-07	1.6E-06	0	4.7E-06	7.1E-06
Naphthalene	91-20-3	9	0	1.0E-06	2.1E-06	0	4.4E-06	1.0E-05
Styrene	100-42-5	17	0	2.3E-06	4.7E-06	0	7.7E-06	2.5E-05
Non-Field-Related Chemicals								
Acetaldehyde	75-07-0	34	1.0E-05	9.7E-05	7.2E-05	7.4E-05	1.9E-04	3.7E-04
Benzene	71-43-2	35	3.5E-06	2.3E-05	1.9E-05	1.6E-05	5.8E-05	9.5E-05
Benzene, 1,4-dichloro	106-46-7	7	0	7.4E-07	1.6E-06	0	4.6E-06	4.6E-06
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	34	0	2.2E-05	2.3E-05	1.5E-05	6.6E-05	8.2E-05
Ethylbenzene	100-41-4	13	0	6.6E-06	1.1E-05	0	2.7E-05	4.5E-05
Formaldehyde	50-00-0	34	3.1E-05	1.5E-04	1.1E-04	1.2E-04	2.5E-04	6.3E-04
Tetrachloroethylene	127-18-4	7	0	1.8E-06	4.4E-06	0	1.2E-05	1.6E-05

[a] 35 field-specific $ADD_{inh\text{-}field}$ values are included in the table.
[b] On-Field ADD_{inh} was calculated from the individual field concentrations ($C_{air\text{-}field}$) of a chemical detected in air on the fields.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-195. Field-Specific Average **On-Field** Inhalation Daily Dose[a] ($ADD_{inh\text{-}field}$, milligrams per kilogram BW per day) for Lifetime Cancer Risk Assessment of Chemicals—Combined Gender **Coaches 50<70 Years**

Chemical	CASRN	Detection	$ADD_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals								
Aniline	62-53-3	10	0	2.5E-07	4.4E-07	0	9.8E-07	1.7E-06
Benz[a]anthracene	56-55-3	1	0	1.9E-10	1.1E-09	0	0	6.5E-09
Benzo[a]pyrene	50-32-8	28	0	4.4E-08	4.7E-08	2.4E-08	1.2E-07	1.8E-07
Benzo[b]fluoranthene	205-99-2	2	0	9.5E-10	3.9E-09	0	5.7E-09	1.6E-08
Benzo[k]fluoranthene	207-08-9	4	0	1.2E-09	3.5E-09	0	9.1E-09	1.3E-08
Chrysene	218-01-9	13	0	7.9E-09	1.2E-08	0	3.0E-08	5.1E-08
Cyclopenta[cd]pyrene	27208-37-3	28	0	2.8E-09	3.4E-09	1.1E-09	8.1E-09	1.6E-08
Dibenz[a,h]anthracene	53-70-3	14	0	5.6E-09	1.1E-08	0	2.8E-08	4.7E-08
Indeno[1,2,3-cd]pyrene	193-39-5	3	0	4.2E-09	1.4E-08	0	4.7E-08	4.7E-08
Methyl Isobutyl Ketone	108-10-1	5	0	6.1E-07	1.7E-06	0	4.7E-06	7.1E-06
Naphthalene	91-20-3	9	0	1.0E-06	2.2E-06	0	4.4E-06	1.0E-05
Styrene	100-42-5	17	0	2.3E-06	4.7E-06	0	7.7E-06	2.5E-05
Non-Field-Related Chemicals								
Acetaldehyde	75-07-0	34	1.0E-05	9.8E-05	7.2E-05	7.4E-05	1.9E-04	3.7E-04
Benzene	71-43-2	35	3.5E-06	2.3E-05	1.9E-05	1.6E-05	5.9E-05	9.5E-05
Benzene, 1,4-dichloro	106-46-7	7	0	7.4E-07	1.6E-06	0	4.6E-06	4.6E-06
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	34	0	2.2E-05	2.3E-05	1.5E-05	6.6E-05	8.2E-05
Ethylbenzene	100-41-4	13	0	6.7E-06	1.1E-05	0	2.7E-05	4.5E-05
Formaldehyde	50-00-0	34	3.1E-05	1.5E-04	1.1E-04	1.2E-04	2.5E-04	6.3E-04
Tetrachloroethylene	127-18-4	7	0	1.9E-06	4.4E-06	0	1.2E-05	1.6E-05

[a] 35 field-specific $ADD_{inh\text{-}field}$ values are included in the table.
[b] On-Field ADD_{inh} was calculated from the individual field concentrations ($C_{air\text{-}field}$) of a chemical detected in air on the fields.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-196. Field-Specific Average **On-Field** Inhalation Daily Dose[a] ($ADD_{inh\text{-}field}$, milligrams per kilogram BW per day) for Lifetime Cancer Risk Assessment of Chemicals—Combined Gender **Referees 16<30 Years**

Chemical	CASRN	Detection	$ADD_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals								
Aniline	62-53-3	10	0	1.1E-07	1.9E-07	0	4.1E-07	7.1E-07
Benz[a]anthracene	56-55-3	1	0	8.0E-11	4.7E-10	0	0	2.7E-09
Benzo[a]pyrene	50-32-8	28	0	1.9E-08	2.0E-08	9.9E-09	5.0E-08	7.7E-08
Benzo[b]fluoranthene	205-99-2	2	0	4.0E-10	1.6E-09	0	2.4E-09	6.8E-09

Chemical	CASRN	Detection	$ADD_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Benzo[k]fluoranthene	207-08-9	4	0	5.0E-10	1.5E-09	0	3.8E-09	5.6E-09
Chrysene	218-01-9	13	0	3.3E-09	5.2E-09	0	1.2E-08	2.1E-08
Cyclopenta[cd]pyrene	27208-37-3	28	0	1.2E-09	1.4E-09	4.4E-10	3.4E-09	6.7E-09
Dibenz[a,h]anthracene	53-70-3	14	0	2.3E-09	4.6E-09	0	1.2E-08	2.0E-08
Indeno[1,2,3-cd]pyrene	193-39-5	3	0	1.7E-09	5.7E-09	0	2.0E-08	2.0E-08
Methyl Isobutyl Ketone	108-10-1	5	0	2.5E-07	6.9E-07	0	2.0E-06	3.0E-06
Naphthalene	91-20-3	9	0	4.3E-07	9.0E-07	0	1.9E-06	4.2E-06
Styrene	100-42-5	17	0	9.6E-07	2.0E-06	0	3.2E-06	1.1E-05
Non-Field-Related Chemicals								
Acetaldehyde	75-07-0	34	4.2E-06	4.1E-05	3.0E-05	3.1E-05	7.8E-05	1.6E-04
Benzene	71-43-2	35	1.5E-06	9.8E-06	7.9E-06	6.9E-06	2.5E-05	4.0E-05
Benzene, 1,4-dichloro	106-46-7	7	0	3.1E-07	6.8E-07	0	1.9E-06	1.9E-06
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	34	0	9.3E-06	9.7E-06	6.2E-06	2.8E-05	3.4E-05
Ethylbenzene	100-41-4	13	0	2.8E-06	4.7E-06	0	1.1E-05	1.9E-05
Formaldehyde	50-00-0	34	1.3E-05	6.2E-05	4.7E-05	5.2E-05	1.0E-04	2.7E-04
Tetrachloroethylene	127-18-4	7	0	7.8E-07	1.8E-06	0	5.2E-06	6.8E-06

[a] 35 field-specific $ADD_{inh\text{-}field}$ values are included in the table.
[b] On-Field ADD_{inh} was calculated from the individual field concentrations ($C_{air\text{-}field}$) of a chemical detected in air on the fields.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-197. Field-Specific Average **On-Field** Inhalation Daily Dose[a] ($ADD_{inh\text{-}field}$, milligrams per kilogram BW per day) for Lifetime Cancer Risk Assessment of Chemicals—Combined Gender **Referees 30<40 Years**

Chemical	CASRN	Detection	$ADD_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals								
Aniline	62-53-3	10	0	9.2E-08	1.6E-07	0	3.6E-07	6.2E-07
Benz[a]anthracene	56-55-3	1	0	7.0E-11	4.1E-10	0	0	2.4E-09
Benzo[a]pyrene	50-32-8	28	0	1.6E-08	1.7E-08	8.7E-09	4.4E-08	6.7E-08
Benzo[b]fluoranthene	205-99-2	2	0	3.5E-10	1.4E-09	0	2.1E-09	5.9E-09
Benzo[k]fluoranthene	207-08-9	4	0	4.3E-10	1.3E-09	0	3.3E-09	4.9E-09
Chrysene	218-01-9	13	0	2.9E-09	4.5E-09	0	1.1E-08	1.9E-08
Cyclopenta[cd]pyrene	27208-37-3	28	0	1.0E-09	1.3E-09	3.8E-10	3.0E-09	5.9E-09
Dibenz[a,h]anthracene	53-70-3	14	0	2.0E-09	4.1E-09	0	1.0E-08	1.7E-08
Indeno[1,2,3-cd]pyrene	193-39-5	3	0	1.5E-09	5.0E-09	0	1.7E-08	1.7E-08
Methyl Isobutyl Ketone	108-10-1	5	0	2.2E-07	6.0E-07	0	1.7E-06	2.6E-06
Naphthalene	91-20-3	9	0	3.8E-07	7.9E-07	0	1.6E-06	3.7E-06
Styrene	100-42-5	17	0	8.4E-07	1.7E-06	0	2.8E-06	9.3E-06

Chemical	CASRN	Detection	$ADD_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Non-Field-Related Chemicals								
Acetaldehyde	75-07-0	34	3.7E-06	3.6E-05	2.6E-05	2.7E-05	6.8E-05	1.4E-04
Benzene	71-43-2	35	1.3E-06	8.6E-06	6.9E-06	6.0E-06	2.1E-05	3.5E-05
Benzene, 1,4-dichloro	106-46-7	7	0	2.7E-07	6.0E-07	0	1.7E-06	1.7E-06
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	34	0	8.2E-06	8.5E-06	5.4E-06	2.4E-05	3.0E-05
Ethylbenzene	100-41-4	13	0	2.4E-06	4.1E-06	0	9.9E-06	1.6E-05
Formaldehyde	50-00-0	34	1.2E-05	5.4E-05	4.1E-05	4.5E-05	9.1E-05	2.3E-04
Tetrachloroethylene	127-18-4	7	0	6.8E-07	1.6E-06	0	4.5E-06	5.9E-06

[a] 35 field-specific $ADD_{inh\text{-}field}$ values are included in the table.
[b] On-Field ADD_{inh} was calculated from the individual field concentrations ($C_{air\text{-}field}$) of a chemical detected in air on the fields.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-198. Field-Specific Average **On-Field** Inhalation Daily Dose[a] ($ADD_{inh\text{-}field}$, milligrams per kilogram BW per day) for Lifetime Cancer Risk Assessment of Chemicals—Combined Gender **Referees 40<50 Years**

Chemical	CASRN	Detection	$ADD_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals								
Aniline	62-53-3	10	0	9.3E-08	1.6E-07	0	3.6E-07	6.3E-07
Benz[a]anthracene	56-55-3	1	0	7.1E-11	4.1E-10	0	0	2.4E-09
Benzo[a]pyrene	50-32-8	28	0	1.6E-08	1.7E-08	8.8E-09	4.4E-08	6.8E-08
Benzo[b]fluoranthene	205-99-2	2	0	3.5E-10	1.4E-09	0	2.1E-09	6.0E-09
Benzo[k]fluoranthene	207-08-9	4	0	4.4E-10	1.3E-09	0	3.4E-09	5.0E-09
Chrysene	218-01-9	13	0	2.9E-09	4.6E-09	0	1.1E-08	1.9E-08
Cyclopenta[cd]pyrene	27208-37-3	28	0	1.0E-09	1.3E-09	3.9E-10	3.0E-09	5.9E-09
Dibenz[a,h]anthracene	53-70-3	14	0	2.1E-09	4.1E-09	0	1.0E-08	1.7E-08
Indeno[1,2,3-cd]pyrene	193-39-5	3	0	1.5E-09	5.0E-09	0	1.7E-08	1.7E-08
Methyl Isobutyl Ketone	108-10-1	5	0	2.2E-07	6.1E-07	0	1.7E-06	2.6E-06
Naphthalene	91-20-3	9	0	3.8E-07	8.0E-07	0	1.6E-06	3.7E-06
Styrene	100-42-5	17	0	8.4E-07	1.7E-06	0	2.8E-06	9.4E-06
Non-Field-Related Chemicals								
Acetaldehyde	75-07-0	34	3.7E-06	3.6E-05	2.7E-05	2.7E-05	6.9E-05	1.4E-04
Benzene	71-43-2	35	1.3E-06	8.7E-06	7.0E-06	6.1E-06	2.2E-05	3.5E-05
Benzene, 1,4-dichloro	106-46-7	7	0	2.8E-07	6.0E-07	0	1.7E-06	1.7E-06
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	34	0	8.2E-06	8.6E-06	5.5E-06	2.5E-05	3.0E-05
Ethylbenzene	100-41-4	13	0	2.5E-06	4.2E-06	0	1.0E-05	1.7E-05
Formaldehyde	50-00-0	34	1.2E-05	5.5E-05	4.1E-05	4.6E-05	9.2E-05	2.3E-04

Chemical	CASRN	Detection	$ADD_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Tetrachloroethylene	127-18-4	7	0	6.9E-07	1.6E-06	0	4.6E-06	6.0E-06

[a] 35 field-specific $ADD_{inh\text{-}field}$ values are included in the table.
[b] On-Field ADD_{inh} was calculated from the individual field concentrations ($C_{air\text{-}field}$) of a chemical detected in air on the fields.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-199. Field-Specific Average **On-Field** Inhalation Daily Dose[a] ($ADD_{inh\text{-}field}$, milligrams per kilogram BW per day) for Lifetime Cancer Risk Assessment of Chemicals—Combined Gender **Referees 50<70 Years**

Chemical	CASRN	Detection	$ADD_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals								
Aniline	62-53-3	10	0	9.3E-08	1.6E-07	0	3.6E-07	6.3E-07
Benz[a]anthracene	56-55-3	1	0	7.1E-11	4.1E-10	0	0	2.4E-09
Benzo[a]pyrene	50-32-8	28	0	1.6E-08	1.7E-08	8.8E-09	4.4E-08	6.8E-08
Benzo[b]fluoranthene	205-99-2	2	0	3.5E-10	1.4E-09	0	2.1E-09	6.0E-09
Benzo[k]fluoranthene	207-08-9	4	0	4.4E-10	1.3E-09	0	3.4E-09	5.0E-09
Chrysene	218-01-9	13	0	2.9E-09	4.6E-09	0	1.1E-08	1.9E-08
Cyclopenta[cd]pyrene	27208-37-3	28	0	1.0E-09	1.3E-09	3.9E-10	3.0E-09	5.9E-09
Dibenz[a,h]anthracene	53-70-3	14	0	2.1E-09	4.1E-09	0	1.0E-08	1.7E-08
Indeno[1,2,3-cd]pyrene	193-39-5	3	0	1.5E-09	5.0E-09	0	1.8E-08	1.8E-08
Methyl Isobutyl Ketone	108-10-1	5	0	2.3E-07	6.1E-07	0	1.8E-06	2.6E-06
Naphthalene	91-20-3	9	0	3.8E-07	8.0E-07	0	1.7E-06	3.7E-06
Styrene	100-42-5	17	0	8.5E-07	1.7E-06	0	2.9E-06	9.5E-06
Non-Field-Related Chemicals								
Acetaldehyde	75-07-0	34	3.8E-06	3.6E-05	2.7E-05	2.8E-05	6.9E-05	1.4E-04
Benzene	71-43-2	35	1.3E-06	8.7E-06	7.0E-06	6.1E-06	2.2E-05	3.5E-05
Benzene, 1,4-dichloro	106-46-7	7	0	2.8E-07	6.1E-07	0	1.7E-06	1.7E-06
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	34	0	8.3E-06	8.6E-06	5.5E-06	2.5E-05	3.0E-05
Ethylbenzene	100-41-4	13	0	2.5E-06	4.2E-06	0	1.0E-05	1.7E-05
Formaldehyde	50-00-0	34	1.2E-05	5.5E-05	4.1E-05	4.6E-05	9.2E-05	2.4E-04
Tetrachloroethylene	127-18-4	7	0	6.9E-07	1.6E-06	0	4.6E-06	6.0E-06

[a] 35 field-specific $ADD_{inh\text{-}field}$ values are included in the table.
[b] On-Field ADD_{inh} was calculated from the individual field concentrations ($C_{air\text{-}field}$) of a chemical detected in air on the fields.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-200. Field-Specific Average **On-Field** Inhalation Daily Dose[a] ($ADD_{inh\text{-}field}$, milligrams per kilogram BW per day) for Lifetime Cancer Risk Assessment of Chemicals—Combined Gender **Spectators Thrid Trimester Fetus<0 Year**

Chemical	CASRN	Detection	$ADD_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals								
Aniline	62-53-3	10	0	3.8E-08	6.7E-08	0	1.5E-07	2.6E-07
Benz[a]anthracene	56-55-3	1	0	2.9E-11	1.7E-10	0	0	9.9E-10
Benzo[a]pyrene	50-32-8	28	0	6.7E-09	7.1E-09	3.6E-09	1.8E-08	2.8E-08
Benzo[b]fluoranthene	205-99-2	2	0	1.5E-10	5.9E-10	0	8.6E-10	2.5E-09
Benzo[k]fluoranthene	207-08-9	4	0	1.8E-10	5.3E-10	0	1.4E-09	2.0E-09
Chrysene	218-01-9	13	0	1.2E-09	1.9E-09	0	4.5E-09	7.8E-09
Cyclopenta[cd]pyrene	27208-37-3	28	0	4.3E-10	5.2E-10	1.6E-10	1.2E-09	2.4E-09
Dibenz[a,h]anthracene	53-70-3	14	0	8.4E-10	1.7E-09	0	4.2E-09	7.1E-09
Indeno[1,2,3-cd]pyrene	193-39-5	3	0	6.3E-10	2.1E-09	0	7.2E-09	7.2E-09
Methyl Isobutyl Ketone	108-10-1	5	0	9.2E-08	2.5E-07	0	7.2E-07	1.1E-06
Naphthalene	91-20-3	9	0	1.6E-07	3.3E-07	0	6.8E-07	1.5E-06
Styrene	100-42-5	17	0	3.5E-07	7.1E-07	0	1.2E-06	3.9E-06
Non-Field-Related Chemicals								
Acetaldehyde	75-07-0	34	1.5E-06	1.5E-05	1.1E-05	1.1E-05	2.8E-05	5.6E-05
Benzene	71-43-2	35	5.3E-07	3.6E-06	2.9E-06	2.5E-06	8.9E-06	1.4E-05
Benzene, 1,4-dichloro	106-46-7	7	0	1.1E-07	2.5E-07	0	7.0E-07	7.0E-07
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	34	0	3.4E-06	3.5E-06	2.2E-06	1.0E-05	1.2E-05
Ethylbenzene	100-41-4	13	0	1.0E-06	1.7E-06	0	4.1E-06	6.8E-06
Formaldehyde	50-00-0	34	4.8E-06	2.3E-05	1.7E-05	1.9E-05	3.8E-05	9.6E-05
Tetrachloroethylene	127-18-4	7	0	2.8E-07	6.7E-07	0	1.9E-06	2.5E-06

[a] 35 field-specific $ADD_{inh\text{-}field}$ values are included in the table.
[b] On-Field ADD_{inh} was calculated from the individual field concentrations ($C_{air\text{-}field}$) of a chemical detected in air on the fields.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-201. Field-Specific Average **On-Field** Inhalation Daily Dose[a] ($ADD_{inh\text{-}field}$, milligrams per kilogram BW per day) for Lifetime Cancer Risk Assessment of Chemicals—Combined Gender **Spectators 0<2 Years**

Chemical	CASRN	Detection	$ADD_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals								
Aniline	62-53-3	10	0	3.1E-07	5.4E-07	0	1.2E-06	2.1E-06
Benz[a]anthracene	56-55-3	1	0	2.3E-10	1.4E-09	0	0	7.9E-09
Benzo[a]pyrene	50-32-8	28	0	5.4E-08	5.7E-08	2.9E-08	1.5E-07	2.2E-07
Benzo[b]fluoranthene	205-99-2	2	0	1.2E-09	4.7E-09	0	6.9E-09	2.0E-08

Chemical	CASRN	Detection	$ADD_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Benzo[k]fluoranthene	207-08-9	4	0	1.5E-09	4.3E-09	0	1.1E-08	1.6E-08
Chrysene	218-01-9	13	0	9.7E-09	1.5E-08	0	3.6E-08	6.3E-08
Cyclopenta[cd]pyrene	27208-37-3	28	0	3.4E-09	4.2E-09	1.3E-09	1.0E-08	2.0E-08
Dibenz[a,h]anthracene	53-70-3	14	0	6.8E-09	1.4E-08	0	3.4E-08	5.7E-08
Indeno[1,2,3-cd]pyrene	193-39-5	3	0	5.1E-09	1.7E-08	0	5.8E-08	5.8E-08
Methyl Isobutyl Ketone	108-10-1	5	0	7.4E-07	2.0E-06	0	5.8E-06	8.6E-06
Naphthalene	91-20-3	9	0	1.3E-06	2.6E-06	0	5.4E-06	1.2E-05
Styrene	100-42-5	17	0	2.8E-06	5.7E-06	0	9.4E-06	3.1E-05
Non-Field-Related Chemicals								
Acetaldehyde	75-07-0	34	1.2E-05	1.2E-04	8.8E-05	9.1E-05	2.3E-04	4.5E-04
Benzene	71-43-2	35	4.3E-06	2.9E-05	2.3E-05	2.0E-05	7.2E-05	1.2E-04
Benzene, 1,4-dichloro	106-46-7	7	0	9.1E-07	2.0E-06	0	5.6E-06	5.6E-06
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	34	0	2.7E-05	2.8E-05	1.8E-05	8.1E-05	1.0E-04
Ethylbenzene	100-41-4	13	0	8.1E-06	1.4E-05	0	3.3E-05	5.5E-05
Formaldehyde	50-00-0	34	3.8E-05	1.8E-04	1.4E-04	1.5E-04	3.0E-04	7.8E-04
Tetrachloroethylene	127-18-4	7	0	2.3E-06	5.4E-06	0	1.5E-05	2.0E-05

[a] 35 field-specific $ADD_{inh\text{-}field}$ values are included in the table.
[b] On-Field ADD_{inh} was calculated from the individual field concentrations ($C_{air\text{-}field}$) of a chemical detected in air on the fields.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-202. Field-Specific Average **On-Field** Inhalation Daily Dose[a] ($ADD_{inh\text{-}field}$, milligrams per kilogram BW per day) for Lifetime Cancer Risk Assessment of Chemicals—Combined Gender **Spectators 2<6 Years**

Chemical	CASRN	Detection	$ADD_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals								
Aniline	62-53-3	10	0	1.6E-07	2.8E-07	0	6.3E-07	1.1E-06
Benz[a]anthracene	56-55-3	1	0	1.2E-10	7.2E-10	0	0	4.2E-09
Benzo[a]pyrene	50-32-8	28	0	2.8E-08	3.0E-08	1.5E-08	7.6E-08	1.2E-07
Benzo[b]fluoranthene	205-99-2	2	0	6.1E-10	2.5E-09	0	3.7E-09	1.0E-08
Benzo[k]fluoranthene	207-08-9	4	0	7.6E-10	2.3E-09	0	5.8E-09	8.6E-09
Chrysene	218-01-9	13	0	5.1E-09	7.9E-09	0	1.9E-08	3.3E-08
Cyclopenta[cd]pyrene	27208-37-3	28	0	1.8E-09	2.2E-09	6.7E-10	5.2E-09	1.0E-08
Dibenz[a,h]anthracene	53-70-3	14	0	3.6E-09	7.1E-09	0	1.8E-08	3.0E-08
Indeno[1,2,3-cd]pyrene	193-39-5	3	0	2.7E-09	8.7E-09	0	3.0E-08	3.0E-08
Methyl Isobutyl Ketone	108-10-1	5	0	3.9E-07	1.1E-06	0	3.0E-06	4.5E-06
Naphthalene	91-20-3	9	0	6.6E-07	1.4E-06	0	2.9E-06	6.5E-06
Styrene	100-42-5	17	0	1.5E-06	3.0E-06	0	4.9E-06	1.6E-05

Chemical	CASRN	Detection	$ADD_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Non-Field-Related Chemicals								
Acetaldehyde	75-07-0	34	6.5E-06	6.3E-05	4.6E-05	4.8E-05	1.2E-04	2.4E-04
Benzene	71-43-2	35	2.2E-06	1.5E-05	1.2E-05	1.1E-05	3.8E-05	6.1E-05
Benzene, 1,4-dichloro	106-46-7	7	0	4.8E-07	1.0E-06	0	3.0E-06	3.0E-06
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	34	0	1.4E-05	1.5E-05	9.5E-06	4.3E-05	5.3E-05
Ethylbenzene	100-41-4	13	0	4.3E-06	7.2E-06	0	1.7E-05	2.9E-05
Formaldehyde	50-00-0	34	2.0E-05	9.5E-05	7.2E-05	8.0E-05	1.6E-04	4.1E-04
Tetrachloroethylene	127-18-4	7	0	1.2E-06	2.8E-06	0	8.0E-06	1.0E-05

[a] 35 field-specific $ADD_{inh\text{-}field}$ values are included in the table.
[b] On-Field ADD_{inh} was calculated from the individual field concentrations ($C_{air\text{-}field}$) of a chemical detected in air on the fields.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-203. Field-Specific Average **On-Field** Inhalation Daily Dose[a] ($ADD_{inh\text{-}field}$, milligrams per kilogram BW per day) for Lifetime Cancer Risk Assessment of Chemicals—Combined Gender **Spectators 6<11 Years**

Chemical	CASRN	Detection	$ADD_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals								
Aniline	62-53-3	10	0	1.5E-07	2.7E-07	0	6.0E-07	1.0E-06
Benz[a]anthracene	56-55-3	1	0	1.2E-10	6.8E-10	0	0	4.0E-09
Benzo[a]pyrene	50-32-8	28	0	2.7E-08	2.9E-08	1.4E-08	7.3E-08	1.1E-07
Benzo[b]fluoranthene	205-99-2	2	0	5.9E-10	2.4E-09	0	3.5E-09	1.0E-08
Benzo[k]fluoranthene	207-08-9	4	0	7.3E-10	2.1E-09	0	5.6E-09	8.3E-09
Chrysene	218-01-9	13	0	4.9E-09	7.6E-09	0	1.8E-08	3.1E-08
Cyclopenta[cd]pyrene	27208-37-3	28	0	1.7E-09	2.1E-09	6.4E-10	5.0E-09	9.8E-09
Dibenz[a,h]anthracene	53-70-3	14	0	3.4E-09	6.8E-09	0	1.7E-08	2.9E-08
Indeno[1,2,3-cd]pyrene	193-39-5	3	0	2.6E-09	8.3E-09	0	2.9E-08	2.9E-08
Methyl Isobutyl Ketone	108-10-1	5	0	3.7E-07	1.0E-06	0	2.9E-06	4.3E-06
Naphthalene	91-20-3	9	0	6.3E-07	1.3E-06	0	2.7E-06	6.2E-06
Styrene	100-42-5	17	0	1.4E-06	2.9E-06	0	4.7E-06	1.6E-05
Non-Field-Related Chemicals								
Acetaldehyde	75-07-0	34	6.2E-06	6.0E-05	4.4E-05	4.6E-05	1.1E-04	2.3E-04
Benzene	71-43-2	35	2.1E-06	1.4E-05	1.2E-05	1.0E-05	3.6E-05	5.8E-05
Benzene, 1,4-dichloro	106-46-7	7	0	4.6E-07	1.0E-06	0	2.8E-06	2.8E-06
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	34	0	1.4E-05	1.4E-05	9.1E-06	4.1E-05	5.0E-05
Ethylbenzene	100-41-4	13	0	4.1E-06	6.9E-06	0	1.7E-05	2.7E-05
Formaldehyde	50-00-0	34	1.9E-05	9.1E-05	6.8E-05	7.6E-05	1.5E-04	3.9E-04

Chemical	CASRN	Detection	$ADD_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Tetrachloroethylene	127-18-4	7	0	1.1E-06	2.7E-06	0	7.6E-06	9.9E-06

[a] 35 field-specific $ADD_{inh\text{-}field}$ values are included in the table.
[b] On-Field ADD_{inh} was calculated from the individual field concentrations ($C_{air\text{-}field}$) of a chemical detected in air on the fields.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-204. Field-Specific Average **On-Field** Inhalation Daily Dose[a] ($ADD_{inh\text{-}field}$, milligrams per kilogram BW per day) for Lifetime Cancer Risk Assessment of Chemicals—Combined Gender **Spectators 11<16 Years**

Chemical	CASRN	Detection	$ADD_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals								
Aniline	62-53-3	10	0	6.6E-08	1.2E-07	0	2.6E-07	4.5E-07
Benz[a]anthracene	56-55-3	1	0	5.1E-11	2.9E-10	0	0	1.7E-09
Benzo[a]pyrene	50-32-8	28	0	1.2E-08	1.2E-08	6.3E-09	3.2E-08	4.8E-08
Benzo[b]fluoranthene	205-99-2	2	0	2.5E-10	1.0E-09	0	1.5E-09	4.3E-09
Benzo[k]fluoranthene	207-08-9	4	0	3.1E-10	9.3E-10	0	2.4E-09	3.6E-09
Chrysene	218-01-9	13	0	2.1E-09	3.3E-09	0	7.9E-09	1.4E-08
Cyclopenta[cd]pyrene	27208-37-3	28	0	7.4E-10	9.1E-10	2.8E-10	2.2E-09	4.2E-09
Dibenz[a,h]anthracene	53-70-3	14	0	1.5E-09	2.9E-09	0	7.3E-09	1.2E-08
Indeno[1,2,3-cd]pyrene	193-39-5	3	0	1.1E-09	3.6E-09	0	1.3E-08	1.3E-08
Methyl Isobutyl Ketone	108-10-1	5	0	1.6E-07	4.4E-07	0	1.2E-06	1.9E-06
Naphthalene	91-20-3	9	0	2.7E-07	5.7E-07	0	1.2E-06	2.7E-06
Styrene	100-42-5	17	0	6.0E-07	1.2E-06	0	2.0E-06	6.7E-06
Non-Field-Related Chemicals								
Acetaldehyde	75-07-0	34	2.7E-06	2.6E-05	1.9E-05	2.0E-05	5.0E-05	9.8E-05
Benzene	71-43-2	35	9.3E-07	6.2E-06	5.0E-06	4.4E-06	1.6E-05	2.5E-05
Benzene, 1,4-dichloro	106-46-7	7	0	2.0E-07	4.3E-07	0	1.2E-06	1.2E-06
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	34	0	5.9E-06	6.1E-06	3.9E-06	1.8E-05	2.2E-05
Ethylbenzene	100-41-4	13	0	1.8E-06	3.0E-06	0	7.2E-06	1.2E-05
Formaldehyde	50-00-0	34	8.3E-06	3.9E-05	3.0E-05	3.3E-05	6.6E-05	1.7E-04
Tetrachloroethylene	127-18-4	7	0	4.9E-07	1.2E-06	0	3.3E-06	4.3E-06

[a] 35 field-specific $ADD_{inh\text{-}field}$ values are included in the table.
[b] On-Field ADD_{inh} was calculated from the individual field concentrations ($C_{air\text{-}field}$) of a chemical detected in air on the fields.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-205. Field-Specific Average **On-Field** Inhalation Daily Dose[a] ($ADD_{inh\text{-}field}$, milligrams per kilogram BW per day) for Lifetime Cancer Risk Assessment of Chemicals—Combined Gender **Spectators 16<30 Years**

Chemical	CASRN	Detection	$ADD_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals								
Aniline	62-53-3	10	0	4.4E-08	7.7E-08	0	1.7E-07	3.0E-07
Benz[a]anthracene	56-55-3	1	0	3.3E-11	1.9E-10	0	0	1.1E-09
Benzo[a]pyrene	50-32-8	28	0	7.7E-09	8.1E-09	4.1E-09	2.1E-08	3.2E-08
Benzo[b]fluoranthene	205-99-2	2	0	1.7E-10	6.8E-10	0	9.9E-10	2.8E-09
Benzo[k]fluoranthene	207-08-9	4	0	2.1E-10	6.1E-10	0	1.6E-09	2.4E-09
Chrysene	218-01-9	13	0	1.4E-09	2.2E-09	0	5.2E-09	9.0E-09
Cyclopenta[cd]pyrene	27208-37-3	28	0	4.9E-10	6.0E-10	1.8E-10	1.4E-09	2.8E-09
Dibenz[a,h]anthracene	53-70-3	14	0	9.7E-10	1.9E-09	0	4.8E-09	8.2E-09
Indeno[1,2,3-cd]pyrene	193-39-5	3	0	7.3E-10	2.4E-09	0	8.3E-09	8.3E-09
Methyl Isobutyl Ketone	108-10-1	5	0	1.1E-07	2.9E-07	0	8.2E-07	1.2E-06
Naphthalene	91-20-3	9	0	1.8E-07	3.8E-07	0	7.8E-07	1.8E-06
Styrene	100-42-5	17	0	4.0E-07	8.2E-07	0	1.3E-06	4.5E-06
Non-Field-Related Chemicals								
Acetaldehyde	75-07-0	34	1.8E-06	1.7E-05	1.3E-05	1.3E-05	3.3E-05	6.5E-05
Benzene	71-43-2	35	6.1E-07	4.1E-06	3.3E-06	2.9E-06	1.0E-05	1.7E-05
Benzene, 1,4-dichloro	106-46-7	7	0	1.3E-07	2.9E-07	0	8.0E-07	8.0E-07
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	34	0	3.9E-06	4.0E-06	2.6E-06	1.2E-05	1.4E-05
Ethylbenzene	100-41-4	13	0	1.2E-06	2.0E-06	0	4.7E-06	7.8E-06
Formaldehyde	50-00-0	34	5.5E-06	2.6E-05	1.9E-05	2.2E-05	4.3E-05	1.1E-04
Tetrachloroethylene	127-18-4	7	0	3.2E-07	7.7E-07	0	2.2E-06	2.8E-06

[a] 35 field-specific $ADD_{inh\text{-}field}$ values are included in the table.
[b] On-Field ADD_{inh} was calculated from the individual field concentrations ($C_{air\text{-}field}$) of a chemical detected in air on the fields.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-206. Field-Specific Average **On-Field** Inhalation Daily Dose[a] ($ADD_{inh\text{-}field}$, milligrams per kilogram BW per day) for Lifetime Cancer Risk Assessment of Chemicals—Combined Gender **Spectators 30<40 Years**

Chemical	CASRN	Detection	$ADD_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals								
Aniline	62-53-3	10	0	3.8E-08	6.7E-08	0	1.5E-07	2.6E-07
Benz[a]anthracene	56-55-3	1	0	2.9E-11	1.7E-10	0	0	9.9E-10
Benzo[a]pyrene	50-32-8	28	0	6.7E-09	7.1E-09	3.6E-09	1.8E-08	2.8E-08
Benzo[b]fluoranthene	205-99-2	2	0	1.5E-10	5.9E-10	0	8.7E-10	2.5E-09

Chemical	CASRN	Detection	$ADD_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Benzo[k]fluoranthene	207-08-9	4	0	1.8E-10	5.3E-10	0	1.4E-09	2.1E-09
Chrysene	218-01-9	13	0	1.2E-09	1.9E-09	0	4.5E-09	7.8E-09
Cyclopenta[cd]pyrene	27208-37-3	28	0	4.3E-10	5.2E-10	1.6E-10	1.2E-09	2.4E-09
Dibenz[a,h]anthracene	53-70-3	14	0	8.5E-10	1.7E-09	0	4.2E-09	7.1E-09
Indeno[1,2,3-cd]pyrene	193-39-5	3	0	6.4E-10	2.1E-09	0	7.2E-09	7.2E-09
Methyl Isobutyl Ketone	108-10-1	5	0	9.3E-08	2.5E-07	0	7.2E-07	1.1E-06
Naphthalene	91-20-3	9	0	1.6E-07	3.3E-07	0	6.8E-07	1.5E-06
Styrene	100-42-5	17	0	3.5E-07	7.2E-07	0	1.2E-06	3.9E-06
Non-Field-Related Chemicals								
Acetaldehyde	75-07-0	34	1.5E-06	1.5E-05	1.1E-05	1.1E-05	2.9E-05	5.7E-05
Benzene	71-43-2	35	5.3E-07	3.6E-06	2.9E-06	2.5E-06	8.9E-06	1.5E-05
Benzene, 1,4-dichloro	106-46-7	7	0	1.1E-07	2.5E-07	0	7.0E-07	7.0E-07
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	34	0	3.4E-06	3.5E-06	2.3E-06	1.0E-05	1.3E-05
Ethylbenzene	100-41-4	13	0	1.0E-06	1.7E-06	0	4.1E-06	6.8E-06
Formaldehyde	50-00-0	34	4.8E-06	2.3E-05	1.7E-05	1.9E-05	3.8E-05	9.7E-05
Tetrachloroethylene	127-18-4	7	0	2.8E-07	6.7E-07	0	1.9E-06	2.5E-06

[a] 35 field-specific $ADD_{inh\text{-}field}$ values are included in the table.
[b] On-Field ADD_{inh} was calculated from the individual field concentrations ($C_{air\text{-}field}$) of a chemical detected in air on the fields.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-207. Field-Specific Average **On-Field** Inhalation Daily Dose[a] ($ADD_{inh\text{-}field}$, milligrams per kilogram BW per day) for Lifetime Cancer Risk Assessment of Chemicals—Combined Gender **Spectators 40<50 Years**

Chemical	CASRN	Detection	$ADD_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals								
Aniline	62-53-3	10	0	3.9E-08	6.8E-08	0	1.5E-07	2.6E-07
Benz[a]anthracene	56-55-3	1	0	2.9E-11	1.7E-10	0	0	1.0E-09
Benzo[a]pyrene	50-32-8	28	0	6.8E-09	7.2E-09	3.6E-09	1.8E-08	2.8E-08
Benzo[b]fluoranthene	205-99-2	2	0	1.5E-10	6.0E-10	0	8.8E-10	2.5E-09
Benzo[k]fluoranthene	207-08-9	4	0	1.8E-10	5.4E-10	0	1.4E-09	2.1E-09
Chrysene	218-01-9	13	0	1.2E-09	1.9E-09	0	4.6E-09	7.9E-09
Cyclopenta[cd]pyrene	27208-37-3	28	0	4.3E-10	5.3E-10	1.6E-10	1.3E-09	2.5E-09
Dibenz[a,h]anthracene	53-70-3	14	0	8.6E-10	1.7E-09	0	4.3E-09	7.2E-09
Indeno[1,2,3-cd]pyrene	193-39-5	3	0	6.4E-10	2.1E-09	0	7.3E-09	7.3E-09
Methyl Isobutyl Ketone	108-10-1	5	0	9.3E-08	2.5E-07	0	7.3E-07	1.1E-06
Naphthalene	91-20-3	9	0	1.6E-07	3.3E-07	0	6.9E-07	1.5E-06
Styrene	100-42-5	17	0	3.5E-07	7.3E-07	0	1.2E-06	3.9E-06

Chemical	CASRN	Detection	$ADD_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Non-Field-Related Chemicals								
Acetaldehyde	75-07-0	34	1.6E-06	1.5E-05	1.1E-05	1.1E-05	2.9E-05	5.7E-05
Benzene	71-43-2	35	5.4E-07	3.6E-06	2.9E-06	2.5E-06	9.0E-06	1.5E-05
Benzene, 1,4-dichloro	106-46-7	7	0	1.1E-07	2.5E-07	0	7.1E-07	7.1E-07
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	34	0	3.4E-06	3.6E-06	2.3E-06	1.0E-05	1.3E-05
Ethylbenzene	100-41-4	13	0	1.0E-06	1.7E-06	0	4.2E-06	6.9E-06
Formaldehyde	50-00-0	34	4.8E-06	2.3E-05	1.7E-05	1.9E-05	3.8E-05	9.8E-05
Tetrachloroethylene	127-18-4	7	0	2.9E-07	6.8E-07	0	1.9E-06	2.5E-06

[a] 35 field-specific $ADD_{inh\text{-}field}$ values are included in the table.
[b] On-Field ADD_{inh} was calculated from the individual field concentrations ($C_{air\text{-}field}$) of a chemical detected in air on the fields.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-208. Field-Specific Average **On-Field** Inhalation Daily Dose[a] ($ADD_{inh\text{-}field}$, milligrams per kilogram BW per day) for Lifetime Cancer Risk Assessment of Chemicals—Combined Gender **Spectators 50<70 Years**

Chemical	CASRN	Detection	$ADD_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals								
Aniline	62-53-3	10	0	3.9E-08	6.8E-08	0	1.5E-07	2.6E-07
Benz[a]anthracene	56-55-3	1	0	3.0E-11	1.7E-10	0	0	1.0E-09
Benzo[a]pyrene	50-32-8	28	0	6.8E-09	7.2E-09	3.7E-09	1.8E-08	2.8E-08
Benzo[b]fluoranthene	205-99-2	2	0	1.5E-10	6.0E-10	0	8.8E-10	2.5E-09
Benzo[k]fluoranthene	207-08-9	4	0	1.8E-10	5.4E-10	0	1.4E-09	2.1E-09
Chrysene	218-01-9	13	0	1.2E-09	1.9E-09	0	4.6E-09	7.9E-09
Cyclopenta[cd]pyrene	27208-37-3	28	0	4.4E-10	5.3E-10	1.6E-10	1.3E-09	2.5E-09
Dibenz[a,h]anthracene	53-70-3	14	0	8.6E-10	1.7E-09	0	4.3E-09	7.2E-09
Indeno[1,2,3-cd]pyrene	193-39-5	3	0	6.4E-10	2.1E-09	0	7.3E-09	7.3E-09
Methyl Isobutyl Ketone	108-10-1	5	0	9.4E-08	2.6E-07	0	7.3E-07	1.1E-06
Naphthalene	91-20-3	9	0	1.6E-07	3.3E-07	0	6.9E-07	1.6E-06
Styrene	100-42-5	17	0	3.5E-07	7.3E-07	0	1.2E-06	3.9E-06
Non-Field-Related Chemicals								
Acetaldehyde	75-07-0	34	1.6E-06	1.5E-05	1.1E-05	1.1E-05	2.9E-05	5.7E-05
Benzene	71-43-2	35	5.4E-07	3.6E-06	2.9E-06	2.6E-06	9.1E-06	1.5E-05
Benzene, 1,4-dichloro	106-46-7	7	0	1.1E-07	2.5E-07	0	7.1E-07	7.1E-07
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	34	0	3.4E-06	3.6E-06	2.3E-06	1.0E-05	1.3E-05
Ethylbenzene	100-41-4	13	0	1.0E-06	1.7E-06	0	4.2E-06	6.9E-06
Formaldehyde	50-00-0	34	4.9E-06	2.3E-05	1.7E-05	1.9E-05	3.8E-05	9.8E-05

Chemical	CASRN	Detection	$ADD_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Tetrachloroethylene	127-18-4	7	0	2.9E-07	6.8E-07	0	1.9E-06	2.5E-06

[a] 35 field-specific $ADD_{inh\text{-}field}$ values are included in the table.
[b] On-Field ADD_{inh} was calculated from the individual field concentrations ($C_{air\text{-}field}$) of a chemical detected in air on the fields.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-209. Field-Specific Average **Off-Field** Inhalation Daily Dose[a] ($ADD_{inh\text{-}field}$, milligrams per kilogram BW per day) for Lifetime Cancer Risk Assessment of Chemicals—Combined Gender **Spectators Third Trimester Fetus<0 Years**

Chemical	CASRN	Detection	$ADD_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals								
Aniline	62-53-3	8	0	4.2E-08	8.3E-08	0	1.5E-07	3.5E-07
Benz[a]anthracene	56-55-3	0	0	0	0	0	0	0
Benzo[a]pyrene	50-32-8	24	0	8.3E-09	1.3E-08	3.4E-09	2.9E-08	5.8E-08
Benzo[b]fluoranthene	205-99-2	3	0	2.2E-10	7.2E-10	0	2.5E-09	2.5E-09
Benzo[k]fluoranthene	207-08-9	3	0	1.9E-10	6.0E-10	0	2.0E-09	2.0E-09
Chrysene	218-01-9	7	0	6.2E-10	1.3E-09	0	2.5E-09	5.5E-09
Cyclopenta[cd]pyrene	27208-37-3	22	0	3.7E-10	4.8E-10	1.6E-10	1.3E-09	1.5E-09
Dibenz[a,h]anthracene	53-70-3	9	0	5.3E-10	1.2E-09	0	3.4E-09	4.3E-09
Indeno[1,2,3-cd]pyrene	193-39-5	2	0	4.4E-10	1.7E-09	0	2.9E-09	7.2E-09
Methyl Isobutyl Ketone	108-10-1	1	0	2.1E-08	1.2E-07	0	0	7.2E-07
Naphthalene	91-20-3	9	0	1.7E-07	3.5E-07	0	7.7E-07	1.5E-06
Styrene	100-42-5	13	0	3.5E-07	7.5E-07	0	1.3E-06	3.9E-06
Non-Field-Related Chemicals								
Benzene	71-43-2	34	1.1E-06	3.7E-06	3.1E-06	2.3E-06	8.9E-06	1.6E-05
Benzene, 1,4-dichloro	106-46-7	6	0	1.0E-07	2.4E-07	0	7.0E-07	7.0E-07
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	33	0	3.4E-06	3.7E-06	1.4E-06	1.1E-05	1.2E-05
Ethylbenzene	100-41-4	13	0	1.1E-06	1.8E-06	0	4.7E-06	7.7E-06
Tetrachloroethylene	127-18-4	7	0	2.9E-07	6.7E-07	0	1.9E-06	2.5E-06

[a] 35 field-specific $ADD_{inh\text{-}field}$ values are included in the table.
[b] Off-Field ADD_{inh} was calculated from the individual field concentrations ($C_{air\text{-}field}$) of a chemical detected in air off the fields. Carbonyl samples were not collected at off-field locations.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-210. Field-Specific Average **Off-Field** Inhalation Daily Dose[a] ($ADD_{inh\text{-}field}$, milligrams per kilogram BW per day) for Lifetime Cancer Risk Assessment of Chemicals—Combined Gender **Spectators 0<2 Year**

Chemical	CASRN	Detection	$ADD_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals								
Aniline	62-53-3	8	0	3.4E-07	6.7E-07	0	1.2E-06	2.8E-06
Benz[a]anthracene	56-55-3	0	0	0	0	0	0	0
Benzo[a]pyrene	50-32-8	24	0	6.6E-08	1.0E-07	2.8E-08	2.4E-07	4.7E-07
Benzo[b]fluoranthene	205-99-2	3	0	1.8E-09	5.8E-09	0	2.0E-08	2.0E-08
Benzo[k]fluoranthene	207-08-9	3	0	1.5E-09	4.8E-09	0	1.6E-08	1.6E-08
Chrysene	218-01-9	7	0	5.0E-09	1.1E-08	0	2.0E-08	4.4E-08
Cyclopenta[cd]pyrene	27208-37-3	22	0	3.0E-09	3.9E-09	1.3E-09	1.1E-08	1.2E-08
Dibenz[a,h]anthracene	53-70-3	9	0	4.3E-09	9.5E-09	0	2.7E-08	3.5E-08
Indeno[1,2,3-cd]pyrene	193-39-5	2	0	3.5E-09	1.4E-08	0	2.3E-08	5.8E-08
Methyl Isobutyl Ketone	108-10-1	1	0	1.7E-07	9.9E-07	0	0	5.8E-06
Naphthalene	91-20-3	9	0	1.4E-06	2.8E-06	0	6.2E-06	1.2E-05
Styrene	100-42-5	13	0	2.8E-06	6.1E-06	0	1.1E-05	3.2E-05
Non-Field-Related Chemicals								
Benzene	71-43-2	34	8.6E-06	3.0E-05	2.5E-05	1.9E-05	7.2E-05	1.3E-04
Benzene, 1,4-dichloro	106-46-7	6	0	8.3E-07	1.9E-06	0	5.6E-06	5.6E-06
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	33	0	2.7E-05	3.0E-05	1.1E-05	9.1E-05	9.4E-05
Ethylbenzene	100-41-4	13	0	8.6E-06	1.5E-05	0	3.8E-05	6.2E-05
Tetrachloroethylene	127-18-4	7	0	2.3E-06	5.4E-06	0	1.6E-05	2.0E-05

[a] 35 field-specific $ADD_{inh\text{-}field}$ values are included in the table.
[b] Off-Field ADD_{inh} was calculated from the individual field concentrations ($C_{air\text{-}field}$) of a chemical detected in air off the fields. Carbonyl samples were not collected at off-field locations.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-211. Field-Specific Average **Off-Field** Inhalation Daily Dose[a] ($ADD_{inh\text{-}field}$, milligrams per kilogram BW per day) for Lifetime Cancer Risk Assessment of Chemicals—Combined Gender **Spectators 2<6 Year**

Chemical	CASRN	Detection	$ADD_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals								
Aniline	62-53-3	8	0	1.8E-07	3.5E-07	0	6.3E-07	1.5E-06
Benz[a]anthracene	56-55-3	0	0	0	0	0	0	0
Benzo[a]pyrene	50-32-8	24	0	3.5E-08	5.4E-08	1.4E-08	1.2E-07	2.5E-07
Benzo[b]fluoranthene	205-99-2	3	0	9.5E-10	3.0E-09	0	1.0E-08	1.0E-08
Benzo[k]fluoranthene	207-08-9	3	0	7.9E-10	2.5E-09	0	8.6E-09	8.6E-09
Chrysene	218-01-9	7	0	2.6E-09	5.5E-09	0	1.1E-08	2.3E-08

Chemical	CASRN	Detection	$ADD_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Cyclopenta[cd]pyrene	27208-37-3	22	0	1.6E-09	2.0E-09	6.7E-10	5.6E-09	6.5E-09
Dibenz[a,h]anthracene	53-70-3	9	0	2.2E-09	5.0E-09	0	1.4E-08	1.8E-08
Indeno[1,2,3-cd]pyrene	193-39-5	2	0	1.8E-09	7.4E-09	0	1.2E-08	3.0E-08
Methyl Isobutyl Ketone	108-10-1	1	0	8.9E-08	5.2E-07	0	0	3.0E-06
Naphthalene	91-20-3	9	0	7.3E-07	1.5E-06	0	3.2E-06	6.4E-06
Styrene	100-42-5	13	0	1.5E-06	3.2E-06	0	5.6E-06	1.7E-05
Non-Field-Related Chemicals								
Benzene	71-43-2	34	4.5E-06	1.6E-05	1.3E-05	9.9E-06	3.8E-05	6.8E-05
Benzene, 1,4-dichloro	106-46-7	6	0	4.3E-07	1.0E-06	0	3.0E-06	3.0E-06
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	33	0	1.4E-05	1.6E-05	5.8E-06	4.8E-05	4.9E-05
Ethylbenzene	100-41-4	13	0	4.5E-06	7.7E-06	0	2.0E-05	3.2E-05
Tetrachloroethylene	127-18-4	7	0	1.2E-06	2.8E-06	0	8.2E-06	1.0E-05

[a] 35 field-specific $ADD_{inh\text{-}field}$ values are included in the table.
[b] Off-Field ADD_{inh} was calculated from the individual field concentrations ($C_{air\text{-}field}$) of a chemical detected in air off the fields. Carbonyl samples were not collected at off-field locations.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-212. Field-Specific Average **Off-Field** Inhalation Daily Dose[a] ($ADD_{inh\text{-}field}$, milligrams per kilogram BW per day) for Lifetime Cancer Risk Assessment of Chemicals—Combined Gender **Spectators 6<11 Year**

Chemical	CASRN	Detection	$ADD_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals								
Aniline	62-53-3	8	0	1.7E-07	3.3E-07	0	6.0E-07	1.4E-06
Benz[a]anthracene	56-55-3	0	0	0	0	0	0	0
Benzo[a]pyrene	50-32-8	24	0	3.3E-08	5.2E-08	1.4E-08	1.2E-07	2.4E-07
Benzo[b]fluoranthene	205-99-2	3	0	9.0E-10	2.9E-09	0	1.0E-08	1.0E-08
Benzo[k]fluoranthene	207-08-9	3	0	7.5E-10	2.4E-09	0	8.3E-09	8.3E-09
Chrysene	218-01-9	7	0	2.5E-09	5.3E-09	0	1.0E-08	2.2E-08
Cyclopenta[cd]pyrene	27208-37-3	22	0	1.5E-09	1.9E-09	6.4E-10	5.4E-09	6.2E-09
Dibenz[a,h]anthracene	53-70-3	9	0	2.1E-09	4.8E-09	0	1.4E-08	1.7E-08
Indeno[1,2,3-cd]pyrene	193-39-5	2	0	1.8E-09	7.0E-09	0	1.2E-08	2.9E-08
Methyl Isobutyl Ketone	108-10-1	1	0	8.5E-08	5.0E-07	0	0	2.9E-06
Naphthalene	91-20-3	9	0	6.9E-07	1.4E-06	0	3.1E-06	6.1E-06
Styrene	100-42-5	13	0	1.4E-06	3.0E-06	0	5.3E-06	1.6E-05
Non-Field-Related Chemicals								
Benzene	71-43-2	34	4.3E-06	1.5E-05	1.3E-05	9.4E-06	3.6E-05	6.5E-05
Benzene, 1,4-dichloro	106-46-7	6	0	4.1E-07	9.6E-07	0	2.8E-06	2.8E-06

Chemical	CASRN	Detection	$ADD_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	33	0	1.4E-05	1.5E-05	5.5E-06	4.5E-05	4.7E-05
Ethylbenzene	100-41-4	13	0	4.3E-06	7.4E-06	0	1.9E-05	3.1E-05
Tetrachloroethylene	127-18-4	7	0	1.2E-06	2.7E-06	0	7.8E-06	9.9E-06

[a] 35 field-specific $ADD_{inh\text{-}field}$ values are included in the table.
[b] Off-Field ADD_{inh} was calculated from the individual field concentrations ($C_{air\text{-}field}$) of a chemical detected in air off the fields. Carbonyl samples were not collected at off-field locations.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-213. Field-Specific Average **Off-Field** Inhalation Daily Dose[a] ($ADD_{inh\text{-}field}$, milligrams per kilogram BW per day) for Lifetime Cancer Risk Assessment of Chemicals—Combined Gender **Spectators 11<16 Year**

Chemical	CASRN	Detection	$ADD_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals								
Aniline	62-53-3	8	0	7.3E-08	1.4E-07	0	2.6E-07	6.1E-07
Benz[a]anthracene	56-55-3	0	0	0	0	0	0	0
Benzo[a]pyrene	50-32-8	24	0	1.4E-08	2.2E-08	6.0E-09	5.1E-08	1.0E-07
Benzo[b]fluoranthene	205-99-2	3	0	3.9E-10	1.3E-09	0	4.3E-09	4.3E-09
Benzo[k]fluoranthene	207-08-9	3	0	3.2E-10	1.0E-09	0	3.6E-09	3.6E-09
Chrysene	218-01-9	7	0	1.1E-09	2.3E-09	0	4.3E-09	9.5E-09
Cyclopenta[cd]pyrene	27208-37-3	22	0	6.5E-10	8.4E-10	2.8E-10	2.3E-09	2.7E-09
Dibenz[a,h]anthracene	53-70-3	9	0	9.2E-10	2.1E-09	0	5.9E-09	7.5E-09
Indeno[1,2,3-cd]pyrene	193-39-5	2	0	7.6E-10	3.0E-09	0	5.0E-09	1.3E-08
Methyl Isobutyl Ketone	108-10-1	1	0	3.7E-08	2.1E-07	0	0	1.2E-06
Naphthalene	91-20-3	9	0	3.0E-07	6.0E-07	0	1.3E-06	2.6E-06
Styrene	100-42-5	13	0	6.2E-07	1.3E-06	0	2.3E-06	6.9E-06
Non-Field-Related Chemicals								
Benzene	71-43-2	34	1.9E-06	6.5E-06	5.5E-06	4.1E-06	1.6E-05	2.8E-05
Benzene, 1,4-dichloro	106-46-7	6	0	1.8E-07	4.1E-07	0	1.2E-06	1.2E-06
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	33	0	5.9E-06	6.5E-06	2.4E-06	2.0E-05	2.0E-05
Ethylbenzene	100-41-4	13	0	1.9E-06	3.2E-06	0	8.2E-06	1.3E-05
Tetrachloroethylene	127-18-4	7	0	5.0E-07	1.2E-06	0	3.4E-06	4.3E-06

[a] 35 field-specific $ADD_{inh\text{-}field}$ values are included in the table.
[b] Off-Field ADD_{inh} was calculated from the individual field concentrations ($C_{air\text{-}field}$) of a chemical detected in air off the fields. Carbonyl samples were not collected at off-field locations.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-214. Field-Specific Average **Off-Field** Inhalation Daily Dose[a] ($ADD_{inh\text{-}field}$, milligrams per kilogram BW per day) for Lifetime Cancer Risk Assessment of Chemicals—Combined Gender **Spectators 16<30 Year**

Chemical	CASRN	Detection	$ADD_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals								
Aniline	62-53-3	8	0	4.8E-08	9.5E-08	0	1.7E-07	4.0E-07
Benz[a]anthracene	56-55-3	0	0	0	0	0	0	0
Benzo[a]pyrene	50-32-8	24	0	9.5E-09	1.5E-08	3.9E-09	3.4E-08	6.7E-08
Benzo[b]fluoranthene	205-99-2	3	0	2.6E-10	8.3E-10	0	2.8E-09	2.8E-09
Benzo[k]fluoranthene	207-08-9	3	0	2.1E-10	6.9E-10	0	2.4E-09	2.4E-09
Chrysene	218-01-9	7	0	7.1E-10	1.5E-09	0	2.9E-09	6.3E-09
Cyclopenta[cd]pyrene	27208-37-3	22	0	4.3E-10	5.5E-10	1.8E-10	1.5E-09	1.8E-09
Dibenz[a,h]anthracene	53-70-3	9	0	6.1E-10	1.4E-09	0	3.9E-09	5.0E-09
Indeno[1,2,3-cd]pyrene	193-39-5	2	0	5.0E-10	2.0E-09	0	3.3E-09	8.3E-09
Methyl Isobutyl Ketone	108-10-1	1	0	2.4E-08	1.4E-07	0	0	8.2E-07
Naphthalene	91-20-3	9	0	2.0E-07	4.0E-07	0	8.8E-07	1.7E-06
Styrene	100-42-5	13	0	4.1E-07	8.7E-07	0	1.5E-06	4.5E-06
Non-Field-Related Chemicals								
Benzene	71-43-2	34	1.2E-06	4.3E-06	3.6E-06	2.7E-06	1.0E-05	1.8E-05
Benzene, 1,4-dichloro	106-46-7	6	0	1.2E-07	2.7E-07	0	8.0E-07	8.0E-07
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	33	0	3.9E-06	4.3E-06	1.6E-06	1.3E-05	1.3E-05
Ethylbenzene	100-41-4	13	0	1.2E-06	2.1E-06	0	5.4E-06	8.8E-06
Tetrachloroethylene	127-18-4	7	0	3.3E-07	7.7E-07	0	2.2E-06	2.8E-06

[a] 35 field-specific $ADD_{inh\text{-}field}$ values are included in the table.
[b] Off-Field ADD_{inh} was calculated from the individual field concentrations ($C_{air\text{-}field}$) of a chemical detected in air off the fields. Carbonyl samples were not collected at off-field locations.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-215. Field-Specific Average **Off-Field** Inhalation Daily Dose[a] ($ADD_{inh\text{-}field}$, milligrams per kilogram BW per day) for Lifetime Cancer Risk Assessment of Chemicals—Combined Gender **Spectators 30<40 Year**

Chemical	CASRN	Detection	$ADD_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals								
Aniline	62-53-3	8	0	4.2E-08	8.3E-08	0	1.5E-07	3.5E-07
Benz[a]anthracene	56-55-3	0	0	0	0	0	0	0
Benzo[a]pyrene	50-32-8	24	0	8.3E-09	1.3E-08	3.4E-09	3.0E-08	5.9E-08
Benzo[b]fluoranthene	205-99-2	3	0	2.3E-10	7.2E-10	0	2.5E-09	2.5E-09
Benzo[k]fluoranthene	207-08-9	3	0	1.9E-10	6.0E-10	0	2.1E-09	2.1E-09
Chrysene	218-01-9	7	0	6.2E-10	1.3E-09	0	2.5E-09	5.5E-09

Chemical	CASRN	Detection	$ADD_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Cyclopenta[cd]pyrene	27208-37-3	22	0	3.8E-10	4.8E-10	1.6E-10	1.3E-09	1.5E-09
Dibenz[a,h]anthracene	53-70-3	9	0	5.3E-10	1.2E-09	0	3.4E-09	4.3E-09
Indeno[1,2,3-cd]pyrene	193-39-5	2	0	4.4E-10	1.7E-09	0	2.9E-09	7.2E-09
Methyl Isobutyl Ketone	108-10-1	1	0	2.1E-08	1.2E-07	0	0	7.2E-07
Naphthalene	91-20-3	9	0	1.7E-07	3.5E-07	0	7.7E-07	1.5E-06
Styrene	100-42-5	13	0	3.6E-07	7.6E-07	0	1.3E-06	4.0E-06
Non-Field-Related Chemicals								
Benzene	71-43-2	34	1.1E-06	3.8E-06	3.1E-06	2.3E-06	9.0E-06	1.6E-05
Benzene, 1,4-dichloro	106-46-7	6	0	1.0E-07	2.4E-07	0	7.0E-07	7.0E-07
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	33	0	3.4E-06	3.7E-06	1.4E-06	1.1E-05	1.2E-05
Ethylbenzene	100-41-4	13	0	1.1E-06	1.8E-06	0	4.7E-06	7.7E-06
Tetrachloroethylene	127-18-4	7	0	2.9E-07	6.7E-07	0	1.9E-06	2.5E-06

[a] 35 field-specific $ADD_{inh\text{-}field}$ values are included in the table.
[b] Off-Field ADD_{inh} was calculated from the individual field concentrations ($C_{air\text{-}field}$) of a chemical detected in air off the fields. Carbonyl samples were not collected at off-field locations.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-216. Field-Specific Average **Off-Field** Inhalation Daily Dose[a] ($ADD_{inh\text{-}field}$, milligrams per kilogram BW per day) for Lifetime Cancer Risk Assessment of Chemicals—Combined Gender **Spectators 40<50 Year**

Chemical	CASRN	Detection	$ADD_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals								
Aniline	62-53-3	8	0	4.3E-08	8.4E-08	0	1.5E-07	3.6E-07
Benz[a]anthracene	56-55-3	0	0	0	0	0	0	0
Benzo[a]pyrene	50-32-8	24	0	8.4E-09	1.3E-08	3.5E-09	3.0E-08	5.9E-08
Benzo[b]fluoranthene	205-99-2	3	0	2.3E-10	7.3E-10	0	2.5E-09	2.5E-09
Benzo[k]fluoranthene	207-08-9	3	0	1.9E-10	6.1E-10	0	2.1E-09	2.1E-09
Chrysene	218-01-9	7	0	6.3E-10	1.3E-09	0	2.5E-09	5.6E-09
Cyclopenta[cd]pyrene	27208-37-3	22	0	3.8E-10	4.9E-10	1.6E-10	1.3E-09	1.6E-09
Dibenz[a,h]anthracene	53-70-3	9	0	5.4E-10	1.2E-09	0	3.4E-09	4.4E-09
Indeno[1,2,3-cd]pyrene	193-39-5	2	0	4.4E-10	1.8E-09	0	2.9E-09	7.3E-09
Methyl Isobutyl Ketone	108-10-1	1	0	2.1E-08	1.2E-07	0	0	7.3E-07
Naphthalene	91-20-3	9	0	1.7E-07	3.5E-07	0	7.8E-07	1.5E-06
Styrene	100-42-5	13	0	3.6E-07	7.6E-07	0	1.3E-06	4.0E-06
Non-Field-Related Chemicals								
Benzene	71-43-2	34	1.1E-06	3.8E-06	3.2E-06	2.4E-06	9.1E-06	1.6E-05
Benzene, 1,4-dichloro	106-46-7	6	0	1.0E-07	2.4E-07	0	7.1E-07	7.1E-07

Chemical	CASRN	Detection	$ADD_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	33	0	3.5E-06	3.8E-06	1.4E-06	1.1E-05	1.2E-05
Ethylbenzene	100-41-4	13	0	1.1E-06	1.9E-06	0	4.8E-06	7.8E-06
Tetrachloroethylene	127-18-4	7	0	2.9E-07	6.8E-07	0	2.0E-06	2.5E-06

[a] 35 field-specific $ADD_{inh\text{-}field}$ values are included in the table.
[b] Off-Field ADD_{inh} was calculated from the individual field concentrations ($C_{air\text{-}field}$) of a chemical detected in air off the fields. Carbonyl samples were not collected at off-field locations.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-217. Field-Specific Average **Off-Field** Inhalation Daily Dose[a] ($ADD_{inh\text{-}field}$, milligrams per kilogram BW per day) for Lifetime Cancer Risk Assessment of Chemicals—Combined Gender **Spectators 50<70 Year**

Chemical	CASRN	Detection	$ADD_{inh\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals								
Aniline	62-53-3	8	0	4.3E-08	8.4E-08	0	1.5E-07	3.6E-07
Benz[a]anthracene	56-55-3	0	0	0	0	0	0	0
Benzo[a]pyrene	50-32-8	24	0	8.4E-09	1.3E-08	3.5E-09	3.0E-08	5.9E-08
Benzo[b]fluoranthene	205-99-2	3	0	2.3E-10	7.3E-10	0	2.5E-09	2.5E-09
Benzo[k]fluoranthene	207-08-9	3	0	1.9E-10	6.1E-10	0	2.1E-09	2.1E-09
Chrysene	218-01-9	7	0	6.3E-10	1.3E-09	0	2.5E-09	5.6E-09
Cyclopenta[cd]pyrene	27208-37-3	22	0	3.8E-10	4.9E-10	1.6E-10	1.3E-09	1.6E-09
Dibenz[a,h]anthracene	53-70-3	9	0	5.4E-10	1.2E-09	0	3.5E-09	4.4E-09
Indeno[1,2,3-cd]pyrene	193-39-5	2	0	4.4E-10	1.8E-09	0	2.9E-09	7.3E-09
Methyl Isobutyl Ketone	108-10-1	1	0	2.1E-08	1.3E-07	0	0	7.3E-07
Naphthalene	91-20-3	9	0	1.7E-07	3.5E-07	0	7.8E-07	1.5E-06
Styrene	100-42-5	13	0	3.6E-07	7.7E-07	0	1.3E-06	4.0E-06
Non-Field-Related Chemicals								
Benzene	71-43-2	34	1.1E-06	3.8E-06	3.2E-06	2.4E-06	9.1E-06	1.6E-05
Benzene, 1,4-dichloro	106-46-7	6	0	1.0E-07	2.4E-07	0	7.1E-07	7.1E-07
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	33	0	3.5E-06	3.8E-06	1.4E-06	1.1E-05	1.2E-05
Ethylbenzene	100-41-4	13	0	1.1E-06	1.9E-06	0	4.8E-06	7.8E-06
Tetrachloroethylene	127-18-4	7	0	2.9E-07	6.8E-07	0	2.0E-06	2.5E-06

[a] 35 field-specific $ADD_{inh\text{-}field}$ values are included in the table.
[b] Off-Field ADD_{inh} was calculated from the individual field concentrations ($C_{air\text{-}field}$) of a chemical detected in air off the fields. Carbonyl samples were not collected at off-field locations.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

F.5.2. Average Dermal One-Day Dose ($AD_{der\text{-}DART\text{-}field}$) for One-Day Non-Cancer Hazard Assessment of DARTs

INDIVIDUAL FIELD ASSESSMENT (Table F-218 to Table F-241)

Table F-218. Field-Specific Average Dermal One-Day Dose[a] ($AD_{der\text{-}DART\text{-}field}$, milligrams per kilogram BW per day) for One-Day Non-Cancer Hazard Assessment of **Field-Related DARTs**[b]—Combined Gender **Athletes 2<6 Years**

Chemical	CASRN	Detection	$AD_{der\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
2-Azacyclotridecanone	947-04-6	2	0	9.1E-10	4.1E-09	0	2.8E-09	2.2E-08
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	9	0	1.3E-08	5.5E-08	0	5.0E-08	3.2E-07
Benzo[a]pyrene	50-32-8	32	0	7.0E-10	6.9E-10	4.6E-10	1.8E-09	2.8E-09
Benzo[e]pyrene	192-97-2	35	2.0E-10	2.1E-09	1.5E-09	2.0E-09	5.0E-09	5.6E-09
Benzo[g,h,i]perylene	191-24-2	35	1.9E-10	1.6E-09	1.0E-09	1.4E-09	3.4E-09	4.1E-09
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	1	0	2.0E-09	1.2E-08	0	0	6.9E-08
Bis(2-Ethylhexyl)adipate	103-23-1	35	6.9E-10	9.2E-09	1.5E-08	4.8E-09	2.1E-08	8.8E-08
Chrysene	218-01-9	35	6.5E-10	6.0E-09	3.8E-09	6.0E-09	1.2E-08	1.4E-08
Coronene	191-07-1	1	0	4.7E-10	2.8E-09	0	0	1.7E-08
Cyclopenta[cd]pyrene	27208-37-3	35	1.1E-10	1.1E-09	6.4E-10	1.0E-09	2.0E-09	2.4E-09
Dicyclohexylamine	101-83-7	30	0	1.8E-07	3.0E-07	1.4E-07	3.3E-07	1.8E-06
N,N-Dicyclohexylmethylamine	7560-83-0	28	0	3.2E-10	6.4E-10	1.5E-10	1.3E-09	3.3E-09
Dimethyl phthalate	131-11-3	3	0	9.4E-10	3.1E-09	0	1.0E-08	1.2E-08
1,3-Diphenylguanidine	102-06-7	2	0	2.7E-09	1.2E-08	0	8.5E-09	6.7E-08
Indeno[1,2,3-cd]pyrene	193-39-5	28	0	6.8E-10	5.7E-10	6.1E-10	1.6E-09	2.5E-09
Methyl stearate	112-61-8	28	0	3.9E-09	5.6E-09	2.2E-09	1.0E-08	3.0E-08
4-tert-Octylphenol	140-66-9	34	0	1.7E-08	3.6E-08	4.7E-09	8.4E-08	1.6E-07
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	35	4.3E-10	5.1E-09	4.1E-09	3.7E-09	1.3E-08	2.0E-08
Phenol, 4-(1-phenylethyl)-	1988-89-2	35	5.0E-10	5.5E-09	6.5E-09	3.1E-09	2.1E-08	2.7E-08

[a] 35 field-specific $AD_{der\text{-}DART\text{-}field}$ values are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-219. Field-Specific Average Dermal One-Day Dose[a] ($AD_{der\text{-}DART\text{-}field}$, milligrams per kilogram BW per day) for One-Day Non-Cancer Hazard Assessment of **Field-Related DARTs**[b]—Combined Gender **Athletes 6<11 Years**

Chemical	CASRN	Detection	$AD_{der\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
2-Azacyclotridecanone	947-04-6	2	0	8.3E-10	3.7E-09	0	2.6E-09	2.0E-08
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	9	0	1.2E-08	5.0E-08	0	4.6E-08	2.9E-07
Benzo[a]pyrene	50-32-8	32	0	6.3E-10	6.2E-10	4.1E-10	1.6E-09	2.6E-09
Benzo[e]pyrene	192-97-2	35	1.8E-10	1.9E-09	1.4E-09	1.8E-09	4.5E-09	5.1E-09
Benzo[g,h,i]perylene	191-24-2	35	1.8E-10	1.4E-09	9.2E-10	1.3E-09	3.1E-09	3.7E-09
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	1	0	1.8E-09	1.1E-08	0	0	6.2E-08
Bis(2-Ethylhexyl)adipate	103-23-1	35	6.2E-10	8.4E-09	1.4E-08	4.3E-09	1.9E-08	8.0E-08
Chrysene	218-01-9	35	5.9E-10	5.4E-09	3.5E-09	5.4E-09	1.1E-08	1.2E-08
Coronene	191-07-1	1	0	4.3E-10	2.5E-09	0	0	1.5E-08
Cyclopenta[cd]pyrene	27208-37-3	35	9.9E-11	9.7E-10	5.8E-10	9.3E-10	1.9E-09	2.2E-09
Dicyclohexylamine	101-83-7	30	0	1.6E-07	2.7E-07	1.3E-07	3.0E-07	1.6E-06
N,N-Dicyclohexylmethylamine	7560-83-0	28	0	2.9E-10	5.8E-10	1.3E-10	1.2E-09	3.0E-09
Dimethyl phthalate	131-11-3	3	0	8.5E-10	2.8E-09	0	9.3E-09	1.1E-08
1,3-Diphenylguanidine	102-06-7	2	0	2.5E-09	1.1E-08	0	7.7E-09	6.1E-08
Indeno[1,2,3-cd]pyrene	193-39-5	28	0	6.2E-10	5.2E-10	5.5E-10	1.4E-09	2.3E-09
Methyl stearate	112-61-8	28	0	3.6E-09	5.0E-09	2.0E-09	9.4E-09	2.8E-08
4-tert-Octylphenol	140-66-9	34	0	1.6E-08	3.3E-08	4.2E-09	7.6E-08	1.5E-07
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	35	3.9E-10	4.6E-09	3.8E-09	3.3E-09	1.2E-08	1.8E-08
Phenol, 4-(1-phenylethyl)-	1988-89-2	35	4.6E-10	5.0E-09	5.9E-09	2.9E-09	1.9E-08	2.5E-08

[a] 35 field-specific $AD_{der\text{-}DART\text{-}field}$ values are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-220. Field-Specific Average Dermal One-Day Dose[a] ($AD_{der\text{-}DART\text{-}field}$, milligrams per kilogram BW per day) for One-Day Non-Cancer Hazard Assessment of **Field-Related DARTs**[b]—Combined Gender **Athletes 11<16 Years**

Chemical	CASRN	Detection	$AD_{der\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
2-Azacyclotridecanone	947-04-6	2	0	7.1E-10	3.2E-09	0	2.2E-09	1.7E-08
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	9	0	1.0E-08	4.3E-08	0	3.9E-08	2.5E-07
Benzo[a]pyrene	50-32-8	32	0	5.4E-10	5.3E-10	3.5E-10	1.4E-09	2.2E-09
Benzo[e]pyrene	192-97-2	35	1.5E-10	1.6E-09	1.2E-09	1.5E-09	3.9E-09	4.4E-09

Chemical	CASRN	Detection	$AD_{der\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Benzo[g,h,i]perylene	191-24-2	35	1.5E-10	1.2E-09	7.9E-10	1.1E-09	2.7E-09	3.2E-09
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	1	0	1.5E-09	9.0E-09	0	0	5.3E-08
Bis(2-Ethylhexyl)adipate	103-23-1	35	5.3E-10	7.1E-09	1.2E-08	3.7E-09	1.7E-08	6.8E-08
Chrysene	218-01-9	35	5.1E-10	4.6E-09	3.0E-09	4.6E-09	9.3E-09	1.1E-08
Coronene	191-07-1	1	0	3.7E-10	2.2E-09	0	0	1.3E-08
Cyclopenta[cd]pyrene	27208-37-3	35	8.5E-11	8.3E-10	4.9E-10	8.0E-10	1.6E-09	1.9E-09
Dicyclohexylamine	101-83-7	30	0	1.4E-07	2.3E-07	1.1E-07	2.6E-07	1.4E-06
N,N-Dicyclohexylmethylamine	7560-83-0	28	0	2.5E-10	4.9E-10	1.1E-10	1.0E-09	2.6E-09
Dimethyl phthalate	131-11-3	3	0	7.3E-10	2.4E-09	0	7.9E-09	9.3E-09
1,3-Diphenylguanidine	102-06-7	2	0	2.1E-09	9.4E-09	0	6.6E-09	5.2E-08
Indeno[1,2,3-cd]pyrene	193-39-5	28	0	5.3E-10	4.4E-10	4.7E-10	1.2E-09	1.9E-09
Methyl stearate	112-61-8	28	0	3.1E-09	4.3E-09	1.7E-09	8.1E-09	2.4E-08
4-tert-Octylphenol	140-66-9	34	0	1.3E-08	2.8E-08	3.6E-09	6.5E-08	1.2E-07
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	35	3.3E-10	3.9E-09	3.2E-09	2.8E-09	1.0E-08	1.5E-08
Phenol, 4-(1-phenylethyl)-	1988-89-2	35	3.9E-10	4.3E-09	5.1E-09	2.4E-09	1.6E-08	2.1E-08

[a] 35 field-specific $AD_{der\text{-}DART\text{-}field}$ values are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-221. Field-Specific Average Dermal One-Day Dose[a] ($AD_{der\text{-}DART\text{-}field}$, milligrams per kilogram BW per day) for One-Day Non-Cancer Hazard Assessment of **Field-Related DARTs**[b]—Combined Gender **Athletes 16<30 Years**

Chemical	CASRN	Detection	$AD_{der\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
2-Azacyclotridecanone	947-04-6	2	0	6.2E-10	2.8E-09	0	1.9E-09	1.5E-08
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	9	0	9.0E-09	3.8E-08	0	3.4E-08	2.2E-07
Benzo[a]pyrene	50-32-8	32	0	4.7E-10	4.7E-10	3.1E-10	1.2E-09	1.9E-09
Benzo[e]pyrene	192-97-2	35	1.3E-10	1.4E-09	1.0E-09	1.3E-09	3.4E-09	3.8E-09
Benzo[g,h,i]perylene	191-24-2	35	1.3E-10	1.1E-09	6.9E-10	9.8E-10	2.3E-09	2.8E-09
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	1	0	1.3E-09	7.9E-09	0	0	4.7E-08
Bis(2-Ethylhexyl)adipate	103-23-1	35	4.7E-10	6.3E-09	1.0E-08	3.2E-09	1.4E-08	6.0E-08
Chrysene	218-01-9	35	4.4E-10	4.1E-09	2.6E-09	4.1E-09	8.2E-09	9.2E-09
Coronene	191-07-1	1	0	3.2E-10	1.9E-09	0	0	1.1E-08
Cyclopenta[cd]pyrene	27208-37-3	35	7.4E-11	7.3E-10	4.3E-10	7.0E-10	1.4E-09	1.7E-09
Dicyclohexylamine	101-83-7	30	0	1.2E-07	2.0E-07	9.4E-08	2.3E-07	1.2E-06

Chemical	CASRN	Detection	$AD_{der\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
N,N-Dicyclohexylmethylamine	7560-83-0	28	0	2.1E-10	4.3E-10	9.9E-11	8.9E-10	2.2E-09
Dimethyl phthalate	131-11-3	3	0	6.4E-10	2.1E-09	0	6.9E-09	8.2E-09
1,3-Diphenylguanidine	102-06-7	2	0	1.8E-09	8.3E-09	0	5.7E-09	4.6E-08
Indeno[1,2,3-cd]pyrene	193-39-5	28	0	4.7E-10	3.9E-10	4.1E-10	1.1E-09	1.7E-09
Methyl stearate	112-61-8	28	0	2.7E-09	3.8E-09	1.5E-09	7.1E-09	2.1E-08
4-tert-Octylphenol	140-66-9	34	0	1.2E-08	2.5E-08	3.2E-09	5.7E-08	1.1E-07
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	35	2.9E-10	3.5E-09	2.8E-09	2.5E-09	8.8E-09	1.3E-08
Phenol, 4-(1-phenylethyl)-	1988-89-2	35	3.4E-10	3.8E-09	4.4E-09	2.1E-09	1.4E-08	1.9E-08

[a] 35 field-specific $AD_{der\text{-}DART\text{-}field}$ values are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-222. Field-Specific Average Dermal One-Day Dose[a] ($AD_{der\text{-}DART\text{-}field}$, milligrams per kilogram BW per day) for One-Day Non-Cancer Hazard Assessment of **Field-Related DARTs**[b]—Combined Gender **Athletes 30<40 Years**

Chemical	CASRN	Detection	$AD_{der\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
2-Azacyclotridecanone	947-04-6	2	0	5.8E-10	2.6E-09	0	1.8E-09	1.4E-08
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	9	0	8.4E-09	3.5E-08	0	3.2E-08	2.1E-07
Benzo[a]pyrene	50-32-8	32	0	4.4E-10	4.4E-10	2.9E-10	1.2E-09	1.8E-09
Benzo[e]pyrene	192-97-2	35	1.3E-10	1.3E-09	9.7E-10	1.2E-09	3.2E-09	3.6E-09
Benzo[g,h,i]perylene	191-24-2	35	1.2E-10	9.9E-10	6.4E-10	9.2E-10	2.2E-09	2.6E-09
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	1	0	1.2E-09	7.4E-09	0	0	4.4E-08
Bis(2-Ethylhexyl)adipate	103-23-1	35	4.4E-10	5.9E-09	9.5E-09	3.0E-09	1.4E-08	5.6E-08
Chrysene	218-01-9	35	4.1E-10	3.8E-09	2.4E-09	3.8E-09	7.6E-09	8.6E-09
Coronene	191-07-1	1	0	3.0E-10	1.8E-09	0	0	1.1E-08
Cyclopenta[cd]pyrene	27208-37-3	35	6.9E-11	6.8E-10	4.1E-10	6.6E-10	1.3E-09	1.6E-09
Dicyclohexylamine	101-83-7	30	0	1.1E-07	1.9E-07	8.8E-08	2.1E-07	1.1E-06
N,N-Dicyclohexylmethylamine	7560-83-0	28	0	2.0E-10	4.1E-10	9.3E-11	8.4E-10	2.1E-09
Dimethyl phthalate	131-11-3	3	0	6.0E-10	2.0E-09	0	6.5E-09	7.7E-09
1,3-Diphenylguanidine	102-06-7	2	0	1.7E-09	7.7E-09	0	5.4E-09	4.3E-08
Indeno[1,2,3-cd]pyrene	193-39-5	28	0	4.4E-10	3.6E-10	3.9E-10	1.0E-09	1.6E-09
Methyl stearate	112-61-8	28	0	2.5E-09	3.5E-09	1.4E-09	6.6E-09	1.9E-08
4-tert-Octylphenol	140-66-9	34	0	1.1E-08	2.3E-08	3.0E-09	5.3E-08	1.0E-07
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	35	2.7E-10	3.2E-09	2.6E-09	2.3E-09	8.2E-09	1.2E-08

Chemical	CASRN	Detection	$AD_{der\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Phenol, 4-(1-phenylethyl)-	1988-89-2	35	3.2E-10	3.5E-09	4.2E-09	2.0E-09	1.3E-08	1.8E-08

[a] 35 field-specific $AD_{der\text{-}DART\text{-}field}$ values are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-223. Field-Specific Average Dermal One-Day Dose[a] ($AD_{der\text{-}DART\text{-}field}$, milligrams per kilogram BW per day) for One-Day Non-Cancer Hazard Assessment of **Field-Related DARTs**[b]—Combined Gender **Athletes 40<50 Years**

Chemical	CASRN	Detection	$AD_{der\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
2-Azacyclotridecanone	947-04-6	2	0	5.8E-10	2.6E-09	0	1.8E-09	1.4E-08
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	9	0	8.5E-09	3.5E-08	0	3.2E-08	2.1E-07
Benzo[a]pyrene	50-32-8	32	0	4.5E-10	4.4E-10	2.9E-10	1.2E-09	1.8E-09
Benzo[e]pyrene	192-97-2	35	1.3E-10	1.3E-09	9.7E-10	1.2E-09	3.2E-09	3.6E-09
Benzo[g,h,i]perylene	191-24-2	35	1.2E-10	1.0E-09	6.5E-10	9.2E-10	2.2E-09	2.6E-09
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	1	0	1.3E-09	7.4E-09	0	0	4.4E-08
Bis(2-Ethylhexyl)adipate	103-23-1	35	4.4E-10	5.9E-09	9.5E-09	3.0E-09	1.4E-08	5.6E-08
Chrysene	218-01-9	35	4.2E-10	3.8E-09	2.5E-09	3.8E-09	7.7E-09	8.7E-09
Coronene	191-07-1	1	0	3.0E-10	1.8E-09	0	0	1.1E-08
Cyclopenta[cd]pyrene	27208-37-3	35	7.0E-11	6.8E-10	4.1E-10	6.6E-10	1.3E-09	1.6E-09
Dicyclohexylamine	101-83-7	30	0	1.2E-07	1.9E-07	8.8E-08	2.1E-07	1.2E-06
N,N-Dicyclohexylmethylamine	7560-83-0	28	0	2.0E-10	4.1E-10	9.3E-11	8.4E-10	2.1E-09
Dimethyl phthalate	131-11-3	3	0	6.0E-10	2.0E-09	0	6.5E-09	7.7E-09
1,3-Diphenylguanidine	102-06-7	2	0	1.7E-09	7.8E-09	0	5.4E-09	4.3E-08
Indeno[1,2,3-cd]pyrene	193-39-5	28	0	4.4E-10	3.7E-10	3.9E-10	1.0E-09	1.6E-09
Methyl stearate	112-61-8	28	0	2.5E-09	3.6E-09	1.4E-09	6.7E-09	1.9E-08
4-tert-Octylphenol	140-66-9	34	0	1.1E-08	2.3E-08	3.0E-09	5.4E-08	1.0E-07
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	35	2.8E-10	3.3E-09	2.6E-09	2.3E-09	8.3E-09	1.2E-08
Phenol, 4-(1-phenylethyl)-	1988-89-2	35	3.2E-10	3.5E-09	4.2E-09	2.0E-09	1.3E-08	1.8E-08

[a] 35 field-specific $AD_{der\text{-}DART\text{-}field}$ values are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-224. Field-Specific Average Dermal One-Day Dose[a] ($AD_{der\text{-}DART\text{-}field}$, milligrams per kilogram BW per day) for One-Day Non-Cancer Hazard Assessment of **Field-Related DARTs**[b]—Combined Gender **Athletes 50<70 Years**

Chemical	CASRN	Detection	$AD_{der\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
2-Azacyclotridecanone	947-04-6	2	0	5.8E-10	2.6E-09	0	1.8E-09	1.4E-08
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	9	0	8.5E-09	3.6E-08	0	3.2E-08	2.1E-07
Benzo[a]pyrene	50-32-8	32	0	4.5E-10	4.4E-10	2.9E-10	1.2E-09	1.8E-09
Benzo[e]pyrene	192-97-2	35	1.3E-10	1.3E-09	9.7E-10	1.3E-09	3.2E-09	3.6E-09
Benzo[g,h,i]perylene	191-24-2	35	1.2E-10	1.0E-09	6.5E-10	9.3E-10	2.2E-09	2.6E-09
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	1	0	1.3E-09	7.5E-09	0	0	4.4E-08
Bis(2-Ethylhexyl)adipate	103-23-1	35	4.4E-10	5.9E-09	9.6E-09	3.1E-09	1.4E-08	5.6E-08
Chrysene	218-01-9	35	4.2E-10	3.8E-09	2.5E-09	3.8E-09	7.7E-09	8.7E-09
Coronene	191-07-1	1	0	3.0E-10	1.8E-09	0	0	1.1E-08
Cyclopenta[cd]pyrene	27208-37-3	35	7.0E-11	6.8E-10	4.1E-10	6.6E-10	1.3E-09	1.6E-09
Dicyclohexylamine	101-83-7	30	0	1.2E-07	1.9E-07	8.8E-08	2.1E-07	1.2E-06
N,N-Dicyclohexylmethylamine	7560-83-0	28	0	2.0E-10	4.1E-10	9.4E-11	8.4E-10	2.1E-09
Dimethyl phthalate	131-11-3	3	0	6.0E-10	2.0E-09	0	6.5E-09	7.7E-09
1,3-Diphenylguanidine	102-06-7	2	0	1.7E-09	7.8E-09	0	5.4E-09	4.3E-08
Indeno[1,2,3-cd]pyrene	193-39-5	28	0	4.4E-10	3.7E-10	3.9E-10	1.0E-09	1.6E-09
Methyl stearate	112-61-8	28	0	2.5E-09	3.6E-09	1.4E-09	6.7E-09	2.0E-08
4-tert-Octylphenol	140-66-9	34	0	1.1E-08	2.3E-08	3.0E-09	5.4E-08	1.0E-07
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	35	2.8E-10	3.3E-09	2.7E-09	2.4E-09	8.3E-09	1.3E-08
Phenol, 4-(1-phenylethyl)-	1988-89-2	35	3.2E-10	3.6E-09	4.2E-09	2.0E-09	1.3E-08	1.8E-08

[a] 35 field-specific $AD_{der\text{-}DART\text{-}field}$ values are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-225. Field-Specific Average Dermal One-Day Dose[a] ($AD_{der\text{-}DART\text{-}field}$, milligrams per kilogram BW per day) for One-Day Non-Cancer Hazard Assessment of **Field-Related DARTs**[b]—Combined Gender **Coaches 16<30 Years**

Chemical	CASRN	Detection	$AD_{der\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
2-Azacyclotridecanone	947-04-6	2	0	3.1E-10	1.4E-09	0	9.5E-10	7.5E-09
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	9	0	4.4E-09	1.9E-08	0	1.7E-08	1.1E-07
Benzo[a]pyrene	50-32-8	32	0	2.3E-10	2.3E-10	1.5E-10	6.1E-10	9.5E-10
Benzo[e]pyrene	192-97-2	35	6.7E-11	6.9E-10	5.1E-10	6.6E-10	1.7E-09	1.9E-09

Chemical	CASRN	Detection	$AD_{der\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Benzo[g,h,i]perylene	191-24-2	35	6.5E-11	5.2E-10	3.4E-10	4.8E-10	1.2E-09	1.4E-09
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	1	0	6.6E-10	3.9E-09	0	0	2.3E-08
Bis(2-Ethylhexyl)adipate	103-23-1	35	2.3E-10	3.1E-09	5.0E-09	1.6E-09	7.2E-09	3.0E-08
Chrysene	218-01-9	35	2.2E-10	2.0E-09	1.3E-09	2.0E-09	4.0E-09	4.6E-09
Coronene	191-07-1	1	0	1.6E-10	9.4E-10	0	0	5.6E-09
Cyclopenta[cd]pyrene	27208-37-3	35	3.7E-11	3.6E-10	2.1E-10	3.5E-10	6.9E-10	8.2E-10
Dicyclohexylamine	101-83-7	30	0	6.1E-08	1.0E-07	4.6E-08	1.1E-07	6.1E-07
N,N-Dicyclohexylmethylamine	7560-83-0	28	0	1.1E-10	2.1E-10	4.9E-11	4.4E-10	1.1E-09
Dimethyl phthalate	131-11-3	3	0	3.2E-10	1.0E-09	0	3.4E-09	4.0E-09
1,3-Diphenylguanidine	102-06-7	2	0	9.1E-10	4.1E-09	0	2.8E-09	2.3E-08
Indeno[1,2,3-cd]pyrene	193-39-5	28	0	2.3E-10	1.9E-10	2.0E-10	5.4E-10	8.4E-10
Methyl stearate	112-61-8	28	0	1.3E-09	1.9E-09	7.4E-10	3.5E-09	1.0E-08
4-tert-Octylphenol	140-66-9	34	0	5.8E-09	1.2E-08	1.6E-09	2.8E-08	5.4E-08
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	35	1.4E-10	1.7E-09	1.4E-09	1.2E-09	4.3E-09	6.6E-09
Phenol, 4-(1-phenylethyl)-	1988-89-2	35	1.7E-10	1.9E-09	2.2E-09	1.1E-09	6.9E-09	9.2E-09

[a] 35 field-specific $AD_{der\text{-}DART\text{-}field}$ values are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-226. Field-Specific Average Dermal One-Day Dose[a] ($AD_{der\text{-}DART\text{-}field}$, milligrams per kilogram BW per day) for One-Day Non-Cancer Hazard Assessment of **Field-Related DARTs**[b]—Combined Gender **Coaches 30<40 Years**

Chemical	CASRN	Detection	$AD_{der\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
2-Azacyclotridecanone	947-04-6	2	0	2.9E-10	1.3E-09	0	8.9E-10	7.1E-09
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	9	0	4.2E-09	1.7E-08	0	1.6E-08	1.0E-07
Benzo[a]pyrene	50-32-8	32	0	2.2E-10	2.2E-10	1.4E-10	5.7E-10	8.9E-10
Benzo[e]pyrene	192-97-2	35	6.2E-11	6.5E-10	4.8E-10	6.1E-10	1.6E-09	1.8E-09
Benzo[g,h,i]perylene	191-24-2	35	6.1E-11	4.9E-10	3.2E-10	4.5E-10	1.1E-09	1.3E-09
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	1	0	6.2E-10	3.7E-09	0	0	2.2E-08
Bis(2-Ethylhexyl)adipate	103-23-1	35	2.2E-10	2.9E-09	4.7E-09	1.5E-09	6.7E-09	2.8E-08
Chrysene	218-01-9	35	2.0E-10	1.9E-09	1.2E-09	1.9E-09	3.8E-09	4.3E-09
Coronene	191-07-1	1	0	1.5E-10	8.8E-10	0	0	5.2E-09
Cyclopenta[cd]pyrene	27208-37-3	35	3.4E-11	3.4E-10	2.0E-10	3.2E-10	6.4E-10	7.7E-10
Dicyclohexylamine	101-83-7	30	0	5.7E-08	9.4E-08	4.3E-08	1.0E-07	5.7E-07

Chemical	CASRN	Detection	$AD_{der\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
N,N-Dicyclohexylmethylamine	7560-83-0	28	0	9.9E-11	2.0E-10	4.6E-11	4.1E-10	1.0E-09
Dimethyl phthalate	131-11-3	3	0	3.0E-10	9.8E-10	0	3.2E-09	3.8E-09
1,3-Diphenylguanidine	102-06-7	2	0	8.6E-10	3.8E-09	0	2.7E-09	2.1E-08
Indeno[1,2,3-cd]pyrene	193-39-5	28	0	2.2E-10	1.8E-10	1.9E-10	5.0E-10	7.9E-10
Methyl stearate	112-61-8	28	0	1.2E-09	1.8E-09	6.9E-10	3.3E-09	9.6E-09
4-tert-Octylphenol	140-66-9	34	0	5.4E-09	1.1E-08	1.5E-09	2.6E-08	5.0E-08
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	35	1.4E-10	1.6E-09	1.3E-09	1.2E-09	4.1E-09	6.1E-09
Phenol, 4-(1-phenylethyl)-	1988-89-2	35	1.6E-10	1.7E-09	2.1E-09	9.9E-10	6.5E-09	8.7E-09

[a] 35 field-specific $AD_{der\text{-}DART\text{-}field}$ values are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-227. Field-Specific Average Dermal One-Day Dose[a] ($AD_{der\text{-}DART\text{-}field}$, milligrams per kilogram BW per day) for One-Day Non-Cancer Hazard Assessment of **Field-Related DARTs**[b]—Combined Gender **Coaches 40<50 Years**

Chemical	CASRN	Detection	$AD_{der\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
2-Azacyclotridecanone	947-04-6	2	0	2.9E-10	1.3E-09	0	9.0E-10	7.1E-09
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	9	0	4.2E-09	1.8E-08	0	1.6E-08	1.0E-07
Benzo[a]pyrene	50-32-8	32	0	2.2E-10	2.2E-10	1.5E-10	5.8E-10	9.0E-10
Benzo[e]pyrene	192-97-2	35	6.3E-11	6.5E-10	4.8E-10	6.2E-10	1.6E-09	1.8E-09
Benzo[g,h,i]perylene	191-24-2	35	6.1E-11	5.0E-10	3.2E-10	4.6E-10	1.1E-09	1.3E-09
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	1	0	6.2E-10	3.7E-09	0	0	2.2E-08
Bis(2-Ethylhexyl)adipate	103-23-1	35	2.2E-10	2.9E-09	4.7E-09	1.5E-09	6.8E-09	2.8E-08
Chrysene	218-01-9	35	2.1E-10	1.9E-09	1.2E-09	1.9E-09	3.8E-09	4.3E-09
Coronene	191-07-1	1	0	1.5E-10	8.9E-10	0	0	5.3E-09
Cyclopenta[cd]pyrene	27208-37-3	35	3.5E-11	3.4E-10	2.0E-10	3.3E-10	6.5E-10	7.8E-10
Dicyclohexylamine	101-83-7	30	0	5.7E-08	9.5E-08	4.4E-08	1.1E-07	5.7E-07
N,N-Dicyclohexylmethylamine	7560-83-0	28	0	1.0E-10	2.0E-10	4.6E-11	4.2E-10	1.0E-09
Dimethyl phthalate	131-11-3	3	0	3.0E-10	9.9E-10	0	3.2E-09	3.8E-09
1,3-Diphenylguanidine	102-06-7	2	0	8.7E-10	3.9E-09	0	2.7E-09	2.1E-08
Indeno[1,2,3-cd]pyrene	193-39-5	28	0	2.2E-10	1.8E-10	1.9E-10	5.1E-10	7.9E-10
Methyl stearate	112-61-8	28	0	1.3E-09	1.8E-09	7.0E-10	3.3E-09	9.7E-09
4-tert-Octylphenol	140-66-9	34	0	5.5E-09	1.2E-08	1.5E-09	2.7E-08	5.1E-08
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	35	1.4E-10	1.6E-09	1.3E-09	1.2E-09	4.1E-09	6.2E-09

Chemical	CASRN	Detection	$AD_{der\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Phenol, 4-(1-phenylethyl)-	1988-89-2	35	1.6E-10	1.8E-09	2.1E-09	1.0E-09	6.6E-09	8.7E-09

[a] 35 field-specific $AD_{der\text{-}DART\text{-}field}$ values are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-228. Field-Specific Average Dermal One-Day Dose[a] ($AD_{der\text{-}DART\text{-}field}$, milligrams per kilogram BW per day) for One-Day Non-Cancer Hazard Assessment of **Field-Related DARTs**[b]—Combined Gender **Coaches 50<70 Years**

Chemical	CASRN	Detection	$AD_{der\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
2-Azacyclotridecanone	947-04-6	2	0	2.9E-10	1.3E-09	0	9.0E-10	7.2E-09
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	9	0	4.2E-09	1.8E-08	0	1.6E-08	1.0E-07
Benzo[a]pyrene	50-32-8	32	0	2.2E-10	2.2E-10	1.5E-10	5.8E-10	9.1E-10
Benzo[e]pyrene	192-97-2	35	6.3E-11	6.6E-10	4.8E-10	6.2E-10	1.6E-09	1.8E-09
Benzo[g,h,i]perylene	191-24-2	35	6.2E-11	5.0E-10	3.2E-10	4.6E-10	1.1E-09	1.3E-09
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	1	0	6.3E-10	3.7E-09	0	0	2.2E-08
Bis(2-Ethylhexyl)adipate	103-23-1	35	2.2E-10	2.9E-09	4.8E-09	1.5E-09	6.8E-09	2.8E-08
Chrysene	218-01-9	35	2.1E-10	1.9E-09	1.2E-09	1.9E-09	3.8E-09	4.3E-09
Coronene	191-07-1	1	0	1.5E-10	8.9E-10	0	0	5.3E-09
Cyclopenta[cd]pyrene	27208-37-3	35	3.5E-11	3.4E-10	2.0E-10	3.3E-10	6.5E-10	7.8E-10
Dicyclohexylamine	101-83-7	30	0	5.7E-08	9.5E-08	4.4E-08	1.1E-07	5.7E-07
N,N-Dicyclohexylmethylamine	7560-83-0	28	0	1.0E-10	2.0E-10	4.7E-11	4.2E-10	1.0E-09
Dimethyl phthalate	131-11-3	3	0	3.0E-10	1.0E-09	0	3.3E-09	3.8E-09
1,3-Diphenylguanidine	102-06-7	2	0	8.7E-10	3.9E-09	0	2.7E-09	2.1E-08
Indeno[1,2,3-cd]pyrene	193-39-5	28	0	2.2E-10	1.8E-10	1.9E-10	5.1E-10	8.0E-10
Methyl stearate	112-61-8	28	0	1.3E-09	1.8E-09	7.0E-10	3.3E-09	9.7E-09
4-tert-Octylphenol	140-66-9	34	0	5.5E-09	1.2E-08	1.5E-09	2.7E-08	5.1E-08
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	35	1.4E-10	1.6E-09	1.3E-09	1.2E-09	4.1E-09	6.2E-09
Phenol, 4-(1-phenylethyl)-	1988-89-2	35	1.6E-10	1.8E-09	2.1E-09	1.0E-09	6.6E-09	8.8E-09

[a] 35 field-specific $AD_{der\text{-}DART\text{-}field}$ values are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-229. Field-Specific Average Dermal One-Day Dose[a] ($AD_{der\text{-}DART\text{-}field}$, milligrams per kilogram BW per day) for One-Day Non-Cancer Hazard Assessment of **Field-Related DARTs**[b]—Combined Gender **Referees 16<30 Years**

Chemical	CASRN	Detection	$AD_{der\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
2-Azacyclotridecanone	947-04-6	2	0	3.1E-10	1.4E-09	0	9.5E-10	7.5E-09
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	9	0	4.4E-09	1.9E-08	0	1.7E-08	1.1E-07
Benzo[a]pyrene	50-32-8	32	0	2.3E-10	2.3E-10	1.5E-10	6.1E-10	9.5E-10
Benzo[e]pyrene	192-97-2	35	6.7E-11	6.9E-10	5.1E-10	6.6E-10	1.7E-09	1.9E-09
Benzo[g,h,i]perylene	191-24-2	35	6.5E-11	5.2E-10	3.4E-10	4.8E-10	1.2E-09	1.4E-09
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	1	0	6.6E-10	3.9E-09	0	0	2.3E-08
Bis(2-Ethylhexyl)adipate	103-23-1	35	2.3E-10	3.1E-09	5.0E-09	1.6E-09	7.2E-09	3.0E-08
Chrysene	218-01-9	35	2.2E-10	2.0E-09	1.3E-09	2.0E-09	4.0E-09	4.6E-09
Coronene	191-07-1	1	0	1.6E-10	9.4E-10	0	0	5.6E-09
Cyclopenta[cd]pyrene	27208-37-3	35	3.7E-11	3.6E-10	2.1E-10	3.5E-10	6.9E-10	8.2E-10
Dicyclohexylamine	101-83-7	30	0	6.1E-08	1.0E-07	4.6E-08	1.1E-07	6.1E-07
N,N-Dicyclohexylmethylamine	7560-83-0	28	0	1.1E-10	2.1E-10	4.9E-11	4.4E-10	1.1E-09
Dimethyl phthalate	131-11-3	3	0	3.2E-10	1.0E-09	0	3.4E-09	4.0E-09
1,3-Diphenylguanidine	102-06-7	2	0	9.1E-10	4.1E-09	0	2.8E-09	2.3E-08
Indeno[1,2,3-cd]pyrene	193-39-5	28	0	2.3E-10	1.9E-10	2.0E-10	5.4E-10	8.4E-10
Methyl stearate	112-61-8	28	0	1.3E-09	1.9E-09	7.4E-10	3.5E-09	1.0E-08
4-tert-Octylphenol	140-66-9	34	0	5.8E-09	1.2E-08	1.6E-09	2.8E-08	5.4E-08
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	35	1.4E-10	1.7E-09	1.4E-09	1.2E-09	4.3E-09	6.6E-09
Phenol, 4-(1-phenylethyl)-	1988-89-2	35	1.7E-10	1.9E-09	2.2E-09	1.1E-09	6.9E-09	9.2E-09

[a] 35 field-specific $AD_{der\text{-}DART\text{-}field}$ values are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-230. Field-Specific Average Dermal One-Day Dose[a] ($AD_{der\text{-}DART\text{-}field}$, milligrams per kilogram BW per day) for One-Day Non-Cancer Hazard Assessment of **Field-Related DARTs**[b]—Combined Gender **Referees 30<40 Years**

Chemical	CASRN	Detection	$AD_{der\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
2-Azacyclotridecanone	947-04-6	2	0	2.9E-10	1.3E-09	0	8.9E-10	7.1E-09
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	9	0	4.2E-09	1.7E-08	0	1.6E-08	1.0E-07
Benzo[a]pyrene	50-32-8	32	0	2.2E-10	2.2E-10	1.4E-10	5.7E-10	8.9E-10
Benzo[e]pyrene	192-97-2	35	6.2E-11	6.5E-10	4.8E-10	6.1E-10	1.6E-09	1.8E-09

Chemical	CASRN	Detection	$AD_{der\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Benzo[g,h,i]perylene	191-24-2	35	6.1E-11	4.9E-10	3.2E-10	4.5E-10	1.1E-09	1.3E-09
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	1	0	6.2E-10	3.7E-09	0	0	2.2E-08
Bis(2-Ethylhexyl)adipate	103-23-1	35	2.2E-10	2.9E-09	4.7E-09	1.5E-09	6.7E-09	2.8E-08
Chrysene	218-01-9	35	2.0E-10	1.9E-09	1.2E-09	1.9E-09	3.8E-09	4.3E-09
Coronene	191-07-1	1	0	1.5E-10	8.8E-10	0	0	5.2E-09
Cyclopenta[cd]pyrene	27208-37-3	35	3.4E-11	3.4E-10	2.0E-10	3.2E-10	6.4E-10	7.7E-10
Dicyclohexylamine	101-83-7	30	0	5.7E-08	9.4E-08	4.3E-08	1.0E-07	5.7E-07
N,N-Dicyclohexylmethylamine	7560-83-0	28	0	9.9E-11	2.0E-10	4.6E-11	4.1E-10	1.0E-09
Dimethyl phthalate	131-11-3	3	0	3.0E-10	9.8E-10	0	3.2E-09	3.8E-09
1,3-Diphenylguanidine	102-06-7	2	0	8.6E-10	3.8E-09	0	2.7E-09	2.1E-08
Indeno[1,2,3-cd]pyrene	193-39-5	28	0	2.2E-10	1.8E-10	1.9E-10	5.0E-10	7.9E-10
Methyl stearate	112-61-8	28	0	1.2E-09	1.8E-09	6.9E-10	3.3E-09	9.6E-09
4-tert-Octylphenol	140-66-9	34	0	5.4E-09	1.1E-08	1.5E-09	2.6E-08	5.0E-08
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	35	1.4E-10	1.6E-09	1.3E-09	1.2E-09	4.1E-09	6.1E-09
Phenol, 4-(1-phenylethyl)-	1988-89-2	35	1.6E-10	1.7E-09	2.1E-09	9.9E-10	6.5E-09	8.7E-09

[a] 35 field-specific $AD_{der\text{-}DART\text{-}field}$ values are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-231. Field-Specific Average Dermal One-Day Dose[a] ($AD_{der\text{-}DART\text{-}field}$, milligrams per kilogram BW per day) for One-Day Non-Cancer Hazard Assessment of **Field-Related DARTs**[b]—Combined Gender **Referees 40<50 Years**

Chemical	CASRN	Detection	$AD_{der\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
2-Azacyclotridecanone	947-04-6	2	0	2.9E-10	1.3E-09	0	9.0E-10	7.1E-09
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	9	0	4.2E-09	1.8E-08	0	1.6E-08	1.0E-07
Benzo[a]pyrene	50-32-8	32	0	2.2E-10	2.2E-10	1.5E-10	5.8E-10	9.0E-10
Benzo[e]pyrene	192-97-2	35	6.3E-11	6.5E-10	4.8E-10	6.2E-10	1.6E-09	1.8E-09
Benzo[g,h,i]perylene	191-24-2	35	6.1E-11	5.0E-10	3.2E-10	4.6E-10	1.1E-09	1.3E-09
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	1	0	6.2E-10	3.7E-09	0	0	2.2E-08
Bis(2-Ethylhexyl)adipate	103-23-1	35	2.2E-10	2.9E-09	4.7E-09	1.5E-09	6.8E-09	2.8E-08
Chrysene	218-01-9	35	2.1E-10	1.9E-09	1.2E-09	1.9E-09	3.8E-09	4.3E-09
Coronene	191-07-1	1	0	1.5E-10	8.9E-10	0	0	5.3E-09
Cyclopenta[cd]pyrene	27208-37-3	35	3.5E-11	3.4E-10	2.0E-10	3.3E-10	6.5E-10	7.8E-10
Dicyclohexylamine	101-83-7	30	0	5.7E-08	9.5E-08	4.4E-08	1.1E-07	5.7E-07

Chemical	CASRN	Detection	$AD_{der\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
N,N-Dicyclohexylmethylamine	7560-83-0	28	0	1.0E-10	2.0E-10	4.6E-11	4.2E-10	1.0E-09
Dimethyl phthalate	131-11-3	3	0	3.0E-10	9.9E-10	0	3.2E-09	3.8E-09
1,3-Diphenylguanidine	102-06-7	2	0	8.7E-10	3.9E-09	0	2.7E-09	2.1E-08
Indeno[1,2,3-cd]pyrene	193-39-5	28	0	2.2E-10	1.8E-10	1.9E-10	5.1E-10	7.9E-10
Methyl stearate	112-61-8	28	0	1.3E-09	1.8E-09	7.0E-10	3.3E-09	9.7E-09
4-tert-Octylphenol	140-66-9	34	0	5.5E-09	1.2E-08	1.5E-09	2.7E-08	5.1E-08
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	35	1.4E-10	1.6E-09	1.3E-09	1.2E-09	4.1E-09	6.2E-09
Phenol, 4-(1-phenylethyl)-	1988-89-2	35	1.6E-10	1.8E-09	2.1E-09	1.0E-09	6.6E-09	8.7E-09

[a] 35 field-specific $AD_{der\text{-}DART\text{-}field}$ values are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-232. Field-Specific Average Dermal One-Day Dose[a] ($AD_{der\text{-}DART\text{-}field}$, milligrams per kilogram BW per day) for One-Day Non-Cancer Hazard Assessment of **Field-Related DARTs**[b]—Combined Gender **Referees 50<70 Years**

Chemical	CASRN	Detection	$AD_{der\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
2-Azacyclotridecanone	947-04-6	2	0	2.9E-10	1.3E-09	0	9.0E-10	7.2E-09
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	9	0	4.2E-09	1.8E-08	0	1.6E-08	1.0E-07
Benzo[a]pyrene	50-32-8	32	0	2.2E-10	2.2E-10	1.5E-10	5.8E-10	9.1E-10
Benzo[e]pyrene	192-97-2	35	6.3E-11	6.6E-10	4.8E-10	6.2E-10	1.6E-09	1.8E-09
Benzo[g,h,i]perylene	191-24-2	35	6.2E-11	5.0E-10	3.2E-10	4.6E-10	1.1E-09	1.3E-09
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	1	0	6.3E-10	3.7E-09	0	0	2.2E-08
Bis(2-Ethylhexyl)adipate	103-23-1	35	2.2E-10	2.9E-09	4.8E-09	1.5E-09	6.8E-09	2.8E-08
Chrysene	218-01-9	35	2.1E-10	1.9E-09	1.2E-09	1.9E-09	3.8E-09	4.3E-09
Coronene	191-07-1	1	0	1.5E-10	8.9E-10	0	0	5.3E-09
Cyclopenta[cd]pyrene	27208-37-3	35	3.5E-11	3.4E-10	2.0E-10	3.3E-10	6.5E-10	7.8E-10
Dicyclohexylamine	101-83-7	30	0	5.7E-08	9.5E-08	4.4E-08	1.1E-07	5.7E-07
N,N-Dicyclohexylmethylamine	7560-83-0	28	0	1.0E-10	2.0E-10	4.7E-11	4.2E-10	1.0E-09
Dimethyl phthalate	131-11-3	3	0	3.0E-10	1.0E-09	0	3.3E-09	3.8E-09
1,3-Diphenylguanidine	102-06-7	2	0	8.7E-10	3.9E-09	0	2.7E-09	2.1E-08
Indeno[1,2,3-cd]pyrene	193-39-5	28	0	2.2E-10	1.8E-10	1.9E-10	5.1E-10	8.0E-10
Methyl stearate	112-61-8	28	0	1.3E-09	1.8E-09	7.0E-10	3.3E-09	9.7E-09
4-tert-Octylphenol	140-66-9	34	0	5.5E-09	1.2E-08	1.5E-09	2.7E-08	5.1E-08
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	35	1.4E-10	1.6E-09	1.3E-09	1.2E-09	4.1E-09	6.2E-09

Chemical	CASRN	Detection	$AD_{der\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Phenol, 4-(1-phenylethyl)-	1988-89-2	35	1.6E-10	1.8E-09	2.1E-09	1.0E-09	6.6E-09	8.8E-09

[a] 35 field-specific $AD_{der\text{-}DART\text{-}field}$ values are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-233. Field-Specific Average Dermal One-Day Dose[a] ($AD_{der\text{-}DART\text{-}field}$, milligrams per kilogram BW per day) for One-Day Non-Cancer Hazard Assessment of **Field-Related DARTs[b]**—Combined Gender **Spectators Third Trimester Fetus<0 Years**

Chemical	CASRN	Detection	$AD_{der\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
2-Azacyclotridecanone	947-04-6	2	0	2.3E-10	1.0E-09	0	7.2E-10	5.7E-09
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	9	0	3.4E-09	1.4E-08	0	1.3E-08	8.2E-08
Benzo[a]pyrene	50-32-8	32	0	1.8E-10	1.7E-10	1.2E-10	4.6E-10	7.2E-10
Benzo[e]pyrene	192-97-2	35	5.0E-11	5.2E-10	3.8E-10	4.9E-10	1.3E-09	1.4E-09
Benzo[g,h,i]perylene	191-24-2	35	4.9E-11	4.0E-10	2.6E-10	3.7E-10	8.7E-10	1.0E-09
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	1	0	5.0E-10	2.9E-09	0	0	1.7E-08
Bis(2-Ethylhexyl)adipate	103-23-1	35	1.7E-10	2.3E-09	3.8E-09	1.2E-09	5.4E-09	2.2E-08
Chrysene	218-01-9	35	1.7E-10	1.5E-09	9.8E-10	1.5E-09	3.0E-09	3.4E-09
Coronene	191-07-1	1	0	1.2E-10	7.1E-10	0	0	4.2E-09
Cyclopenta[cd]pyrene	27208-37-3	35	2.8E-11	2.7E-10	1.6E-10	2.6E-10	5.2E-10	6.2E-10
Dicyclohexylamine	101-83-7	30	0	4.6E-08	7.6E-08	3.5E-08	8.5E-08	4.6E-07
N,N-Dicyclohexylmethylamine	7560-83-0	28	0	8.0E-11	1.6E-10	3.7E-11	3.3E-10	8.3E-10
Dimethyl phthalate	131-11-3	3	0	2.4E-10	7.9E-10	0	2.6E-09	3.1E-09
1,3-Diphenylguanidine	102-06-7	2	0	6.9E-10	3.1E-09	0	2.1E-09	1.7E-08
Indeno[1,2,3-cd]pyrene	193-39-5	28	0	1.7E-10	1.4E-10	1.5E-10	4.0E-10	6.3E-10
Methyl stearate	112-61-8	28	0	1.0E-09	1.4E-09	5.6E-10	2.6E-09	7.7E-09
4-tert-Octylphenol	140-66-9	34	0	4.4E-09	9.2E-09	1.2E-09	2.1E-08	4.1E-08
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	35	1.1E-10	1.3E-09	1.0E-09	9.3E-10	3.3E-09	5.0E-09
Phenol, 4-(1-phenylethyl)-	1988-89-2	35	1.3E-10	1.4E-09	1.7E-09	8.0E-10	5.2E-09	7.0E-09

[a] 35 field-specific $AD_{der\text{-}DART\text{-}field}$ values are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-234. Field-Specific Average Dermal One-Day Dose[a] ($AD_{der\text{-}DART\text{-}field}$, milligrams per kilogram BW per day) for One-Day Non-Cancer Hazard Assessment of **Field-Related DARTs**[b]—Combined Gender **Spectators 0<2 Years**

Chemical	CASRN	Detection	$AD_{der\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
2-Azacyclotridecanone	947-04-6	2	0	1.2E-09	5.5E-09	0	3.8E-09	3.0E-08
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	9	0	1.8E-08	7.5E-08	0	6.8E-08	4.4E-07
Benzo[a]pyrene	50-32-8	32	0	9.5E-10	9.3E-10	6.2E-10	2.5E-09	3.9E-09
Benzo[e]pyrene	192-97-2	35	2.7E-10	2.8E-09	2.1E-09	2.7E-09	6.7E-09	7.6E-09
Benzo[g,h,i]perylene	191-24-2	35	2.6E-10	2.1E-09	1.4E-09	2.0E-09	4.7E-09	5.6E-09
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	1	0	2.7E-09	1.6E-08	0	0	9.3E-08
Bis(2-Ethylhexyl)adipate	103-23-1	35	9.3E-10	1.3E-08	2.0E-08	6.5E-09	2.9E-08	1.2E-07
Chrysene	218-01-9	35	8.9E-10	8.1E-09	5.2E-09	8.1E-09	1.6E-08	1.8E-08
Coronene	191-07-1	1	0	6.4E-10	3.8E-09	0	0	2.2E-08
Cyclopenta[cd]pyrene	27208-37-3	35	1.5E-10	1.5E-09	8.7E-10	1.4E-09	2.8E-09	3.3E-09
Dicyclohexylamine	101-83-7	30	0	2.4E-07	4.1E-07	1.9E-07	4.5E-07	2.5E-06
N,N-Dicyclohexylmethylamine	7560-83-0	28	0	4.3E-10	8.7E-10	2.0E-10	1.8E-09	4.5E-09
Dimethyl phthalate	131-11-3	3	0	1.3E-09	4.2E-09	0	1.4E-08	1.6E-08
1,3-Diphenylguanidine	102-06-7	2	0	3.7E-09	1.7E-08	0	1.1E-08	9.1E-08
Indeno[1,2,3-cd]pyrene	193-39-5	28	0	9.3E-10	7.8E-10	8.2E-10	2.2E-09	3.4E-09
Methyl stearate	112-61-8	28	0	5.4E-09	7.6E-09	3.0E-09	1.4E-08	4.1E-08
4-tert-Octylphenol	140-66-9	34	0	2.3E-08	4.9E-08	6.4E-09	1.1E-07	2.2E-07
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	35	5.9E-10	6.9E-09	5.6E-09	5.0E-09	1.8E-08	2.7E-08
Phenol, 4-(1-phenylethyl)-	1988-89-2	35	6.8E-10	7.5E-09	8.9E-09	4.3E-09	2.8E-08	3.7E-08

[a] 35 field-specific $AD_{der\text{-}DART\text{-}field}$ values are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-235. Field-Specific Average Dermal One-Day Dose[a] ($AD_{der\text{-}DART\text{-}field}$, milligrams per kilogram BW per day) for One-Day Non-Cancer Hazard Assessment of **Field-Related DARTs**[b]—Combined Gender **Spectators 2<6 Years**

Chemical	CASRN	Detection	$AD_{der\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
2-Azacyclotridecanone	947-04-6	2	0	9.1E-10	4.1E-09	0	2.8E-09	2.2E-08
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	9	0	1.3E-08	5.5E-08	0	5.0E-08	3.2E-07
Benzo[a]pyrene	50-32-8	32	0	7.0E-10	6.9E-10	4.6E-10	1.8E-09	2.8E-09
Benzo[e]pyrene	192-97-2	35	2.0E-10	2.1E-09	1.5E-09	2.0E-09	5.0E-09	5.6E-09

Chemical	CASRN	Detection	$AD_{der\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Benzo[g,h,i]perylene	191-24-2	35	1.9E-10	1.6E-09	1.0E-09	1.4E-09	3.4E-09	4.1E-09
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	1	0	2.0E-09	1.2E-08	0	0	6.9E-08
Bis(2-Ethylhexyl)adipate	103-23-1	35	6.9E-10	9.2E-09	1.5E-08	4.8E-09	2.1E-08	8.8E-08
Chrysene	218-01-9	35	6.5E-10	6.0E-09	3.8E-09	6.0E-09	1.2E-08	1.4E-08
Coronene	191-07-1	1	0	4.7E-10	2.8E-09	0	0	1.7E-08
Cyclopenta[cd]pyrene	27208-37-3	35	1.1E-10	1.1E-09	6.4E-10	1.0E-09	2.0E-09	2.4E-09
Dicyclohexylamine	101-83-7	30	0	1.8E-07	3.0E-07	1.4E-07	3.3E-07	1.8E-06
N,N-Dicyclohexylmethylamine	7560-83-0	28	0	3.2E-10	6.4E-10	1.5E-10	1.3E-09	3.3E-09
Dimethyl phthalate	131-11-3	3	0	9.4E-10	3.1E-09	0	1.0E-08	1.2E-08
1,3-Diphenylguanidine	102-06-7	2	0	2.7E-09	1.2E-08	0	8.5E-09	6.7E-08
Indeno[1,2,3-cd]pyrene	193-39-5	28	0	6.8E-10	5.7E-10	6.1E-10	1.6E-09	2.5E-09
Methyl stearate	112-61-8	28	0	3.9E-09	5.6E-09	2.2E-09	1.0E-08	3.0E-08
4-tert-Octylphenol	140-66-9	34	0	1.7E-08	3.6E-08	4.7E-09	8.4E-08	1.6E-07
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	35	4.3E-10	5.1E-09	4.1E-09	3.7E-09	1.3E-08	2.0E-08
Phenol, 4-(1-phenylethyl)-	1988-89-2	35	5.0E-10	5.5E-09	6.5E-09	3.1E-09	2.1E-08	2.7E-08

[a] 35 field-specific $AD_{der\text{-}DART\text{-}field}$ values are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-236. Field-Specific Average Dermal One-Day Dose[a] ($AD_{der\text{-}DART\text{-}field}$, milligrams per kilogram BW per day) for One-Day Non-Cancer Hazard Assessment of **Field-Related DARTs**[b]—Combined Gender **Spectators 6<11 Years**

Chemical	CASRN	Detection	$AD_{der\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
2-Azacyclotridecanone	947-04-6	2	0	8.3E-10	3.7E-09	0	2.6E-09	2.0E-08
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	9	0	1.2E-08	5.0E-08	0	4.6E-08	2.9E-07
Benzo[a]pyrene	50-32-8	32	0	6.3E-10	6.2E-10	4.1E-10	1.6E-09	2.6E-09
Benzo[e]pyrene	192-97-2	35	1.8E-10	1.9E-09	1.4E-09	1.8E-09	4.5E-09	5.1E-09
Benzo[g,h,i]perylene	191-24-2	35	1.8E-10	1.4E-09	9.2E-10	1.3E-09	3.1E-09	3.7E-09
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	1	0	1.8E-09	1.1E-08	0	0	6.2E-08
Bis(2-Ethylhexyl)adipate	103-23-1	35	6.2E-10	8.4E-09	1.4E-08	4.3E-09	1.9E-08	8.0E-08
Chrysene	218-01-9	35	5.9E-10	5.4E-09	3.5E-09	5.4E-09	1.1E-08	1.2E-08
Coronene	191-07-1	1	0	4.3E-10	2.5E-09	0	0	1.5E-08
Cyclopenta[cd]pyrene	27208-37-3	35	9.9E-11	9.7E-10	5.8E-10	9.3E-10	1.9E-09	2.2E-09
Dicyclohexylamine	101-83-7	30	0	1.6E-07	2.7E-07	1.3E-07	3.0E-07	1.6E-06

Chemical	CASRN	Detection	$AD_{der\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
N,N-Dicyclohexylmethylamine	7560-83-0	28	0	2.9E-10	5.8E-10	1.3E-10	1.2E-09	3.0E-09
Dimethyl phthalate	131-11-3	3	0	8.5E-10	2.8E-09	0	9.3E-09	1.1E-08
1,3-Diphenylguanidine	102-06-7	2	0	2.5E-09	1.1E-08	0	7.7E-09	6.1E-08
Indeno[1,2,3-cd]pyrene	193-39-5	28	0	6.2E-10	5.2E-10	5.5E-10	1.4E-09	2.3E-09
Methyl stearate	112-61-8	28	0	3.6E-09	5.0E-09	2.0E-09	9.4E-09	2.8E-08
4-tert-Octylphenol	140-66-9	34	0	1.6E-08	3.3E-08	4.2E-09	7.6E-08	1.5E-07
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	35	3.9E-10	4.6E-09	3.8E-09	3.3E-09	1.2E-08	1.8E-08
Phenol, 4-(1-phenylethyl)-	1988-89-2	35	4.6E-10	5.0E-09	5.9E-09	2.9E-09	1.9E-08	2.5E-08

[a] 35 field-specific $AD_{der\text{-}DART\text{-}field}$ values are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-237. Field-Specific Average Dermal One-Day Dose[a] ($AD_{der\text{-}DART\text{-}field}$, milligrams per kilogram BW per day) for One-Day Non-Cancer Hazard Assessment of **Field-Related DARTs**[b]—Combined Gender **Spectators 11<16 Years**

Chemical	CASRN	Detection	$AD_{der\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
2-Azacyclotridecanone	947-04-6	2	0	7.1E-10	3.2E-09	0	2.2E-09	1.7E-08
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	9	0	1.0E-08	4.3E-08	0	3.9E-08	2.5E-07
Benzo[a]pyrene	50-32-8	32	0	5.4E-10	5.3E-10	3.5E-10	1.4E-09	2.2E-09
Benzo[e]pyrene	192-97-2	35	1.5E-10	1.6E-09	1.2E-09	1.5E-09	3.9E-09	4.4E-09
Benzo[g,h,i]perylene	191-24-2	35	1.5E-10	1.2E-09	7.9E-10	1.1E-09	2.7E-09	3.2E-09
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	1	0	1.5E-09	9.0E-09	0	0	5.3E-08
Bis(2-Ethylhexyl)adipate	103-23-1	35	5.3E-10	7.1E-09	1.2E-08	3.7E-09	1.7E-08	6.8E-08
Chrysene	218-01-9	35	5.1E-10	4.6E-09	3.0E-09	4.6E-09	9.3E-09	1.1E-08
Coronene	191-07-1	1	0	3.7E-10	2.2E-09	0	0	1.3E-08
Cyclopenta[cd]pyrene	27208-37-3	35	8.5E-11	8.3E-10	4.9E-10	8.0E-10	1.6E-09	1.9E-09
Dicyclohexylamine	101-83-7	30	0	1.4E-07	2.3E-07	1.1E-07	2.6E-07	1.4E-06
N,N-Dicyclohexylmethylamine	7560-83-0	28	0	2.5E-10	4.9E-10	1.1E-10	1.0E-09	2.6E-09
Dimethyl phthalate	131-11-3	3	0	7.3E-10	2.4E-09	0	7.9E-09	9.3E-09
1,3-Diphenylguanidine	102-06-7	2	0	2.1E-09	9.4E-09	0	6.6E-09	5.2E-08
Indeno[1,2,3-cd]pyrene	193-39-5	28	0	5.3E-10	4.4E-10	4.7E-10	1.2E-09	1.9E-09
Methyl stearate	112-61-8	28	0	3.1E-09	4.3E-09	1.7E-09	8.1E-09	2.4E-08
4-tert-Octylphenol	140-66-9	34	0	1.3E-08	2.8E-08	3.6E-09	6.5E-08	1.2E-07
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	35	3.3E-10	3.9E-09	3.2E-09	2.8E-09	1.0E-08	1.5E-08

Chemical	CASRN	Detection	$AD_{der\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Phenol, 4-(1-phenylethyl)-	1988-89-2	35	3.9E-10	4.3E-09	5.1E-09	2.4E-09	1.6E-08	2.1E-08

[a] 35 field-specific $AD_{der\text{-}DART\text{-}field}$ values are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-238. Field-Specific Average Dermal One-Day Dose[a] ($AD_{der\text{-}DART\text{-}field}$, milligrams per kilogram BW per day) for One-Day Non-Cancer Hazard Assessment of **Field-Related DARTs**[b]—Combined Gender **Spectators 16<30 Years**

Chemical	CASRN	Detection	$AD_{der\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
2-Azacyclotridecanone	947-04-6	2	0	3.1E-10	1.4E-09	0	9.6E-10	7.6E-09
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	9	0	4.5E-09	1.9E-08	0	1.7E-08	1.1E-07
Benzo[a]pyrene	50-32-8	32	0	2.4E-10	2.3E-10	1.6E-10	6.2E-10	9.7E-10
Benzo[e]pyrene	192-97-2	35	6.7E-11	7.0E-10	5.2E-10	6.6E-10	1.7E-09	1.9E-09
Benzo[g,h,i]perylene	191-24-2	35	6.6E-11	5.3E-10	3.4E-10	4.9E-10	1.2E-09	1.4E-09
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	1	0	6.7E-10	3.9E-09	0	0	2.3E-08
Bis(2-Ethylhexyl)adipate	103-23-1	35	2.3E-10	3.1E-09	5.1E-09	1.6E-09	7.2E-09	3.0E-08
Chrysene	218-01-9	35	2.2E-10	2.0E-09	1.3E-09	2.0E-09	4.1E-09	4.6E-09
Coronene	191-07-1	1	0	1.6E-10	9.5E-10	0	0	5.6E-09
Cyclopenta[cd]pyrene	27208-37-3	35	3.7E-11	3.6E-10	2.2E-10	3.5E-10	6.9E-10	8.3E-10
Dicyclohexylamine	101-83-7	30	0	6.1E-08	1.0E-07	4.7E-08	1.1E-07	6.1E-07
N,N-Dicyclohexylmethylamine	7560-83-0	28	0	1.1E-10	2.2E-10	5.0E-11	4.5E-10	1.1E-09
Dimethyl phthalate	131-11-3	3	0	3.2E-10	1.1E-09	0	3.5E-09	4.1E-09
1,3-Diphenylguanidine	102-06-7	2	0	9.2E-10	4.1E-09	0	2.9E-09	2.3E-08
Indeno[1,2,3-cd]pyrene	193-39-5	28	0	2.3E-10	1.9E-10	2.1E-10	5.4E-10	8.5E-10
Methyl stearate	112-61-8	28	0	1.3E-09	1.9E-09	7.5E-10	3.5E-09	1.0E-08
4-tert-Octylphenol	140-66-9	34	0	5.9E-09	1.2E-08	1.6E-09	2.8E-08	5.4E-08
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	35	1.5E-10	1.7E-09	1.4E-09	1.2E-09	4.4E-09	6.6E-09
Phenol, 4-(1-phenylethyl)-	1988-89-2	35	1.7E-10	1.9E-09	2.2E-09	1.1E-09	7.0E-09	9.3E-09

[a] 35 field-specific $AD_{der\text{-}DART\text{-}field}$ values are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-239. Field-Specific Average Dermal One-Day Dose[a] ($AD_{der\text{-}DART\text{-}field}$, milligrams per kilogram BW per day) for One-Day Non-Cancer Hazard Assessment of **Field-Related DARTs**[b]—Combined Gender **Spectators 30<40 Years**

Chemical	CASRN	Detection	$AD_{der\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
2-Azacyclotridecanone	947-04-6	2	0	2.7E-10	1.2E-09	0	8.3E-10	6.6E-09
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	9	0	3.9E-09	1.6E-08	0	1.5E-08	9.5E-08
Benzo[a]pyrene	50-32-8	32	0	2.0E-10	2.0E-10	1.3E-10	5.3E-10	8.3E-10
Benzo[e]pyrene	192-97-2	35	5.8E-11	6.0E-10	4.5E-10	5.7E-10	1.5E-09	1.6E-09
Benzo[g,h,i]perylene	191-24-2	35	5.7E-11	4.6E-10	3.0E-10	4.2E-10	1.0E-09	1.2E-09
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	1	0	5.8E-10	3.4E-09	0	0	2.0E-08
Bis(2-Ethylhexyl)adipate	103-23-1	35	2.0E-10	2.7E-09	4.4E-09	1.4E-09	6.3E-09	2.6E-08
Chrysene	218-01-9	35	1.9E-10	1.8E-09	1.1E-09	1.8E-09	3.5E-09	4.0E-09
Coronene	191-07-1	1	0	1.4E-10	8.2E-10	0	0	4.9E-09
Cyclopenta[cd]pyrene	27208-37-3	35	3.2E-11	3.1E-10	1.9E-10	3.0E-10	6.0E-10	7.2E-10
Dicyclohexylamine	101-83-7	30	0	5.3E-08	8.8E-08	4.0E-08	9.8E-08	5.3E-07
N,N-Dicyclohexylmethylamine	7560-83-0	28	0	9.3E-11	1.9E-10	4.3E-11	3.9E-10	9.7E-10
Dimethyl phthalate	131-11-3	3	0	2.8E-10	9.2E-10	0	3.0E-09	3.5E-09
1,3-Diphenylguanidine	102-06-7	2	0	8.0E-10	3.6E-09	0	2.5E-09	2.0E-08
Indeno[1,2,3-cd]pyrene	193-39-5	28	0	2.0E-10	1.7E-10	1.8E-10	4.7E-10	7.3E-10
Methyl stearate	112-61-8	28	0	1.2E-09	1.6E-09	6.4E-10	3.1E-09	8.9E-09
4-tert-Octylphenol	140-66-9	34	0	5.1E-09	1.1E-08	1.4E-09	2.5E-08	4.7E-08
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	35	1.3E-10	1.5E-09	1.2E-09	1.1E-09	3.8E-09	5.7E-09
Phenol, 4-(1-phenylethyl)-	1988-89-2	35	1.5E-10	1.6E-09	1.9E-09	9.2E-10	6.1E-09	8.1E-09

[a] 35 field-specific $AD_{der\text{-}DART\text{-}field}$ values are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-240. Field-Specific Average Dermal One-Day Dose[a] ($AD_{der\text{-}DART\text{-}field}$, milligrams per kilogram BW per day) for One-Day Non-Cancer Hazard Assessment of **Field-Related DARTs**[b]—Combined Gender **Spectators 40<50 Years**

Chemical	CASRN	Detection	$AD_{der\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
2-Azacyclotridecanone	947-04-6	2	0	2.7E-10	1.2E-09	0	8.4E-10	6.7E-09
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	9	0	3.9E-09	1.6E-08	0	1.5E-08	9.6E-08
Benzo[a]pyrene	50-32-8	32	0	2.1E-10	2.0E-10	1.4E-10	5.4E-10	8.4E-10
Benzo[e]pyrene	192-97-2	35	5.9E-11	6.1E-10	4.5E-10	5.8E-10	1.5E-09	1.7E-09

Chemical	CASRN	Detection	$AD_{der\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Benzo[g,h,i]perylene	191-24-2	35	5.7E-11	4.6E-10	3.0E-10	4.3E-10	1.0E-09	1.2E-09
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	1	0	5.8E-10	3.4E-09	0	0	2.0E-08
Bis(2-Ethylhexyl)adipate	103-23-1	35	2.0E-10	2.7E-09	4.4E-09	1.4E-09	6.3E-09	2.6E-08
Chrysene	218-01-9	35	1.9E-10	1.8E-09	1.1E-09	1.8E-09	3.6E-09	4.0E-09
Coronene	191-07-1	1	0	1.4E-10	8.3E-10	0	0	4.9E-09
Cyclopenta[cd]pyrene	27208-37-3	35	3.2E-11	3.2E-10	1.9E-10	3.1E-10	6.1E-10	7.2E-10
Dicyclohexylamine	101-83-7	30	0	5.3E-08	8.8E-08	4.1E-08	9.9E-08	5.3E-07
N,N-Dicyclohexylmethylamine	7560-83-0	28	0	9.4E-11	1.9E-10	4.3E-11	3.9E-10	9.8E-10
Dimethyl phthalate	131-11-3	3	0	2.8E-10	9.3E-10	0	3.0E-09	3.6E-09
1,3-Diphenylguanidine	102-06-7	2	0	8.1E-10	3.6E-09	0	2.5E-09	2.0E-08
Indeno[1,2,3-cd]pyrene	193-39-5	28	0	2.0E-10	1.7E-10	1.8E-10	4.7E-10	7.4E-10
Methyl stearate	112-61-8	28	0	1.2E-09	1.7E-09	6.5E-10	3.1E-09	9.0E-09
4-tert-Octylphenol	140-66-9	34	0	5.1E-09	1.1E-08	1.4E-09	2.5E-08	4.7E-08
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	35	1.3E-10	1.5E-09	1.2E-09	1.1E-09	3.8E-09	5.8E-09
Phenol, 4-(1-phenylethyl)-	1988-89-2	35	1.5E-10	1.6E-09	1.9E-09	9.3E-10	6.1E-09	8.2E-09

[a] 35 field-specific $AD_{der\text{-}DART\text{-}field}$ values are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-241. Field-Specific Average Dermal One-Day Dose[a] ($AD_{der\text{-}DART\text{-}field}$, milligrams per kilogram BW per day) for One-Day Non-Cancer Hazard Assessment of **Field-Related DARTs**[b]—Combined Gender **Spectators 50<70 Years**

Chemical	CASRN	Detection	$AD_{der\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
2-Azacyclotridecanone	947-04-6	2	0	2.5E-10	1.1E-09	0	7.9E-10	6.3E-09
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	9	0	3.7E-09	1.5E-08	0	1.4E-08	9.1E-08
Benzo[a]pyrene	50-32-8	32	0	1.9E-10	1.9E-10	1.3E-10	5.1E-10	7.9E-10
Benzo[e]pyrene	192-97-2	35	5.5E-11	5.7E-10	4.2E-10	5.5E-10	1.4E-09	1.6E-09
Benzo[g,h,i]perylene	191-24-2	35	5.4E-11	4.4E-10	2.8E-10	4.0E-10	9.6E-10	1.1E-09
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	1	0	5.5E-10	3.2E-09	0	0	1.9E-08
Bis(2-Ethylhexyl)adipate	103-23-1	35	1.9E-10	2.6E-09	4.2E-09	1.3E-09	6.0E-09	2.5E-08
Chrysene	218-01-9	35	1.8E-10	1.7E-09	1.1E-09	1.7E-09	3.4E-09	3.8E-09
Coronene	191-07-1	1	0	1.3E-10	7.8E-10	0	0	4.6E-09
Cyclopenta[cd]pyrene	27208-37-3	35	3.0E-11	3.0E-10	1.8E-10	2.9E-10	5.7E-10	6.8E-10
Dicyclohexylamine	101-83-7	30	0	5.0E-08	8.3E-08	3.9E-08	9.3E-08	5.0E-07

Chemical	CASRN	Detection	$AD_{der\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
N,N-Dicyclohexylmethylamine	7560-83-0	28	0	8.8E-11	1.8E-10	4.1E-11	3.7E-10	9.2E-10
Dimethyl phthalate	131-11-3	3	0	2.6E-10	8.7E-10	0	2.9E-09	3.4E-09
1,3-Diphenylguanidine	102-06-7	2	0	7.6E-10	3.4E-09	0	2.4E-09	1.9E-08
Indeno[1,2,3-cd]pyrene	193-39-5	28	0	1.9E-10	1.6E-10	1.7E-10	4.5E-10	7.0E-10
Methyl stearate	112-61-8	28	0	1.1E-09	1.6E-09	6.1E-10	2.9E-09	8.5E-09
4-tert-Octylphenol	140-66-9	34	0	4.8E-09	1.0E-08	1.3E-09	2.3E-08	4.5E-08
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	35	1.2E-10	1.4E-09	1.2E-09	1.0E-09	3.6E-09	5.5E-09
Phenol, 4-(1-phenylethyl)-	1988-89-2	35	1.4E-10	1.6E-09	1.8E-09	8.8E-10	5.8E-09	7.7E-09

[a] 35 field-specific $AD_{der\text{-}DART\text{-}field}$ values are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

F.5.3. Average Dermal Daily Dose (ADD_{der}) for Chronic Non-Cancer Hazard of General Chemicals

Table F-242. Average Dermal Daily Dose[a] for Chronic Non-Cancer Hazard (ADD_{der}, milligrams per kilogram BW per day) of **Field-Related General Chemicals**[b]— Combined Gender **Athletes**

Chemical Name	CASRN	ADD_{der}						
		2<6 Years	6<11 Years	11<16 Years	16<30 Years	30<40 Years	40<50 Years	50<70 Years
Acenaphthylene	208-96-8	8.0E-12	6.3E-12	6.7E-12	8.4E-12	6.0E-12	5.1E-12	5.1E-12
Aniline	62-53-3	2.6E-10	2.0E-10	2.1E-10	2.7E-10	1.9E-10	1.6E-10	1.6E-10
Anthracene	120-12-7	8.9E-11	7.0E-11	7.4E-11	9.3E-11	6.6E-11	5.6E-11	5.7E-11
Anthracene, 2-methyl-	613-12-7	1.3E-10	1.0E-10	1.1E-10	1.3E-10	9.5E-11	8.1E-11	8.1E-11
Anthracene, 9,10-diphenyl-	1499-10-1	1.7E-11	1.4E-11	1.5E-11	1.8E-11	1.3E-11	1.1E-11	1.1E-11
Anthracene, 9-phenyl	602-55-1	4.3E-11	3.4E-11	3.6E-11	4.6E-11	3.2E-11	2.7E-11	2.8E-11
Benz[a]anthracene	56-55-3	3.5E-10	2.8E-10	2.9E-10	3.7E-10	2.6E-10	2.2E-10	2.2E-10
Benzene, n-butyl-	104-51-8	5.3E-13	4.2E-13	4.4E-13	5.5E-13	3.9E-13	3.3E-13	3.4E-13
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	2.4E-08	1.9E-08	2.0E-08	2.5E-08	1.8E-08	1.5E-08	1.5E-08
Benzo[b]fluoranthene	205-99-2	5.0E-10	3.9E-10	4.2E-10	5.2E-10	3.7E-10	3.2E-10	3.2E-10
7H-Benzo[c]fluorene	205-12-9	4.4E-11	3.4E-11	3.6E-11	4.6E-11	3.2E-11	2.8E-11	2.8E-11
Benzo[k]fluoranthene	207-08-9	2.2E-10	1.7E-10	1.8E-10	2.3E-10	1.6E-10	1.4E-10	1.4E-10
Benzothiazole	95-16-9	2.8E-07	2.2E-07	2.4E-07	3.0E-07	2.1E-07	1.8E-07	1.8E-07
Benzothiazole, 2-phenyl-	883-93-2	6.9E-09	5.5E-09	5.8E-09	7.3E-09	5.2E-09	4.4E-09	4.4E-09
1,3-Benzothiazole-2-thiol	149-30-4	1.9E-09	1.5E-09	1.6E-09	2.0E-09	1.4E-09	1.2E-09	1.2E-09
Benzothiazolone	934-34-9	8.0E-07	6.3E-07	6.6E-07	8.4E-07	5.9E-07	5.0E-07	5.1E-07

Chemical Name	CASRN	ADD_{der}						
		2<6 Years	6<11 Years	11<16 Years	16<30 Years	30<40 Years	40<50 Years	50<70 Years
Benzyl butyl phthalate	85-68-7	3.2E-09	2.6E-09	2.7E-09	3.4E-09	2.4E-09	2.1E-09	2.1E-09
Cyclohexyl isothiocyanate	1122-82-3	1.2E-11	9.5E-12	1.0E-11	1.3E-11	8.9E-12	7.6E-12	7.6E-12
Dibenz[a,h]anthracene	53-70-3	1.3E-10	1.0E-10	1.1E-10	1.4E-10	9.7E-11	8.2E-11	8.3E-11
Dibenzothiophene	132-65-0	7.8E-11	6.1E-11	6.5E-11	8.2E-11	5.8E-11	4.9E-11	5.0E-11
Diethyl Phthalate	84-66-2	5.9E-10	4.7E-10	4.9E-10	6.2E-10	4.4E-10	3.7E-10	3.8E-10
Diisobutyl Phthalate	84-69-5	4.9E-10	3.9E-10	4.1E-10	5.2E-10	3.7E-10	3.1E-10	3.2E-10
Diisooctylphthalate	27554-26-3	1.6E-08	1.3E-08	1.4E-08	1.7E-08	1.2E-08	1.0E-08	1.0E-08
Di-n-octyl phthalate	117-84-0	3.5E-09	2.7E-09	2.9E-09	3.6E-09	2.6E-09	2.2E-09	2.2E-09
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	3.0E-12	2.4E-12	2.5E-12	3.2E-12	2.3E-12	1.9E-12	1.9E-12
3,5-Di-tert-butyl-4-hydroxybenzaldehyde	1620-98-0	1.5E-08	1.2E-08	1.3E-08	1.6E-08	1.1E-08	9.6E-09	9.6E-09
Fluoranthene	206-44-0	2.7E-09	2.1E-09	2.3E-09	2.8E-09	2.0E-09	1.7E-09	1.7E-09
Fluorene	86-73-7	1.1E-11	9.0E-12	9.5E-12	1.2E-11	8.5E-12	7.3E-12	7.3E-12
Hexanoic Acid, 2-ethyl	149-57-5	1.3E-11	1.0E-11	1.1E-11	1.4E-11	9.8E-12	8.3E-12	8.4E-12
1-Hydroxypyrene	5315-79-7	7.6E-10	6.0E-10	6.3E-10	8.0E-10	5.7E-10	4.8E-10	4.8E-10
2-(Methylthio)benzothiazole	615-22-5	1.0E-08	8.2E-09	8.7E-09	1.1E-08	7.8E-09	6.6E-09	6.7E-09
Naphthalene	91-20-3	1.7E-11	1.3E-11	1.4E-11	1.8E-11	1.2E-11	1.1E-11	1.1E-11
Naphthalene, 1,2-dimethyl-	573-98-8	1.2E-12	9.3E-13	9.8E-13	1.2E-12	8.8E-13	7.5E-13	7.5E-13
Naphthalene, 1,6-dimethyl-	575-43-9	1.2E-11	9.9E-12	1.0E-11	1.3E-11	9.3E-12	7.9E-12	8.0E-12
Naphthalene, 1-methyl-	90-12-0	2.6E-12	2.1E-12	2.2E-12	2.8E-12	2.0E-12	1.7E-12	1.7E-12
Naphthalene, 2-(bromomethyl)-	939-26-4	4.9E-10	3.9E-10	4.1E-10	5.2E-10	3.7E-10	3.1E-10	3.1E-10
Naphthalene, 2,3-dimethyl-	581-40-8	1.5E-10	1.1E-10	1.2E-10	1.5E-10	1.1E-10	9.2E-11	9.3E-11
Naphthalene, 2-methyl	91-57-6	2.6E-12	2.0E-12	2.1E-12	2.7E-12	1.9E-12	1.6E-12	1.6E-12
1-Octadecene	112-88-9	8.4E-10	6.6E-10	7.0E-10	8.8E-10	6.3E-10	5.3E-10	5.4E-10
Phenanthrene	85-01-8	5.8E-10	4.6E-10	4.8E-10	6.1E-10	4.3E-10	3.7E-10	3.7E-10
Phenanthrene, 1-methyl	832-69-9	3.0E-10	2.4E-10	2.5E-10	3.2E-10	2.3E-10	1.9E-10	1.9E-10
Phenanthrene, 2-methyl-	2531-84-2	3.7E-10	2.9E-10	3.1E-10	3.9E-10	2.7E-10	2.3E-10	2.3E-10
Phenanthrene, 3-methyl	832-71-3	1.3E-10	1.1E-10	1.1E-10	1.4E-10	1.0E-10	8.5E-11	8.5E-11
N-Phenylbenzamide	93-98-1	8.3E-10	6.6E-10	7.0E-10	8.8E-10	6.2E-10	5.3E-10	5.3E-10
Phthalimide	85-41-6	5.4E-09	4.3E-09	4.5E-09	5.7E-09	4.0E-09	3.4E-09	3.5E-09
Pyrene	129-00-0	7.3E-09	5.8E-09	6.1E-09	7.7E-09	5.5E-09	4.6E-09	4.7E-09
Pyridine, 2-(4-methylphenyl)-	4467-06-5	2.7E-10	2.1E-10	2.2E-10	2.8E-10	2.0E-10	1.7E-10	1.7E-10
Triethylene glycol monobutyl ether	143-22-6	1.4E-09	1.1E-09	1.2E-09	1.5E-09	1.0E-09	8.9E-10	8.9E-10
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	1.9E-10	1.5E-10	1.6E-10	2.0E-10	1.4E-10	1.2E-10	1.2E-10

[a] ADD_{der} was calculated from the mean of 35 individual field average concentrations ($C_{der\text{-}crumb\ rubber}$) of a chemical detected in artificial sweat extracts of crumb rubber samples.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-243. Average Dermal Daily Dose[a] for Chronic Non-Cancer Hazard (ADD_{der}, milligrams per kilogram BW per day) of **Field-Related General Chemicals**[b]— Combined Gender **Coaches**

Chemical Name	CASRN	ADD_{der}			
		16<30 Years	30<40 Years	40<50 Years	50<70 Years
Acenaphthylene	208-96-8	4.2E-12	3.9E-12	3.9E-12	3.9E-12
Aniline	62-53-3	1.3E-10	1.2E-10	1.3E-10	1.3E-10
Anthracene	120-12-7	4.6E-11	4.3E-11	4.4E-11	4.4E-11
Anthracene, 2-methyl-	613-12-7	6.6E-11	6.2E-11	6.3E-11	6.3E-11
Anthracene, 9,10-diphenyl-	1499-10-1	9.1E-12	8.5E-12	8.6E-12	8.6E-12
Anthracene, 9-phenyl	602-55-1	2.3E-11	2.1E-11	2.1E-11	2.1E-11
Benz[a]anthracene	56-55-3	1.8E-10	1.7E-10	1.7E-10	1.7E-10
Benzene, n-butyl-	104-51-8	2.7E-13	2.6E-13	2.6E-13	2.6E-13
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	1.2E-08	1.2E-08	1.2E-08	1.2E-08
Benzo[b]fluoranthene	205-99-2	2.6E-10	2.4E-10	2.5E-10	2.5E-10
7H-Benzo[c]fluorene	205-12-9	2.3E-11	2.1E-11	2.1E-11	2.1E-11
Benzo[k]fluoranthene	207-08-9	1.1E-10	1.1E-10	1.1E-10	1.1E-10
Benzothiazole	95-16-9	1.5E-07	1.4E-07	1.4E-07	1.4E-07
Benzothiazole, 2-phenyl-	883-93-2	3.6E-09	3.4E-09	3.4E-09	3.4E-09
1,3-Benzothiazole-2-thiol	149-30-4	9.8E-10	9.2E-10	9.3E-10	9.3E-10
Benzothiazolone	934-34-9	4.1E-07	3.9E-07	3.9E-07	3.9E-07
Benzyl butyl phthalate	85-68-7	1.7E-09	1.6E-09	1.6E-09	1.6E-09
Cyclohexyl isothiocyanate	1122-82-3	6.2E-12	5.8E-12	5.9E-12	5.9E-12
Dibenz[a,h]anthracene	53-70-3	6.7E-11	6.3E-11	6.4E-11	6.4E-11
Dibenzothiophene	132-65-0	4.0E-11	3.8E-11	3.8E-11	3.8E-11
Diethyl Phthalate	84-66-2	3.1E-10	2.9E-10	2.9E-10	2.9E-10
Diisobutyl Phthalate	84-69-5	2.6E-10	2.4E-10	2.4E-10	2.4E-10
Diisooctylphthalate	27554-26-3	8.5E-09	7.9E-09	8.0E-09	8.0E-09
Di-n-octyl phthalate	117-84-0	1.8E-09	1.7E-09	1.7E-09	1.7E-09
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	1.6E-12	1.5E-12	1.5E-12	1.5E-12
3,5-Di-tert-butyl-4-hydroxybenzaldehyde	1620-98-0	7.9E-09	7.4E-09	7.4E-09	7.5E-09
Fluoranthene	206-44-0	1.4E-09	1.3E-09	1.3E-09	1.3E-09
Fluorene	86-73-7	5.9E-12	5.6E-12	5.6E-12	5.6E-12
Hexanoic Acid, 2-ethyl	149-57-5	6.8E-12	6.4E-12	6.4E-12	6.5E-12
1-Hydroxypyrene	5315-79-7	3.9E-10	3.7E-10	3.7E-10	3.7E-10
2-(Methylthio)benzothiazole	615-22-5	5.4E-09	5.1E-09	5.1E-09	5.1E-09
Naphthalene	91-20-3	8.7E-12	8.1E-12	8.2E-12	8.3E-12
Naphthalene, 1,2-dimethyl-	573-98-8	6.1E-13	5.7E-13	5.8E-13	5.8E-13
Naphthalene, 1,6-dimethyl-	575-43-9	6.5E-12	6.1E-12	6.1E-12	6.2E-12
Naphthalene, 1-methyl-	90-12-0	1.4E-12	1.3E-12	1.3E-12	1.3E-12
Naphthalene, 2-(bromomethyl)-	939-26-4	2.5E-10	2.4E-10	2.4E-10	2.4E-10

Chemical Name	CASRN	ADD_{der}			
		16<30 Years	30<40 Years	40<50 Years	50<70 Years
Naphthalene, 2,3-dimethyl-	581-40-8	7.5E-11	7.1E-11	7.1E-11	7.2E-11
Naphthalene, 2-methyl	91-57-6	1.3E-12	1.3E-12	1.3E-12	1.3E-12
1-Octadecene	112-88-9	4.4E-10	4.1E-10	4.1E-10	4.1E-10
Phenanthrene	85-01-8	3.0E-10	2.8E-10	2.8E-10	2.9E-10
Phenanthrene, 1-methyl	832-69-9	1.6E-10	1.5E-10	1.5E-10	1.5E-10
Phenanthrene, 2-methyl-	2531-84-2	1.9E-10	1.8E-10	1.8E-10	1.8E-10
Phenanthrene, 3-methyl	832-71-3	6.9E-11	6.5E-11	6.6E-11	6.6E-11
N-Phenylbenzamide	93-98-1	4.3E-10	4.1E-10	4.1E-10	4.1E-10
Phthalimide	85-41-6	2.8E-09	2.6E-09	2.7E-09	2.7E-09
Pyrene	129-00-0	3.8E-09	3.6E-09	3.6E-09	3.6E-09
Pyridine, 2-(4-methylphenyl)-	4467-06-5	1.4E-10	1.3E-10	1.3E-10	1.3E-10
Triethylene glycol monobutyl ether	143-22-6	7.3E-10	6.8E-10	6.9E-10	6.9E-10
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	9.8E-11	9.2E-11	9.3E-11	9.3E-11

[a] ADD_{der} was calculated from the mean of 35 individual field average concentrations ($C_{der\text{-}crumb\ rubber}$) of a chemical detected in artificial sweat extracts of crumb rubber samples.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-244. Average Dermal Daily Dose[a] for Chronic Non-Cancer Hazard (ADD_{der}, milligrams per kilogram BW per day) of **Field-Related General Chemicals**[b]— Combined Gender **Referees**

Chemical Name	CASRN	ADD_{der}			
		16<30 Years	30<40 Years	40<50 Years	50<70 Years
Acenaphthylene	208-96-8	1.7E-12	1.6E-12	1.6E-12	1.6E-12
Aniline	62-53-3	5.4E-11	5.0E-11	5.1E-11	5.1E-11
Anthracene	120-12-7	1.9E-11	1.7E-11	1.8E-11	1.8E-11
Anthracene, 2-methyl-	613-12-7	2.7E-11	2.5E-11	2.5E-11	2.5E-11
Anthracene, 9,10-diphenyl-	1499-10-1	3.7E-12	3.4E-12	3.5E-12	3.5E-12
Anthracene, 9-phenyl	602-55-1	9.1E-12	8.5E-12	8.6E-12	8.6E-12
Benz[a]anthracene	56-55-3	7.3E-11	6.9E-11	7.0E-11	7.0E-11
Benzene, n-butyl-	104-51-8	1.1E-13	1.0E-13	1.0E-13	1.0E-13
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	5.0E-09	4.7E-09	4.7E-09	4.7E-09
Benzo[b]fluoranthene	205-99-2	1.0E-10	9.8E-11	9.9E-11	9.9E-11
7H-Benzo[c]fluorene	205-12-9	9.1E-12	8.5E-12	8.6E-12	8.6E-12
Benzo[k]fluoranthene	207-08-9	4.6E-11	4.3E-11	4.3E-11	4.3E-11
Benzothiazole	95-16-9	5.9E-08	5.6E-08	5.6E-08	5.6E-08
Benzothiazole, 2-phenyl-	883-93-2	1.4E-09	1.4E-09	1.4E-09	1.4E-09
1,3-Benzothiazole-2-thiol	149-30-4	3.9E-10	3.7E-10	3.7E-10	3.7E-10

Chemical Name	CASRN	ADD_{der}			
		16<30 Years	30<40 Years	40<50 Years	50<70 Years
Benzothiazolone	934-34-9	1.7E-07	1.6E-07	1.6E-07	1.6E-07
Benzyl butyl phthalate	85-68-7	6.8E-10	6.3E-10	6.4E-10	6.4E-10
Cyclohexyl isothiocyanate	1122-82-3	2.5E-12	2.3E-12	2.4E-12	2.4E-12
Dibenz[a,h]anthracene	53-70-3	2.7E-11	2.5E-11	2.6E-11	2.6E-11
Dibenzothiophene	132-65-0	1.6E-11	1.5E-11	1.5E-11	1.5E-11
Diethyl Phthalate	84-66-2	1.2E-10	1.2E-10	1.2E-10	1.2E-10
Diisobutyl Phthalate	84-69-5	1.0E-10	9.7E-11	9.8E-11	9.8E-11
Diisooctylphthalate	27554-26-3	3.4E-09	3.2E-09	3.2E-09	3.2E-09
Di-n-octyl phthalate	117-84-0	7.2E-10	6.8E-10	6.8E-10	6.9E-10
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	6.4E-13	6.0E-13	6.0E-13	6.0E-13
3,5-Di-tert-butyl-4-hydroxybenzaldehyde	1620-98-0	3.2E-09	3.0E-09	3.0E-09	3.0E-09
Fluoranthene	206-44-0	5.6E-10	5.3E-10	5.3E-10	5.4E-10
Fluorene	86-73-7	2.4E-12	2.2E-12	2.3E-12	2.3E-12
Hexanoic Acid, 2-ethyl	149-57-5	2.7E-12	2.6E-12	2.6E-12	2.6E-12
1-Hydroxypyrene	5315-79-7	1.6E-10	1.5E-10	1.5E-10	1.5E-10
2-(Methylthio)benzothiazole	615-22-5	2.2E-09	2.0E-09	2.1E-09	2.1E-09
Naphthalene	91-20-3	3.5E-12	3.3E-12	3.3E-12	3.3E-12
Naphthalene, 1,2-dimethyl-	573-98-8	2.5E-13	2.3E-13	2.3E-13	2.3E-13
Naphthalene, 1,6-dimethyl-	575-43-9	2.6E-12	2.4E-12	2.5E-12	2.5E-12
Naphthalene, 1-methyl-	90-12-0	5.5E-13	5.2E-13	5.2E-13	5.3E-13
Naphthalene, 2-(bromomethyl)-	939-26-4	1.0E-10	9.6E-11	9.7E-11	9.7E-11
Naphthalene, 2,3-dimethyl-	581-40-8	3.0E-11	2.8E-11	2.9E-11	2.9E-11
Naphthalene, 2-methyl	91-57-6	5.4E-13	5.0E-13	5.1E-13	5.1E-13
1-Octadecene	112-88-9	1.8E-10	1.6E-10	1.7E-10	1.7E-10
Phenanthrene	85-01-8	1.2E-10	1.1E-10	1.1E-10	1.1E-10
Phenanthrene, 1-methyl	832-69-9	6.3E-11	5.9E-11	6.0E-11	6.0E-11
Phenanthrene, 2-methyl-	2531-84-2	7.7E-11	7.2E-11	7.3E-11	7.3E-11
Phenanthrene, 3-methyl	832-71-3	2.8E-11	2.6E-11	2.6E-11	2.6E-11
N-Phenylbenzamide	93-98-1	1.7E-10	1.6E-10	1.7E-10	1.7E-10
Phthalimide	85-41-6	1.1E-09	1.1E-09	1.1E-09	1.1E-09
Pyrene	129-00-0	1.5E-09	1.4E-09	1.4E-09	1.4E-09
Pyridine, 2-(4-methylphenyl)-	4467-06-5	5.6E-11	5.3E-11	5.3E-11	5.3E-11
Triethylene glycol monobutyl ether	143-22-6	2.9E-10	2.7E-10	2.8E-10	2.8E-10
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	3.9E-11	3.7E-11	3.7E-11	3.7E-11

[a] ADD_{der} was calculated from the mean of 35 individual field average concentrations ($C_{der\text{-}crumb\ rubber}$) of a chemical detected in artificial sweat extracts of crumb rubber samples.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-245. Average Dermal Daily Dose[a] for Chronic Non-Cancer Hazard (ADD_{der}, milligrams per kilogram BW per day) of **Field-Related General Chemicals**[b]— Combined Gender **Spectators**

Chemical Name	CASRN	ADD_{der}								
		Third Trimester Fetus	0<2 Years	2<6 Years	6<11 Years	11<16 Years	16<30 Years	30<40 Years	40<50 Years	50<70 Years
Acenaphthylene	208-96-8	2.4E-12	1.3E-11	9.3E-12	8.4E-12	7.2E-12	3.2E-12	2.7E-12	2.8E-12	2.6E-12
Aniline	62-53-3	7.6E-11	4.1E-10	3.0E-10	2.7E-10	2.3E-10	1.0E-10	8.7E-11	8.8E-11	8.3E-11
Anthracene	120-12-7	2.6E-11	1.4E-10	1.0E-10	9.3E-11	8.0E-11	3.5E-11	3.0E-11	3.1E-11	2.9E-11
Anthracene, 2-methyl-	613-12-7	3.8E-11	2.0E-10	1.5E-10	1.3E-10	1.2E-10	5.0E-11	4.4E-11	4.4E-11	4.1E-11
Anthracene, 9,10-diphenyl-	1499-10-1	5.1E-12	2.8E-11	2.0E-11	1.8E-11	1.6E-11	6.9E-12	6.0E-12	6.0E-12	5.7E-12
Anthracene, 9-phenyl	602-55-1	1.3E-11	6.9E-11	5.0E-11	4.6E-11	3.9E-11	1.7E-11	1.5E-11	1.5E-11	1.4E-11
Benz[a]anthracene	56-55-3	1.0E-10	5.6E-10	4.1E-10	3.7E-10	3.2E-10	1.4E-10	1.2E-10	1.2E-10	1.1E-10
Benzene, n-butyl-	104-51-8	1.6E-13	8.3E-13	6.1E-13	5.6E-13	4.8E-13	2.1E-13	1.8E-13	1.8E-13	1.7E-13
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	7.0E-09	3.8E-08	2.8E-08	2.5E-08	2.1E-08	9.4E-09	8.1E-09	8.2E-09	7.7E-09
Benzo[b]fluoranthene	205-99-2	1.5E-10	7.9E-10	5.8E-10	5.3E-10	4.5E-10	2.0E-10	1.7E-10	1.7E-10	1.6E-10
7H-Benzo[c]fluorene	205-12-9	1.3E-11	6.9E-11	5.1E-11	4.6E-11	3.9E-11	1.7E-11	1.5E-11	1.5E-11	1.4E-11
Benzo[k]fluoranthene	207-08-9	6.4E-11	3.4E-10	2.5E-10	2.3E-10	2.0E-10	8.6E-11	7.4E-11	7.5E-11	7.1E-11
Benzothiazole	95-16-9	8.4E-08	4.5E-07	3.3E-07	3.0E-07	2.6E-07	1.1E-07	9.7E-08	9.8E-08	9.2E-08
Benzothiazole, 2-phenyl-	883-93-2	2.0E-09	1.1E-08	8.0E-09	7.3E-09	6.2E-09	2.7E-09	2.4E-09	2.4E-09	2.2E-09
1,3-Benzothiazole-2-thiol	149-30-4	5.6E-10	3.0E-09	2.2E-09	2.0E-09	1.7E-09	7.4E-10	6.4E-10	6.5E-10	6.1E-10
Benzothiazolone	934-34-9	2.3E-07	1.3E-06	9.3E-07	8.4E-07	7.2E-07	3.1E-07	2.7E-07	2.7E-07	2.6E-07
Benzyl butyl phthalate	85-68-7	9.5E-10	5.1E-09	3.8E-09	3.4E-09	2.9E-09	1.3E-09	1.1E-09	1.1E-09	1.1E-09
Cyclohexyl isothiocyanate	1122-82-3	3.5E-12	1.9E-11	1.4E-11	1.3E-11	1.1E-11	4.7E-12	4.1E-12	4.1E-12	3.9E-12
Dibenz[a,h]anthracene	53-70-3	3.8E-11	2.0E-10	1.5E-10	1.4E-10	1.2E-10	5.1E-11	4.4E-11	4.5E-11	4.2E-11
Dibenzothiophene	132-65-0	2.3E-11	1.2E-10	9.0E-11	8.2E-11	7.0E-11	3.1E-11	2.7E-11	2.7E-11	2.5E-11
Diethyl Phthalate	84-66-2	1.7E-10	9.3E-10	6.9E-10	6.2E-10	5.3E-10	2.3E-10	2.0E-10	2.0E-10	1.9E-10
Diisobutyl Phthalate	84-69-5	1.5E-10	7.8E-10	5.7E-10	5.2E-10	4.5E-10	2.0E-10	1.7E-10	1.7E-10	1.6E-10
Diisooctylphthalate	27554-26-3	4.8E-09	2.6E-08	1.9E-08	1.7E-08	1.5E-08	6.4E-09	5.6E-09	5.6E-09	5.3E-09
Di-n-octyl phthalate	117-84-0	1.0E-09	5.5E-09	4.0E-09	3.6E-09	3.1E-09	1.4E-09	1.2E-09	1.2E-09	1.1E-09
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	9.0E-13	4.8E-12	3.5E-12	3.2E-12	2.7E-12	1.2E-12	1.0E-12	1.0E-12	9.9E-13
3,5-Di-tert-butyl-4-hydroxybenzaldehyde	1620-98-0	4.5E-09	2.4E-08	1.8E-08	1.6E-08	1.4E-08	6.0E-09	5.2E-09	5.2E-09	4.9E-09
Fluoranthene	206-44-0	8.0E-10	4.3E-09	3.1E-09	2.8E-09	2.4E-09	1.1E-09	9.2E-10	9.3E-10	8.8E-10
Fluorene	86-73-7	3.4E-12	1.8E-11	1.3E-11	1.2E-11	1.0E-11	4.5E-12	3.9E-12	3.9E-12	3.7E-12
Hexanoic Acid, 2-ethyl	149-57-5	3.9E-12	2.1E-11	1.5E-11	1.4E-11	1.2E-11	5.2E-12	4.5E-12	4.5E-12	4.2E-12
1-Hydroxypyrene	5315-79-7	2.2E-10	1.2E-09	8.8E-10	8.0E-10	6.9E-10	3.0E-10	2.6E-10	2.6E-10	2.5E-10
2-(Methylthio)benzothiazole	615-22-5	3.1E-09	1.6E-08	1.2E-08	1.1E-08	9.4E-09	4.1E-09	3.6E-09	3.6E-09	3.4E-09
Naphthalene	91-20-3	4.9E-12	2.6E-11	1.9E-11	1.8E-11	1.5E-11	6.6E-12	5.7E-12	5.8E-12	5.4E-12
Naphthalene, 1,2-dimethyl-	573-98-8	3.5E-13	1.9E-12	1.4E-12	1.2E-12	1.1E-12	4.7E-13	4.0E-13	4.1E-13	3.8E-13
Naphthalene, 1,6-dimethyl-	575-43-9	3.7E-12	2.0E-11	1.4E-11	1.3E-11	1.1E-11	4.9E-12	4.3E-12	4.3E-12	4.1E-12
Naphthalene, 1-methyl-	90-12-0	7.8E-13	4.2E-12	3.1E-12	2.8E-12	2.4E-12	1.0E-12	9.0E-13	9.1E-13	8.6E-13
Naphthalene, 2-(bromomethyl)-	939-26-4	1.4E-10	7.7E-10	5.7E-10	5.2E-10	4.4E-10	1.9E-10	1.7E-10	1.7E-10	1.6E-10

Chemical Name	CASRN	ADD_{der}								
		Third Trimester Fetus	0<2 Years	2<6 Years	6<11 Years	11<16 Years	16<30 Years	30<40 Years	40<50 Years	50<70 Years
Naphthalene, 2,3-dimethyl-	581-40-8	4.3E-11	2.3E-10	1.7E-10	1.5E-10	1.3E-10	5.7E-11	5.0E-11	5.0E-11	4.7E-11
Naphthalene, 2-methyl	91-57-6	7.6E-13	4.1E-12	3.0E-12	2.7E-12	2.3E-12	1.0E-12	8.8E-13	8.9E-13	8.3E-13
1-Octadecene	112-88-9	2.5E-10	1.3E-09	9.7E-10	8.8E-10	7.6E-10	3.3E-10	2.9E-10	2.9E-10	2.7E-10
Phenanthrene	85-01-8	1.7E-10	9.1E-10	6.7E-10	6.1E-10	5.2E-10	2.3E-10	2.0E-10	2.0E-10	1.9E-10
Phenanthrene, 1-methyl	832-69-9	8.9E-11	4.8E-10	3.5E-10	3.2E-10	2.7E-10	1.2E-10	1.0E-10	1.0E-10	9.8E-11
Phenanthrene, 2-methyl-	2531-84-2	1.1E-10	5.8E-10	4.3E-10	3.9E-10	3.3E-10	1.4E-10	1.2E-10	1.3E-10	1.2E-10
Phenanthrene, 3-methyl	832-71-3	3.9E-11	2.1E-10	1.6E-10	1.4E-10	1.2E-10	5.3E-11	4.5E-11	4.6E-11	4.3E-11
N-Phenylbenzamide	93-98-1	2.5E-10	1.3E-09	9.7E-10	8.8E-10	7.5E-10	3.3E-10	2.8E-10	2.9E-10	2.7E-10
Phthalimide	85-41-6	1.6E-09	8.6E-09	6.3E-09	5.7E-09	4.9E-09	2.1E-09	1.9E-09	1.9E-09	1.8E-09
Pyrene	129-00-0	2.2E-09	1.2E-08	8.5E-09	7.7E-09	6.6E-09	2.9E-09	2.5E-09	2.5E-09	2.4E-09
Pyridine, 2-(4-methylphenyl)-	4467-06-5	7.9E-11	4.3E-10	3.1E-10	2.8E-10	2.4E-10	1.1E-10	9.2E-11	9.3E-11	8.7E-11
Triethylene glycol monobutyl ether	143-22-6	4.1E-10	2.2E-09	1.6E-09	1.5E-09	1.3E-09	5.5E-10	4.8E-10	4.8E-10	4.5E-10
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	5.5E-11	3.0E-10	2.2E-10	2.0E-10	1.7E-10	7.4E-11	6.4E-11	6.5E-11	6.1E-11

[a] ADD_{der} was calculated from the mean of 35 individual field average concentrations ($C_{der\text{-}crumb\ rubber}$) of a chemical detected in artificial sweat extracts of crumb rubber samples.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

INDIVIDUAL FIELD ASSESSMENT (Table F-246 to Table F-269)

Table F-246. Field-Specific Average Dermal Daily Dose[a] for Chronic Non-Cancer Hazard ($ADD_{der\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related General Chemicals**[b]—Combined Gender **Athletes 2<6 Years**

Chemical	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Acenaphthylene	208-96-8	10	0	8.0E-12	1.4E-11	0	3.3E-11	5.0E-11
Aniline	62-53-3	4	0	2.6E-10	8.0E-10	0	2.0E-09	3.8E-09
Anthracene	120-12-7	20	0	8.9E-11	1.2E-10	6.1E-11	2.2E-10	5.9E-10
Anthracene, 2-methyl-	613-12-7	35	3.1E-11	1.3E-10	1.0E-10	8.4E-11	2.9E-10	5.0E-10
Anthracene, 9,10-diphenyl-	1499-10-1	5	0	1.7E-11	4.9E-11	0	1.1E-10	2.4E-10
Anthracene, 9-phenyl	602-55-1	9	0	4.3E-11	9.8E-11	0	2.4E-10	4.3E-10
Benz[a]anthracene	56-55-3	31	0	3.5E-10	4.1E-10	1.9E-10	9.9E-10	1.9E-09
Benzene, n-butyl-	104-51-8	1	0	5.3E-13	3.1E-12	0	0	1.8E-11
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	32	0	2.4E-08	3.8E-08	9.9E-09	7.3E-08	2.0E-07
Benzo[b]fluoranthene	205-99-2	34	0	5.0E-10	4.4E-10	3.9E-10	1.2E-09	1.9E-09
7H-Benzo[c]fluorene	205-12-9	26	0	4.4E-11	5.5E-11	2.2E-11	1.4E-10	2.3E-10
Benzo[k]fluoranthene	207-08-9	29	0	2.2E-10	2.3E-10	1.3E-10	7.1E-10	8.8E-10

Chemical	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Benzothiazole	95-16-9	35	6.5E-08	2.8E-07	1.5E-07	2.4E-07	5.6E-07	6.4E-07
Benzothiazole, 2-phenyl-	883-93-2	35	2.0E-09	6.9E-09	5.4E-09	4.9E-09	1.9E-08	2.7E-08
1,3-Benzothiazole-2-thiol	149-30-4	1	0	1.9E-09	1.1E-08	0	0	6.6E-08
Benzothiazolone	934-34-9	35	1.7E-07	8.0E-07	2.5E-07	9.0E-07	1.1E-06	1.1E-06
Benzyl butyl phthalate	85-68-7	35	2.2E-10	3.2E-09	2.3E-09	2.7E-09	8.0E-09	9.2E-09
Cyclohexyl isothiocyanate	1122-82-3	1	0	1.2E-11	7.1E-11	0	0	4.2E-10
Dibenz[a,h]anthracene	53-70-3	14	0	1.3E-10	2.4E-10	0	6.3E-10	9.9E-10
Dibenzothiophene	132-65-0	20	0	7.8E-11	9.6E-11	6.5E-11	2.1E-10	4.6E-10
Diethyl Phthalate	84-66-2	5	0	5.9E-10	1.8E-09	0	3.3E-09	8.9E-09
Diisobutyl Phthalate	84-69-5	28	0	4.9E-10	8.3E-10	3.3E-10	1.3E-09	4.8E-09
Diisooctylphthalate	27554-26-3	35	1.4E-10	1.6E-08	1.1E-08	1.4E-08	4.0E-08	4.7E-08
Di-n-octyl phthalate	117-84-0	33	0	3.5E-09	4.9E-09	1.9E-09	1.2E-08	2.3E-08
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	4	0	3.0E-12	9.0E-12	0	2.4E-11	4.0E-11
3,5-Di-tert-butyl-4-hydroxybenzaldehyde	1620-98-0	25	0	1.5E-08	3.9E-08	3.5E-09	4.1E-08	2.3E-07
Fluoranthene	206-44-0	35	4.4E-10	2.7E-09	2.1E-09	1.9E-09	7.0E-09	7.4E-09
Fluorene	86-73-7	6	0	1.1E-11	3.5E-11	0	4.9E-11	2.0E-10
Hexanoic Acid, 2-ethyl	149-57-5	1	0	1.3E-11	7.7E-11	0	0	4.6E-10
1-Hydroxypyrene	5315-79-7	1	0	7.6E-10	4.5E-09	0	0	2.7E-08
2-(Methylthio)benzothiazole	615-22-5	9	0	1.0E-08	2.3E-08	0	4.8E-08	1.0E-07
Naphthalene	91-20-3	2	0	1.7E-11	6.9E-11	0	8.4E-11	3.0E-10
Naphthalene, 1,2-dimethyl-	573-98-8	1	0	1.2E-12	7.0E-12	0	0	4.1E-11
Naphthalene, 1,6-dimethyl-	575-43-9	6	0	1.2E-11	3.0E-11	0	9.0E-11	9.2E-11
Naphthalene, 1-methyl-	90-12-0	1	0	2.6E-12	1.6E-11	0	0	9.3E-11
Naphthalene, 2-(bromomethyl)-	939-26-4	33	0	4.9E-10	3.9E-10	3.0E-10	1.2E-09	1.5E-09
Naphthalene, 2,3-dimethyl-	581-40-8	33	0	1.5E-10	1.3E-10	8.7E-11	4.2E-10	5.8E-10
Naphthalene, 2-methyl	91-57-6	1	0	2.6E-12	1.5E-11	0	0	9.0E-11
1-Octadecene	112-88-9	27	0	8.4E-10	2.3E-09	2.3E-10	1.5E-09	1.4E-08
Phenanthrene	85-01-8	29	0	5.8E-10	7.8E-10	2.8E-10	1.9E-09	3.6E-09
Phenanthrene, 1-methyl	832-69-9	35	5.6E-11	3.0E-10	2.3E-10	2.4E-10	7.3E-10	9.2E-10
Phenanthrene, 2-methyl-	2531-84-2	34	0	3.7E-10	3.4E-10	2.8E-10	1.0E-09	1.4E-09
Phenanthrene, 3-methyl	832-71-3	3	0	1.3E-10	5.0E-10	0	9.5E-10	2.7E-09
N-Phenylbenzamide	93-98-1	8	0	8.3E-10	1.7E-09	0	4.0E-09	6.0E-09
Phthalimide	85-41-6	26	0	5.4E-09	1.3E-08	7.4E-11	3.1E-08	5.4E-08

Chemical	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Pyrene	129-00-0	35	1.3E-09	7.3E-09	4.7E-09	6.4E-09	1.7E-08	1.9E-08
Pyridine, 2-(4-methylphenyl)-	4467-06-5	14	0	2.7E-10	5.1E-10	0	1.1E-09	2.3E-09
Triethylene glycol monobutyl ether	143-22-6	7	0	1.4E-09	3.4E-09	0	8.8E-09	1.5E-08
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	32	0	1.9E-10	2.3E-10	6.7E-11	5.6E-10	9.0E-10

[a] 35 field-specific $ADD_{der\text{-}field}$ are included in the table. $ADD_{der\text{-}field}$ was calculated from field-specific average concentrations ($C_{der\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial sweat extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-247. Field-Specific Average Dermal Daily Dose[a] for Chronic Non-Cancer Hazard ($ADD_{der\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related General Chemicals**[b]—Combined Gender **Athletes 6<11 Years**

Chemical	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Acenaphthylene	208-96-8	10	0	6.3E-12	1.1E-11	0	2.6E-11	3.9E-11
Aniline	62-53-3	4	0	2.0E-10	6.3E-10	0	1.6E-09	3.0E-09
Anthracene	120-12-7	20	0	7.0E-11	9.2E-11	4.8E-11	1.7E-10	4.7E-10
Anthracene, 2-methyl-	613-12-7	35	2.4E-11	1.0E-10	8.2E-11	6.7E-11	2.3E-10	4.0E-10
Anthracene, 9,10-diphenyl-	1499-10-1	5	0	1.4E-11	3.9E-11	0	8.4E-11	1.9E-10
Anthracene, 9-phenyl	602-55-1	9	0	3.4E-11	7.8E-11	0	1.9E-10	3.4E-10
Benz[a]anthracene	56-55-3	31	0	2.8E-10	3.2E-10	1.5E-10	7.8E-10	1.5E-09
Benzene, n-butyl-	104-51-8	1	0	4.2E-13	2.5E-12	0	0	1.5E-11
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	32	0	1.9E-08	3.0E-08	7.8E-09	5.8E-08	1.6E-07
Benzo[b]fluoranthene	205-99-2	34	0	3.9E-10	3.5E-10	3.1E-10	9.9E-10	1.5E-09
7H-Benzo[c]fluorene	205-12-9	26	0	3.4E-11	4.3E-11	1.8E-11	1.1E-10	1.8E-10
Benzo[k]fluoranthene	207-08-9	29	0	1.7E-10	1.8E-10	1.0E-10	5.6E-10	6.9E-10
Benzothiazole	95-16-9	35	5.2E-08	2.2E-07	1.2E-07	1.9E-07	4.4E-07	5.0E-07
Benzothiazole, 2-phenyl-	883-93-2	35	1.6E-09	5.5E-09	4.3E-09	3.9E-09	1.5E-08	2.1E-08
1,3-Benzothiazole-2-thiol	149-30-4	1	0	1.5E-09	8.8E-09	0	0	5.2E-08
Benzothiazolone	934-34-9	35	1.4E-07	6.3E-07	2.0E-07	7.1E-07	8.8E-07	9.0E-07
Benzyl butyl phthalate	85-68-7	35	1.7E-10	2.6E-09	1.8E-09	2.2E-09	6.4E-09	7.3E-09
Cyclohexyl isothiocyanate	1122-82-3	1	0	9.5E-12	5.6E-11	0	0	3.3E-10
Dibenz[a,h]anthracene	53-70-3	14	0	1.0E-10	1.9E-10	0	5.0E-10	7.8E-10

Chemical	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Dibenzothiophene	132-65-0	20	0	6.1E-11	7.6E-11	5.1E-11	1.7E-10	3.6E-10
Diethyl Phthalate	84-66-2	5	0	4.7E-10	1.4E-09	0	2.6E-09	7.0E-09
Diisobutyl Phthalate	84-69-5	28	0	3.9E-10	6.6E-10	2.6E-10	1.0E-09	3.8E-09
Diisooctylphthalate	27554-26-3	35	1.1E-10	1.3E-08	8.9E-09	1.1E-08	3.2E-08	3.7E-08
Di-n-octyl phthalate	117-84-0	33	0	2.7E-09	3.9E-09	1.5E-09	9.4E-09	1.9E-08
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	4	0	2.4E-12	7.1E-12	0	1.9E-11	3.1E-11
3,5-Di-tert-butyl-4-hydroxybenzaldehyde	1620-98-0	25	0	1.2E-08	3.1E-08	2.8E-09	3.2E-08	1.8E-07
Fluoranthene	206-44-0	35	3.5E-10	2.1E-09	1.7E-09	1.5E-09	5.5E-09	5.9E-09
Fluorene	86-73-7	6	0	9.0E-12	2.8E-11	0	3.8E-11	1.5E-10
Hexanoic Acid, 2-ethyl	149-57-5	1	0	1.0E-11	6.1E-11	0	0	3.6E-10
1-Hydroxypyrene	5315-79-7	1	0	6.0E-10	3.6E-09	0	0	2.1E-08
2-(Methylthio)benzothiazole	615-22-5	9	0	8.2E-09	1.8E-08	0	3.8E-08	8.3E-08
Naphthalene	91-20-3	2	0	1.3E-11	5.5E-11	0	6.7E-11	2.4E-10
Naphthalene, 1,2-dimethyl-	573-98-8	1	0	9.3E-13	5.5E-12	0	0	3.3E-11
Naphthalene, 1,6-dimethyl-	575-43-9	6	0	9.9E-12	2.3E-11	0	7.1E-11	7.3E-11
Naphthalene, 1-methyl-	90-12-0	1	0	2.1E-12	1.2E-11	0	0	7.3E-11
Naphthalene, 2-(bromomethyl)-	939-26-4	33	0	3.9E-10	3.1E-10	2.4E-10	9.2E-10	1.2E-09
Naphthalene, 2,3-dimethyl-	581-40-8	33	0	1.1E-10	1.0E-10	6.8E-11	3.3E-10	4.6E-10
Naphthalene, 2-methyl	91-57-6	1	0	2.0E-12	1.2E-11	0	0	7.1E-11
1-Octadecene	112-88-9	27	0	6.6E-10	1.8E-09	1.8E-10	1.2E-09	1.1E-08
Phenanthrene	85-01-8	29	0	4.6E-10	6.2E-10	2.2E-10	1.5E-09	2.9E-09
Phenanthrene, 1-methyl	832-69-9	35	4.5E-11	2.4E-10	1.8E-10	1.9E-10	5.8E-10	7.3E-10
Phenanthrene, 2-methyl-	2531-84-2	34	0	2.9E-10	2.7E-10	2.2E-10	8.1E-10	1.1E-09
Phenanthrene, 3-methyl	832-71-3	3	0	1.1E-10	4.0E-10	0	7.5E-10	2.1E-09
N-Phenylbenzamide	93-98-1	8	0	6.6E-10	1.3E-09	0	3.2E-09	4.8E-09
Phthalimide	85-41-6	26	0	4.3E-09	9.9E-09	5.8E-11	2.4E-08	4.3E-08
Pyrene	129-00-0	35	1.1E-09	5.8E-09	3.7E-09	5.0E-09	1.4E-08	1.5E-08
Pyridine, 2-(4-methylphenyl)-	4467-06-5	14	0	2.1E-10	4.1E-10	0	9.0E-10	1.8E-09
Triethylene glycol monobutyl ether	143-22-6	7	0	1.1E-09	2.7E-09	0	7.0E-09	1.2E-08
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	32	0	1.5E-10	1.8E-10	5.3E-11	4.4E-10	7.2E-10

[a] 35 field-specific $ADD_{der\text{-}field}$ are included in the table. $ADD_{der\text{-}field}$ was calculated from field-specific average concentrations ($C_{der\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial sweat extracts of crumb rubber samples from an individual field.

[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-248. Field-Specific Average Dermal Daily Dose[a] for Chronic Non-Cancer Hazard ($ADD_{der\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related General Chemicals**[b]—Combined Gender **Athletes 11<16 Years**

Chemical	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Acenaphthylene	208-96-8	10	0	6.7E-12	1.1E-11	0	2.7E-11	4.1E-11
Aniline	62-53-3	4	0	2.1E-10	6.6E-10	0	1.6E-09	3.2E-09
Anthracene	120-12-7	20	0	7.4E-11	9.7E-11	5.0E-11	1.8E-10	4.9E-10
Anthracene, 2-methyl-	613-12-7	35	2.6E-11	1.1E-10	8.7E-11	7.0E-11	2.5E-10	4.2E-10
Anthracene, 9,10-diphenyl-	1499-10-1	5	0	1.5E-11	4.1E-11	0	8.9E-11	2.0E-10
Anthracene, 9-phenyl	602-55-1	9	0	3.6E-11	8.2E-11	0	2.0E-10	3.6E-10
Benz[a]anthracene	56-55-3	31	0	2.9E-10	3.4E-10	1.5E-10	8.2E-10	1.6E-09
Benzene, n-butyl-	104-51-8	1	0	4.4E-13	2.6E-12	0	0	1.5E-11
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	32	0	2.0E-08	3.2E-08	8.2E-09	6.1E-08	1.7E-07
Benzo[b]fluoranthene	205-99-2	34	0	4.2E-10	3.7E-10	3.3E-10	1.0E-09	1.6E-09
7H-Benzo[c]fluorene	205-12-9	26	0	3.6E-11	4.6E-11	1.9E-11	1.2E-10	1.9E-10
Benzo[k]fluoranthene	207-08-9	29	0	1.8E-10	1.9E-10	1.1E-10	5.9E-10	7.3E-10
Benzothiazole	95-16-9	35	5.4E-08	2.4E-07	1.2E-07	2.0E-07	4.6E-07	5.3E-07
Benzothiazole, 2-phenyl-	883-93-2	35	1.7E-09	5.8E-09	4.5E-09	4.1E-09	1.5E-08	2.3E-08
1,3-Benzothiazole-2-thiol	149-30-4	1	0	1.6E-09	9.3E-09	0	0	5.5E-08
Benzothiazolone	934-34-9	35	1.4E-07	6.6E-07	2.1E-07	7.5E-07	9.2E-07	9.5E-07
Benzyl butyl phthalate	85-68-7	35	1.8E-10	2.7E-09	1.9E-09	2.3E-09	6.7E-09	7.7E-09
Cyclohexyl isothiocyanate	1122-82-3	1	0	1.0E-11	5.9E-11	0	0	3.5E-10
Dibenz[a,h]anthracene	53-70-3	14	0	1.1E-10	2.0E-10	0	5.3E-10	8.2E-10
Dibenzothiophene	132-65-0	20	0	6.5E-11	8.0E-11	5.4E-11	1.8E-10	3.8E-10
Diethyl Phthalate	84-66-2	5	0	4.9E-10	1.5E-09	0	2.7E-09	7.4E-09
Diisobutyl Phthalate	84-69-5	28	0	4.1E-10	6.9E-10	2.8E-10	1.1E-09	4.0E-09
Diisooctylphthalate	27554-26-3	35	1.2E-10	1.4E-08	9.4E-09	1.2E-08	3.4E-08	3.9E-08
Di-n-octyl phthalate	117-84-0	33	0	2.9E-09	4.1E-09	1.6E-09	9.9E-09	2.0E-08
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	4	0	2.5E-12	7.5E-12	0	2.0E-11	3.3E-11
3,5-Di-tert-butyl-4-hydroxybenzaldehyde	1620-98-0	25	0	1.3E-08	3.3E-08	2.9E-09	3.4E-08	1.9E-07
Fluoranthene	206-44-0	35	3.7E-10	2.3E-09	1.8E-09	1.6E-09	5.8E-09	6.2E-09
Fluorene	86-73-7	6	0	9.5E-12	3.0E-11	0	4.1E-11	1.6E-10

Chemical	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Hexanoic Acid, 2-ethyl	149-57-5	1	0	1.1E-11	6.5E-11	0	0	3.8E-10
1-Hydroxypyrene	5315-79-7	1	0	6.3E-10	3.7E-09	0	0	2.2E-08
2-(Methylthio)benzothiazole	615-22-5	9	0	8.7E-09	1.9E-08	0	4.0E-08	8.7E-08
Naphthalene	91-20-3	2	0	1.4E-11	5.8E-11	0	7.0E-11	2.5E-10
Naphthalene, 1,2-dimethyl-	573-98-8	1	0	9.8E-13	5.8E-12	0	0	3.4E-11
Naphthalene, 1,6-dimethyl-	575-43-9	6	0	1.0E-11	2.5E-11	0	7.5E-11	7.7E-11
Naphthalene, 1-methyl-	90-12-0	1	0	2.2E-12	1.3E-11	0	0	7.7E-11
Naphthalene, 2-(bromomethyl)-	939-26-4	33	0	4.1E-10	3.3E-10	2.5E-10	9.8E-10	1.3E-09
Naphthalene, 2,3-dimethyl-	581-40-8	33	0	1.2E-10	1.1E-10	7.2E-11	3.5E-10	4.9E-10
Naphthalene, 2-methyl	91-57-6	1	0	2.1E-12	1.3E-11	0	0	7.5E-11
1-Octadecene	112-88-9	27	0	7.0E-10	1.9E-09	1.9E-10	1.2E-09	1.2E-08
Phenanthrene	85-01-8	29	0	4.8E-10	6.5E-10	2.3E-10	1.6E-09	3.0E-09
Phenanthrene, 1-methyl	832-69-9	35	4.7E-11	2.5E-10	1.9E-10	2.0E-10	6.1E-10	7.7E-10
Phenanthrene, 2-methyl-	2531-84-2	34	0	3.1E-10	2.8E-10	2.3E-10	8.5E-10	1.1E-09
Phenanthrene, 3-methyl	832-71-3	3	0	1.1E-10	4.2E-10	0	7.9E-10	2.2E-09
N-Phenylbenzamide	93-98-1	8	0	7.0E-10	1.4E-09	0	3.3E-09	5.0E-09
Phthalimide	85-41-6	26	0	4.5E-09	1.0E-08	6.2E-11	2.6E-08	4.5E-08
Pyrene	129-00-0	35	1.1E-09	6.1E-09	4.0E-09	5.3E-09	1.4E-08	1.6E-08
Pyridine, 2-(4-methylphenyl)-	4467-06-5	14	0	2.2E-10	4.3E-10	0	9.5E-10	1.9E-09
Triethylene glycol monobutyl ether	143-22-6	7	0	1.2E-09	2.8E-09	0	7.3E-09	1.3E-08
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	32	0	1.6E-10	1.9E-10	5.6E-11	4.7E-10	7.5E-10

[a] 35 field-specific $ADD_{der\text{-}field}$ are included in the table. $ADD_{der\text{-}field}$ was calculated from field-specific average concentrations ($C_{der\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial sweat extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-249. Field-Specific Average Dermal Daily Dose[a] for Chronic Non-Cancer Hazard ($ADD_{der\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related General Chemicals**[b]—Combined Gender **Athletes 16<30 Years**

Chemical	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Acenaphthylene	208-96-8	10	0	8.4E-12	1.4E-11	0	3.5E-11	5.2E-11

Chemical	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	4	0	2.7E-10	8.4E-10	0	2.1E-09	4.0E-09
Anthracene	120-12-7	20	0	9.3E-11	1.2E-10	6.4E-11	2.3E-10	6.2E-10
Anthracene, 2-methyl-	613-12-7	35	3.2E-11	1.3E-10	1.1E-10	8.9E-11	3.1E-10	5.3E-10
Anthracene, 9,10-diphenyl-	1499-10-1	5	0	1.8E-11	5.2E-11	0	1.1E-10	2.5E-10
Anthracene, 9-phenyl	602-55-1	9	0	4.6E-11	1.0E-10	0	2.6E-10	4.6E-10
Benz[a]anthracene	56-55-3	31	0	3.7E-10	4.3E-10	2.0E-10	1.0E-09	2.0E-09
Benzene, n-butyl-	104-51-8	1	0	5.5E-13	3.3E-12	0	0	1.9E-11
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	32	0	2.5E-08	4.0E-08	1.0E-08	7.7E-08	2.2E-07
Benzo[b]fluoranthene	205-99-2	34	0	5.2E-10	4.6E-10	4.1E-10	1.3E-09	2.0E-09
7H-Benzo[c]fluorene	205-12-9	26	0	4.6E-11	5.8E-11	2.4E-11	1.5E-10	2.4E-10
Benzo[k]fluoranthene	207-08-9	29	0	2.3E-10	2.4E-10	1.4E-10	7.4E-10	9.2E-10
Benzothiazole	95-16-9	35	6.9E-08	3.0E-07	1.5E-07	2.5E-07	5.8E-07	6.7E-07
Benzothiazole, 2-phenyl-	883-93-2	35	2.1E-09	7.3E-09	5.7E-09	5.2E-09	2.0E-08	2.8E-08
1,3-Benzothiazole-2-thiol	149-30-4	1	0	2.0E-09	1.2E-08	0	0	6.9E-08
Benzothiazolone	934-34-9	35	1.8E-07	8.4E-07	2.7E-07	9.4E-07	1.2E-06	1.2E-06
Benzyl butyl phthalate	85-68-7	35	2.3E-10	3.4E-09	2.4E-09	2.9E-09	8.5E-09	9.7E-09
Cyclohexyl isothiocyanate	1122-82-3	1	0	1.3E-11	7.4E-11	0	0	4.4E-10
Dibenz[a,h]anthracene	53-70-3	14	0	1.4E-10	2.5E-10	0	6.6E-10	1.0E-09
Dibenzothiophene	132-65-0	20	0	8.2E-11	1.0E-10	6.9E-11	2.3E-10	4.9E-10
Diethyl Phthalate	84-66-2	5	0	6.2E-10	1.8E-09	0	3.4E-09	9.3E-09
Diisobutyl Phthalate	84-69-5	28	0	5.2E-10	8.8E-10	3.5E-10	1.4E-09	5.1E-09
Diisooctylphthalate	27554-26-3	35	1.5E-10	1.7E-08	1.2E-08	1.5E-08	4.2E-08	4.9E-08
Di-n-octyl phthalate	117-84-0	33	0	3.6E-09	5.1E-09	2.0E-09	1.3E-08	2.5E-08
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	4	0	3.2E-12	9.5E-12	0	2.5E-11	4.2E-11
3,5-Di-tert-butyl-4-hydroxybenzaldehyde	1620-98-0	25	0	1.6E-08	4.1E-08	3.7E-09	4.3E-08	2.4E-07
Fluoranthene	206-44-0	35	4.6E-10	2.8E-09	2.2E-09	2.0E-09	7.3E-09	7.8E-09
Fluorene	86-73-7	6	0	1.2E-11	3.7E-11	0	5.1E-11	2.1E-10
Hexanoic Acid, 2-ethyl	149-57-5	1	0	1.4E-11	8.1E-11	0	0	4.8E-10
1-Hydroxypyrene	5315-79-7	1	0	8.0E-10	4.7E-09	0	0	2.8E-08
2-(Methylthio)benzothiazole	615-22-5	9	0	1.1E-08	2.4E-08	0	5.1E-08	1.1E-07
Naphthalene	91-20-3	2	0	1.8E-11	7.3E-11	0	8.9E-11	3.2E-10
Naphthalene, 1,2-dimethyl-	573-98-8	1	0	1.2E-12	7.3E-12	0	0	4.3E-11

Chemical	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Naphthalene, 1,6-dimethyl-	575-43-9	6	0	1.3E-11	3.1E-11	0	9.4E-11	9.7E-11
Naphthalene, 1-methyl-	90-12-0	1	0	2.8E-12	1.6E-11	0	0	9.7E-11
Naphthalene, 2-(bromomethyl)-	939-26-4	33	0	5.2E-10	4.2E-10	3.2E-10	1.2E-09	1.6E-09
Naphthalene, 2,3-dimethyl-	581-40-8	33	0	1.5E-10	1.3E-10	9.1E-11	4.4E-10	6.1E-10
Naphthalene, 2-methyl	91-57-6	1	0	2.7E-12	1.6E-11	0	0	9.5E-11
1-Octadecene	112-88-9	27	0	8.8E-10	2.4E-09	2.4E-10	1.5E-09	1.5E-08
Phenanthrene	85-01-8	29	0	6.1E-10	8.2E-10	3.0E-10	2.0E-09	3.8E-09
Phenanthrene, 1-methyl	832-69-9	35	5.9E-11	3.2E-10	2.4E-10	2.5E-10	7.7E-10	9.7E-10
Phenanthrene, 2-methyl-	2531-84-2	34	0	3.9E-10	3.6E-10	2.9E-10	1.1E-09	1.4E-09
Phenanthrene, 3-methyl	832-71-3	3	0	1.4E-10	5.3E-10	0	1.0E-09	2.8E-09
N-Phenylbenzamide	93-98-1	8	0	8.8E-10	1.8E-09	0	4.2E-09	6.4E-09
Phthalimide	85-41-6	26	0	5.7E-09	1.3E-08	7.8E-11	3.2E-08	5.7E-08
Pyrene	129-00-0	35	1.4E-09	7.7E-09	5.0E-09	6.7E-09	1.8E-08	2.0E-08
Pyridine, 2-(4-methylphenyl)-	4467-06-5	14	0	2.8E-10	5.4E-10	0	1.2E-09	2.5E-09
Triethylene glycol monobutyl ether	143-22-6	7	0	1.5E-09	3.6E-09	0	9.3E-09	1.6E-08
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	32	0	2.0E-10	2.4E-10	7.0E-11	5.9E-10	9.5E-10

[a] 35 field-specific $ADD_{der\text{-}field}$ are included in the table. $ADD_{der\text{-}field}$ was calculated from field-specific average concentrations ($C_{der\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial sweat extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-250. Field-Specific Average Dermal Daily Dose[a] for Chronic Non-Cancer Hazard ($ADD_{der\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related General Chemicals**[b]—Combined Gender **Athletes 30<40 Years**

Chemical	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Acenaphthylene	208-96-8	10	0	6.0E-12	1.0E-11	0	2.5E-11	3.7E-11
Aniline	62-53-3	4	0	1.9E-10	5.9E-10	0	1.5E-09	2.8E-09
Anthracene	120-12-7	20	0	6.6E-11	8.7E-11	4.5E-11	1.6E-10	4.4E-10
Anthracene, 2-methyl-	613-12-7	35	2.3E-11	9.5E-11	7.8E-11	6.3E-11	2.2E-10	3.7E-10
Anthracene, 9,10-diphenyl-	1499-10-1	5	0	1.3E-11	3.7E-11	0	7.9E-11	1.8E-10
Anthracene, 9-phenyl	602-55-1	9	0	3.2E-11	7.3E-11	0	1.8E-10	3.2E-10
Benz[a]anthracene	56-55-3	31	0	2.6E-10	3.0E-10	1.4E-10	7.4E-10	1.4E-09

Chemical	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Benzene, n-butyl-	104-51-8	1	0	3.9E-13	2.3E-12	0	0	1.4E-11
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	32	0	1.8E-08	2.8E-08	7.4E-09	5.5E-08	1.5E-07
Benzo[b]fluoranthene	205-99-2	34	0	3.7E-10	3.3E-10	2.9E-10	9.3E-10	1.4E-09
7H-Benzo[c]fluorene	205-12-9	26	0	3.2E-11	4.1E-11	1.7E-11	1.0E-10	1.7E-10
Benzo[k]fluoranthene	207-08-9	29	0	1.6E-10	1.7E-10	9.9E-11	5.3E-10	6.6E-10
Benzothiazole	95-16-9	35	4.9E-08	2.1E-07	1.1E-07	1.8E-07	4.2E-07	4.8E-07
Benzothiazole, 2-phenyl-	883-93-2	35	1.5E-09	5.2E-09	4.0E-09	3.7E-09	1.4E-08	2.0E-08
1,3-Benzothiazole-2-thiol	149-30-4	1	0	1.4E-09	8.3E-09	0	0	4.9E-08
Benzothiazolone	934-34-9	35	1.3E-07	5.9E-07	1.9E-07	6.7E-07	8.3E-07	8.5E-07
Benzyl butyl phthalate	85-68-7	35	1.6E-10	2.4E-09	1.7E-09	2.0E-09	6.0E-09	6.9E-09
Cyclohexyl isothiocyanate	1122-82-3	1	0	8.9E-12	5.3E-11	0	0	3.1E-10
Dibenz[a,h]anthracene	53-70-3	14	0	9.7E-11	1.8E-10	0	4.7E-10	7.4E-10
Dibenzothiophene	132-65-0	20	0	5.8E-11	7.2E-11	4.9E-11	1.6E-10	3.4E-10
Diethyl Phthalate	84-66-2	5	0	4.4E-10	1.3E-09	0	2.4E-09	6.6E-09
Diisobutyl Phthalate	84-69-5	28	0	3.7E-10	6.2E-10	2.5E-10	9.7E-10	3.6E-09
Diisooctylphthalate	27554-26-3	35	1.0E-10	1.2E-08	8.4E-09	1.0E-08	3.0E-08	3.5E-08
Di-n-octyl phthalate	117-84-0	33	0	2.6E-09	3.6E-09	1.4E-09	8.9E-09	1.8E-08
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	4	0	2.3E-12	6.7E-12	0	1.8E-11	3.0E-11
3,5-Di-tert-butyl-4-hydroxybenzaldehyde	1620-98-0	25	0	1.1E-08	2.9E-08	2.6E-09	3.1E-08	1.7E-07
Fluoranthene	206-44-0	35	3.3E-10	2.0E-09	1.6E-09	1.4E-09	5.2E-09	5.5E-09
Fluorene	86-73-7	6	0	8.5E-12	2.6E-11	0	3.6E-11	1.5E-10
Hexanoic Acid, 2-ethyl	149-57-5	1	0	9.8E-12	5.8E-11	0	0	3.4E-10
1-Hydroxypyrene	5315-79-7	1	0	5.7E-10	3.4E-09	0	0	2.0E-08
2-(Methylthio)benzothiazole	615-22-5	9	0	7.8E-09	1.7E-08	0	3.6E-08	7.8E-08
Naphthalene	91-20-3	2	0	1.2E-11	5.1E-11	0	6.3E-11	2.3E-10
Naphthalene, 1,2-dimethyl-	573-98-8	1	0	8.8E-13	5.2E-12	0	0	3.1E-11
Naphthalene, 1,6-dimethyl-	575-43-9	6	0	9.3E-12	2.2E-11	0	6.7E-11	6.9E-11
Naphthalene, 1-methyl-	90-12-0	1	0	2.0E-12	1.2E-11	0	0	6.9E-11
Naphthalene, 2-(bromomethyl)-	939-26-4	33	0	3.7E-10	2.9E-10	2.3E-10	8.7E-10	1.1E-09
Naphthalene, 2,3-dimethyl-	581-40-8	33	0	1.1E-10	9.6E-11	6.5E-11	3.1E-10	4.4E-10
Naphthalene, 2-methyl	91-57-6	1	0	1.9E-12	1.1E-11	0	0	6.7E-11
1-Octadecene	112-88-9	27	0	6.3E-10	1.7E-09	1.7E-10	1.1E-09	1.0E-08

Chemical	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Phenanthrene	85-01-8	29	0	4.3E-10	5.8E-10	2.1E-10	1.4E-09	2.7E-09
Phenanthrene, 1-methyl	832-69-9	35	4.2E-11	2.3E-10	1.7E-10	1.8E-10	5.5E-10	6.9E-10
Phenanthrene, 2-methyl-	2531-84-2	34	0	2.7E-10	2.5E-10	2.1E-10	7.6E-10	1.0E-09
Phenanthrene, 3-methyl	832-71-3	3	0	1.0E-10	3.7E-10	0	7.1E-10	2.0E-09
N-Phenylbenzamide	93-98-1	8	0	6.2E-10	1.3E-09	0	3.0E-09	4.5E-09
Phthalimide	85-41-6	26	0	4.0E-09	9.3E-09	5.5E-11	2.3E-08	4.0E-08
Pyrene	129-00-0	35	1.0E-09	5.5E-09	3.5E-09	4.7E-09	1.3E-08	1.4E-08
Pyridine, 2-(4-methylphenyl)-	4467-06-5	14	0	2.0E-10	3.8E-10	0	8.5E-10	1.7E-09
Triethylene glycol monobutyl ether	143-22-6	7	0	1.0E-09	2.5E-09	0	6.6E-09	1.1E-08
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	32	0	1.4E-10	1.7E-10	5.0E-11	4.2E-10	6.8E-10

[a] 35 field-specific $ADD_{der\text{-}field}$ are included in the table. $ADD_{der\text{-}field}$ was calculated from field-specific average concentrations ($C_{der\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial sweat extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-251. Field-Specific Average Dermal Daily Dose[a] for Chronic Non-Cancer Hazard ($ADD_{der\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related General Chemicals**[b]—Combined Gender **Athletes 40<50 Years**

Chemical	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Acenaphthylene	208-96-8	10	0	5.1E-12	8.7E-12	0	2.1E-11	3.2E-11
Aniline	62-53-3	4	0	1.6E-10	5.0E-10	0	1.2E-09	2.4E-09
Anthracene	120-12-7	20	0	5.6E-11	7.4E-11	3.8E-11	1.4E-10	3.8E-10
Anthracene, 2-methyl-	613-12-7	35	1.9E-11	8.1E-11	6.6E-11	5.3E-11	1.9E-10	3.2E-10
Anthracene, 9,10-diphenyl-	1499-10-1	5	0	1.1E-11	3.1E-11	0	6.7E-11	1.5E-10
Anthracene, 9-phenyl	602-55-1	9	0	2.7E-11	6.2E-11	0	1.5E-10	2.7E-10
Benz[a]anthracene	56-55-3	31	0	2.2E-10	2.6E-10	1.2E-10	6.3E-10	1.2E-09
Benzene, n-butyl-	104-51-8	1	0	3.3E-13	2.0E-12	0	0	1.2E-11
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	32	0	1.5E-08	2.4E-08	6.3E-09	4.6E-08	1.3E-07
Benzo[b]fluoranthene	205-99-2	34	0	3.2E-10	2.8E-10	2.5E-10	7.9E-10	1.2E-09
7H-Benzo[c]fluorene	205-12-9	26	0	2.8E-11	3.5E-11	1.4E-11	8.8E-11	1.5E-10
Benzo[k]fluoranthene	207-08-9	29	0	1.4E-10	1.5E-10	8.4E-11	4.5E-10	5.6E-10
Benzothiazole	95-16-9	35	4.1E-08	1.8E-07	9.3E-08	1.5E-07	3.5E-07	4.0E-07

Chemical	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Benzothiazole, 2-phenyl-	883-93-2	35	1.3E-09	4.4E-09	3.4E-09	3.1E-09	1.2E-08	1.7E-08
1,3-Benzothiazole-2-thiol	149-30-4	1	0	1.2E-09	7.1E-09	0	0	4.2E-08
Benzothiazolone	934-34-9	35	1.1E-07	5.0E-07	1.6E-07	5.7E-07	7.0E-07	7.2E-07
Benzyl butyl phthalate	85-68-7	35	1.4E-10	2.1E-09	1.5E-09	1.7E-09	5.1E-09	5.8E-09
Cyclohexyl isothiocyanate	1122-82-3	1	0	7.6E-12	4.5E-11	0	0	2.7E-10
Dibenz[a,h]anthracene	53-70-3	14	0	8.2E-11	1.5E-10	0	4.0E-10	6.3E-10
Dibenzothiophene	132-65-0	20	0	4.9E-11	6.1E-11	4.1E-11	1.4E-10	2.9E-10
Diethyl Phthalate	84-66-2	5	0	3.7E-10	1.1E-09	0	2.1E-09	5.6E-09
Diisobutyl Phthalate	84-69-5	28	0	3.1E-10	5.3E-10	2.1E-10	8.2E-10	3.1E-09
Diisooctylphthalate	27554-26-3	35	8.8E-11	1.0E-08	7.2E-09	8.9E-09	2.6E-08	3.0E-08
Di-n-octyl phthalate	117-84-0	33	0	2.2E-09	3.1E-09	1.2E-09	7.5E-09	1.5E-08
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	4	0	1.9E-12	5.7E-12	0	1.5E-11	2.5E-11
3,5-Di-tert-butyl-4-hydroxybenzaldehyde	1620-98-0	25	0	9.6E-09	2.5E-08	2.2E-09	2.6E-08	1.4E-07
Fluoranthene	206-44-0	35	2.8E-10	1.7E-09	1.3E-09	1.2E-09	4.4E-09	4.7E-09
Fluorene	86-73-7	6	0	7.3E-12	2.2E-11	0	3.1E-11	1.2E-10
Hexanoic Acid, 2-ethyl	149-57-5	1	0	8.3E-12	4.9E-11	0	0	2.9E-10
1-Hydroxypyrene	5315-79-7	1	0	4.8E-10	2.8E-09	0	0	1.7E-08
2-(Methylthio)benzothiazole	615-22-5	9	0	6.6E-09	1.5E-08	0	3.1E-08	6.6E-08
Naphthalene	91-20-3	2	0	1.1E-11	4.4E-11	0	5.3E-11	1.9E-10
Naphthalene, 1,2-dimethyl-	573-98-8	1	0	7.5E-13	4.4E-12	0	0	2.6E-11
Naphthalene, 1,6-dimethyl-	575-43-9	6	0	7.9E-12	1.9E-11	0	5.7E-11	5.9E-11
Naphthalene, 1-methyl-	90-12-0	1	0	1.7E-12	9.9E-12	0	0	5.9E-11
Naphthalene, 2-(bromomethyl)-	939-26-4	33	0	3.1E-10	2.5E-10	1.9E-10	7.4E-10	9.8E-10
Naphthalene, 2,3-dimethyl-	581-40-8	33	0	9.2E-11	8.1E-11	5.5E-11	2.7E-10	3.7E-10
Naphthalene, 2-methyl	91-57-6	1	0	1.6E-12	9.6E-12	0	0	5.7E-11
1-Octadecene	112-88-9	27	0	5.3E-10	1.5E-09	1.5E-10	9.3E-10	8.8E-09
Phenanthrene	85-01-8	29	0	3.7E-10	5.0E-10	1.8E-10	1.2E-09	2.3E-09
Phenanthrene, 1-methyl	832-69-9	35	3.6E-11	1.9E-10	1.5E-10	1.5E-10	4.7E-10	5.9E-10
Phenanthrene, 2-methyl-	2531-84-2	34	0	2.3E-10	2.1E-10	1.8E-10	6.5E-10	8.7E-10
Phenanthrene, 3-methyl	832-71-3	3	0	8.5E-11	3.2E-10	0	6.0E-10	1.7E-09
N-Phenylbenzamide	93-98-1	8	0	5.3E-10	1.1E-09	0	2.5E-09	3.8E-09
Phthalimide	85-41-6	26	0	3.4E-09	7.9E-09	4.7E-11	2.0E-08	3.4E-08
Pyrene	129-00-0	35	8.5E-10	4.6E-09	3.0E-09	4.0E-09	1.1E-08	1.2E-08

Chemical	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Pyridine, 2-(4-methylphenyl)-	4467-06-5	14	0	1.7E-10	3.3E-10	0	7.2E-10	1.5E-09
Triethylene glycol monobutyl ether	143-22-6	7	0	8.9E-10	2.2E-09	0	5.6E-09	9.6E-09
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	32	0	1.2E-10	1.4E-10	4.2E-11	3.5E-10	5.7E-10

[a] 35 field-specific $ADD_{der\text{-}field}$ are included in the table. $ADD_{der\text{-}field}$ was calculated from field-specific average concentrations ($C_{der\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial sweat extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-252. Field-Specific Average Dermal Daily Dose[a] for Chronic Non-Cancer Hazard ($ADD_{der\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related General Chemicals**[b]—Combined Gender **Athletes 50<70 Years**

Chemical	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Acenaphthylene	208-96-8	10	0	5.1E-12	8.8E-12	0	2.1E-11	3.2E-11
Aniline	62-53-3	4	0	1.6E-10	5.1E-10	0	1.3E-09	2.4E-09
Anthracene	120-12-7	20	0	5.7E-11	7.4E-11	3.9E-11	1.4E-10	3.8E-10
Anthracene, 2-methyl-	613-12-7	35	2.0E-11	8.1E-11	6.6E-11	5.4E-11	1.9E-10	3.2E-10
Anthracene, 9,10-diphenyl-	1499-10-1	5	0	1.1E-11	3.1E-11	0	6.8E-11	1.5E-10
Anthracene, 9-phenyl	602-55-1	9	0	2.8E-11	6.3E-11	0	1.6E-10	2.8E-10
Benz[a]anthracene	56-55-3	31	0	2.2E-10	2.6E-10	1.2E-10	6.3E-10	1.2E-09
Benzene, n-butyl-	104-51-8	1	0	3.4E-13	2.0E-12	0	0	1.2E-11
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	32	0	1.5E-08	2.4E-08	6.3E-09	4.7E-08	1.3E-07
Benzo[b]fluoranthene	205-99-2	34	0	3.2E-10	2.8E-10	2.5E-10	8.0E-10	1.2E-09
7H-Benzo[c]fluorene	205-12-9	26	0	2.8E-11	3.5E-11	1.4E-11	8.9E-11	1.5E-10
Benzo[k]fluoranthene	207-08-9	29	0	1.4E-10	1.5E-10	8.4E-11	4.5E-10	5.6E-10
Benzothiazole	95-16-9	35	4.2E-08	1.8E-07	9.3E-08	1.5E-07	3.6E-07	4.1E-07
Benzothiazole, 2-phenyl-	883-93-2	35	1.3E-09	4.4E-09	3.5E-09	3.1E-09	1.2E-08	1.7E-08
1,3-Benzothiazole-2-thiol	149-30-4	1	0	1.2E-09	7.1E-09	0	0	4.2E-08
Benzothiazolone	934-34-9	35	1.1E-07	5.1E-07	1.6E-07	5.7E-07	7.1E-07	7.2E-07
Benzyl butyl phthalate	85-68-7	35	1.4E-10	2.1E-09	1.5E-09	1.7E-09	5.1E-09	5.9E-09
Cyclohexyl isothiocyanate	1122-82-3	1	0	7.6E-12	4.5E-11	0	0	2.7E-10
Dibenz[a,h]anthracene	53-70-3	14	0	8.3E-11	1.5E-10	0	4.0E-10	6.3E-10
Dibenzothiophene	132-65-0	20	0	5.0E-11	6.1E-11	4.2E-11	1.4E-10	2.9E-10

Chemical	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Diethyl Phthalate	84-66-2	5	0	3.8E-10	1.1E-09	0	2.1E-09	5.7E-09
Diisobutyl Phthalate	84-69-5	28	0	3.2E-10	5.3E-10	2.1E-10	8.3E-10	3.1E-09
Diisooctylphthalate	27554-26-3	35	8.9E-11	1.0E-08	7.2E-09	8.9E-09	2.6E-08	3.0E-08
Di-n-octyl phthalate	117-84-0	33	0	2.2E-09	3.1E-09	1.2E-09	7.6E-09	1.5E-08
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	4	0	1.9E-12	5.7E-12	0	1.5E-11	2.5E-11
3,5-Di-tert-butyl-4-hydroxybenzaldehyde	1620-98-0	25	0	9.6E-09	2.5E-08	2.2E-09	2.6E-08	1.4E-07
Fluoranthene	206-44-0	35	2.8E-10	1.7E-09	1.4E-09	1.2E-09	4.5E-09	4.7E-09
Fluorene	86-73-7	6	0	7.3E-12	2.3E-11	0	3.1E-11	1.2E-10
Hexanoic Acid, 2-ethyl	149-57-5	1	0	8.4E-12	4.9E-11	0	0	2.9E-10
1-Hydroxypyrene	5315-79-7	1	0	4.8E-10	2.9E-09	0	0	1.7E-08
2-(Methylthio)benzothiazole	615-22-5	9	0	6.7E-09	1.5E-08	0	3.1E-08	6.7E-08
Naphthalene	91-20-3	2	0	1.1E-11	4.4E-11	0	5.4E-11	1.9E-10
Naphthalene, 1,2-dimethyl-	573-98-8	1	0	7.5E-13	4.5E-12	0	0	2.6E-11
Naphthalene, 1,6-dimethyl-	575-43-9	6	0	8.0E-12	1.9E-11	0	5.7E-11	5.9E-11
Naphthalene, 1-methyl-	90-12-0	1	0	1.7E-12	1.0E-11	0	0	5.9E-11
Naphthalene, 2-(bromomethyl)-	939-26-4	33	0	3.1E-10	2.5E-10	1.9E-10	7.5E-10	9.8E-10
Naphthalene, 2,3-dimethyl-	581-40-8	33	0	9.3E-11	8.2E-11	5.5E-11	2.7E-10	3.7E-10
Naphthalene, 2-methyl	91-57-6	1	0	1.6E-12	9.7E-12	0	0	5.7E-11
1-Octadecene	112-88-9	27	0	5.4E-10	1.5E-09	1.5E-10	9.3E-10	8.9E-09
Phenanthrene	85-01-8	29	0	3.7E-10	5.0E-10	1.8E-10	1.2E-09	2.3E-09
Phenanthrene, 1-methyl	832-69-9	35	3.6E-11	1.9E-10	1.5E-10	1.5E-10	4.7E-10	5.9E-10
Phenanthrene, 2-methyl-	2531-84-2	34	0	2.3E-10	2.2E-10	1.8E-10	6.5E-10	8.8E-10
Phenanthrene, 3-methyl	832-71-3	3	0	8.5E-11	3.2E-10	0	6.1E-10	1.7E-09
N-Phenylbenzamide	93-98-1	8	0	5.3E-10	1.1E-09	0	2.6E-09	3.9E-09
Phthalimide	85-41-6	26	0	3.5E-09	8.0E-09	4.7E-11	2.0E-08	3.5E-08
Pyrene	129-00-0	35	8.6E-10	4.7E-09	3.0E-09	4.1E-09	1.1E-08	1.2E-08
Pyridine, 2-(4-methylphenyl)-	4467-06-5	14	0	1.7E-10	3.3E-10	0	7.3E-10	1.5E-09
Triethylene glycol monobutyl ether	143-22-6	7	0	8.9E-10	2.2E-09	0	5.6E-09	9.7E-09
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	32	0	1.2E-10	1.4E-10	4.3E-11	3.6E-10	5.8E-10

[a] 35 field-specific $ADD_{der\text{-}field}$ are included in the table. $ADD_{der\text{-}field}$ was calculated from field-specific average concentrations ($C_{der\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial sweat extracts of crumb rubber samples from an individual field.

[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-

Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-253. Field-Specific Average Dermal Daily Dose[a] for Chronic Non-Cancer Hazard ($ADD_{der\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related General Chemicals**[b]—Combined Gender **Coaches 16<30 Years**

Chemical	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Acenaphthylene	208-96-8	10	0	4.2E-12	7.2E-12	0	1.7E-11	2.6E-11
Aniline	62-53-3	4	0	1.3E-10	4.1E-10	0	1.0E-09	2.0E-09
Anthracene	120-12-7	20	0	4.6E-11	6.0E-11	3.1E-11	1.1E-10	3.1E-10
Anthracene, 2-methyl-	613-12-7	35	1.6E-11	6.6E-11	5.4E-11	4.4E-11	1.5E-10	2.6E-10
Anthracene, 9,10-diphenyl-	1499-10-1	5	0	9.1E-12	2.6E-11	0	5.5E-11	1.2E-10
Anthracene, 9-phenyl	602-55-1	9	0	2.3E-11	5.1E-11	0	1.3E-10	2.3E-10
Benz[a]anthracene	56-55-3	31	0	1.8E-10	2.1E-10	9.6E-11	5.1E-10	9.7E-10
Benzene, n-butyl-	104-51-8	1	0	2.7E-13	1.6E-12	0	0	9.6E-12
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	32	0	1.2E-08	2.0E-08	5.1E-09	3.8E-08	1.1E-07
Benzo[b]fluoranthene	205-99-2	34	0	2.6E-10	2.3E-10	2.0E-10	6.5E-10	1.0E-09
7H-Benzo[c]fluorene	205-12-9	26	0	2.3E-11	2.9E-11	1.2E-11	7.2E-11	1.2E-10
Benzo[k]fluoranthene	207-08-9	29	0	1.1E-10	1.2E-10	6.9E-11	3.7E-10	4.6E-10
Benzothiazole	95-16-9	35	3.4E-08	1.5E-07	7.6E-08	1.2E-07	2.9E-07	3.3E-07
Benzothiazole, 2-phenyl-	883-93-2	35	1.1E-09	3.6E-09	2.8E-09	2.5E-09	9.7E-09	1.4E-08
1,3-Benzothiazole-2-thiol	149-30-4	1	0	9.8E-10	5.8E-09	0	0	3.4E-08
Benzothiazolone	934-34-9	35	8.9E-08	4.1E-07	1.3E-07	4.7E-07	5.8E-07	5.9E-07
Benzyl butyl phthalate	85-68-7	35	1.1E-10	1.7E-09	1.2E-09	1.4E-09	4.2E-09	4.8E-09
Cyclohexyl isothiocyanate	1122-82-3	1	0	6.2E-12	3.7E-11	0	0	2.2E-10
Dibenz[a,h]anthracene	53-70-3	14	0	6.7E-11	1.2E-10	0	3.3E-10	5.1E-10
Dibenzothiophene	132-65-0	20	0	4.0E-11	5.0E-11	3.4E-11	1.1E-10	2.4E-10
Diethyl Phthalate	84-66-2	5	0	3.1E-10	9.1E-10	0	1.7E-09	4.6E-09
Diisobutyl Phthalate	84-69-5	28	0	2.6E-10	4.3E-10	1.7E-10	6.7E-10	2.5E-09
Diisooctylphthalate	27554-26-3	35	7.3E-11	8.5E-09	5.9E-09	7.3E-09	2.1E-08	2.4E-08
Di-n-octyl phthalate	117-84-0	33	0	1.8E-09	2.5E-09	1.0E-09	6.2E-09	1.2E-08
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	4	0	1.6E-12	4.7E-12	0	1.2E-11	2.1E-11
3,5-Di-tert-butyl-4-hydroxybenzaldehyde	1620-98-0	25	0	7.9E-09	2.0E-08	1.8E-09	2.1E-08	1.2E-07
Fluoranthene	206-44-0	35	2.3E-10	1.4E-09	1.1E-09	9.8E-10	3.6E-09	3.8E-09
Fluorene	86-73-7	6	0	5.9E-12	1.8E-11	0	2.5E-11	1.0E-10
Hexanoic Acid, 2-ethyl	149-57-5	1	0	6.8E-12	4.0E-11	0	0	2.4E-10

Chemical	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
1-Hydroxypyrene	5315-79-7	1	0	3.9E-10	2.3E-09	0	0	1.4E-08
2-(Methylthio)benzothiazole	615-22-5	9	0	5.4E-09	1.2E-08	0	2.5E-08	5.4E-08
Naphthalene	91-20-3	2	0	8.7E-12	3.6E-11	0	4.4E-11	1.6E-10
Naphthalene, 1,2-dimethyl-	573-98-8	1	0	6.1E-13	3.6E-12	0	0	2.1E-11
Naphthalene, 1,6-dimethyl-	575-43-9	6	0	6.5E-12	1.5E-11	0	4.7E-11	4.8E-11
Naphthalene, 1-methyl-	90-12-0	1	0	1.4E-12	8.1E-12	0	0	4.8E-11
Naphthalene, 2-(bromomethyl)-	939-26-4	33	0	2.5E-10	2.1E-10	1.6E-10	6.1E-10	8.0E-10
Naphthalene, 2,3-dimethyl-	581-40-8	33	0	7.5E-11	6.7E-11	4.5E-11	2.2E-10	3.0E-10
Naphthalene, 2-methyl	91-57-6	1	0	1.3E-12	7.9E-12	0	0	4.7E-11
1-Octadecene	112-88-9	27	0	4.4E-10	1.2E-09	1.2E-10	7.6E-10	7.2E-09
Phenanthrene	85-01-8	29	0	3.0E-10	4.1E-10	1.5E-10	1.0E-09	1.9E-09
Phenanthrene, 1-methyl	832-69-9	35	2.9E-11	1.6E-10	1.2E-10	1.2E-10	3.8E-10	4.8E-10
Phenanthrene, 2-methyl-	2531-84-2	34	0	1.9E-10	1.8E-10	1.4E-10	5.3E-10	7.1E-10
Phenanthrene, 3-methyl	832-71-3	3	0	6.9E-11	2.6E-10	0	4.9E-10	1.4E-09
N-Phenylbenzamide	93-98-1	8	0	4.3E-10	8.7E-10	0	2.1E-09	3.1E-09
Phthalimide	85-41-6	26	0	2.8E-09	6.5E-09	3.8E-11	1.6E-08	2.8E-08
Pyrene	129-00-0	35	7.0E-10	3.8E-09	2.5E-09	3.3E-09	8.9E-09	1.0E-08
Pyridine, 2-(4-methylphenyl)-	4467-06-5	14	0	1.4E-10	2.7E-10	0	5.9E-10	1.2E-09
Triethylene glycol monobutyl ether	143-22-6	7	0	7.3E-10	1.8E-09	0	4.6E-09	7.9E-09
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	32	0	9.8E-11	1.2E-10	3.5E-11	2.9E-10	4.7E-10

[a] 35 field-specific $ADD_{der\text{-}field}$ are included in the table. $ADD_{der\text{-}field}$ was calculated from field-specific average concentrations ($C_{der\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial sweat extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-254. Field-Specific Average Dermal Daily Dose[a] for Chronic Non-Cancer Hazard ($ADD_{der\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related General Chemicals**[b]—Combined Gender **Coaches 30<40 Years**

Chemical	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Acenaphthylene	208-96-8	10	0	3.9E-12	6.7E-12	0	1.6E-11	2.4E-11
Aniline	62-53-3	4	0	1.2E-10	3.9E-10	0	9.6E-10	1.9E-09

Chemical	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Anthracene	120-12-7	20	0	4.3E-11	5.7E-11	2.9E-11	1.1E-10	2.9E-10
Anthracene, 2-methyl-	613-12-7	35	1.5E-11	6.2E-11	5.1E-11	4.1E-11	1.4E-10	2.4E-10
Anthracene, 9,10-diphenyl-	1499-10-1	5	0	8.5E-12	2.4E-11	0	5.2E-11	1.2E-10
Anthracene, 9-phenyl	602-55-1	9	0	2.1E-11	4.8E-11	0	1.2E-10	2.1E-10
Benz[a]anthracene	56-55-3	31	0	1.7E-10	2.0E-10	9.0E-11	4.8E-10	9.1E-10
Benzene, n-butyl-	104-51-8	1	0	2.6E-13	1.5E-12	0	0	9.0E-12
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	32	0	1.2E-08	1.9E-08	4.8E-09	3.6E-08	1.0E-07
Benzo[b]fluoranthene	205-99-2	34	0	2.4E-10	2.1E-10	1.9E-10	6.1E-10	9.4E-10
7H-Benzo[c]fluorene	205-12-9	26	0	2.1E-11	2.7E-11	1.1E-11	6.8E-11	1.1E-10
Benzo[k]fluoranthene	207-08-9	29	0	1.1E-10	1.1E-10	6.4E-11	3.4E-10	4.3E-10
Benzothiazole	95-16-9	35	3.2E-08	1.4E-07	7.1E-08	1.2E-07	2.7E-07	3.1E-07
Benzothiazole, 2-phenyl-	883-93-2	35	9.9E-10	3.4E-09	2.6E-09	2.4E-09	9.0E-09	1.3E-08
1,3-Benzothiazole-2-thiol	149-30-4	1	0	9.2E-10	5.4E-09	0	0	3.2E-08
Benzothiazolone	934-34-9	35	8.3E-08	3.9E-07	1.2E-07	4.4E-07	5.4E-07	5.5E-07
Benzyl butyl phthalate	85-68-7	35	1.1E-10	1.6E-09	1.1E-09	1.3E-09	3.9E-09	4.5E-09
Cyclohexyl isothiocyanate	1122-82-3	1	0	5.8E-12	3.4E-11	0	0	2.0E-10
Dibenz[a,h]anthracene	53-70-3	14	0	6.3E-11	1.2E-10	0	3.1E-10	4.8E-10
Dibenzothiophene	132-65-0	20	0	3.8E-11	4.7E-11	3.2E-11	1.0E-10	2.2E-10
Diethyl Phthalate	84-66-2	5	0	2.9E-10	8.5E-10	0	1.6E-09	4.3E-09
Diisobutyl Phthalate	84-69-5	28	0	2.4E-10	4.1E-10	1.6E-10	6.3E-10	2.4E-09
Diisooctylphthalate	27554-26-3	35	6.8E-11	7.9E-09	5.5E-09	6.8E-09	2.0E-08	2.3E-08
Di-n-octyl phthalate	117-84-0	33	0	1.7E-09	2.4E-09	9.4E-10	5.8E-09	1.1E-08
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	4	0	1.5E-12	4.4E-12	0	1.2E-11	1.9E-11
3,5-Di-tert-butyl-4-hydroxybenzaldehyde	1620-98-0	25	0	7.4E-09	1.9E-08	1.7E-09	2.0E-08	1.1E-07
Fluoranthene	206-44-0	35	2.1E-10	1.3E-09	1.0E-09	9.2E-10	3.4E-09	3.6E-09
Fluorene	86-73-7	6	0	5.6E-12	1.7E-11	0	2.4E-11	9.5E-11
Hexanoic Acid, 2-ethyl	149-57-5	1	0	6.4E-12	3.8E-11	0	0	2.2E-10
1-Hydroxypyrene	5315-79-7	1	0	3.7E-10	2.2E-09	0	0	1.3E-08
2-(Methylthio)benzothiazole	615-22-5	9	0	5.1E-09	1.1E-08	0	2.4E-08	5.1E-08
Naphthalene	91-20-3	2	0	8.1E-12	3.4E-11	0	4.1E-11	1.5E-10
Naphthalene, 1,2-dimethyl-	573-98-8	1	0	5.7E-13	3.4E-12	0	0	2.0E-11
Naphthalene, 1,6-dimethyl-	575-43-9	6	0	6.1E-12	1.4E-11	0	4.4E-11	4.5E-11

Chemical	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Naphthalene, 1-methyl-	90-12-0	1	0	1.3E-12	7.6E-12	0	0	4.5E-11
Naphthalene, 2-(bromomethyl)-	939-26-4	33	0	2.4E-10	1.9E-10	1.5E-10	5.7E-10	7.5E-10
Naphthalene, 2,3-dimethyl-	581-40-8	33	0	7.1E-11	6.2E-11	4.2E-11	2.0E-10	2.8E-10
Naphthalene, 2-methyl	91-57-6	1	0	1.3E-12	7.4E-12	0	0	4.4E-11
1-Octadecene	112-88-9	27	0	4.1E-10	1.1E-09	1.1E-10	7.1E-10	6.8E-09
Phenanthrene	85-01-8	29	0	2.8E-10	3.8E-10	1.4E-10	9.3E-10	1.8E-09
Phenanthrene, 1-methyl	832-69-9	35	2.7E-11	1.5E-10	1.1E-10	1.2E-10	3.6E-10	4.5E-10
Phenanthrene, 2-methyl-	2531-84-2	34	0	1.8E-10	1.6E-10	1.4E-10	5.0E-10	6.7E-10
Phenanthrene, 3-methyl	832-71-3	3	0	6.5E-11	2.4E-10	0	4.6E-10	1.3E-09
N-Phenylbenzamide	93-98-1	8	0	4.1E-10	8.2E-10	0	1.9E-09	2.9E-09
Phthalimide	85-41-6	26	0	2.6E-09	6.1E-09	3.6E-11	1.5E-08	2.6E-08
Pyrene	129-00-0	35	6.5E-10	3.6E-09	2.3E-09	3.1E-09	8.3E-09	9.4E-09
Pyridine, 2-(4-methylphenyl)-	4467-06-5	14	0	1.3E-10	2.5E-10	0	5.5E-10	1.1E-09
Triethylene glycol monobutyl ether	143-22-6	7	0	6.8E-10	1.7E-09	0	4.3E-09	7.4E-09
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	32	0	9.2E-11	1.1E-10	3.3E-11	2.7E-10	4.4E-10

[a] 35 field-specific $ADD_{der\text{-}field}$ are included in the table. $ADD_{der\text{-}field}$ was calculated from field-specific average concentrations ($C_{der\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial sweat extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-255. Field-Specific Average Dermal Daily Dose[a] for Chronic Non-Cancer Hazard ($ADD_{der\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related General Chemicals**[b]—Combined Gender **Coaches 40<50 Years**

Chemical	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Acenaphthylene	208-96-8	10	0	3.9E-12	6.8E-12	0	1.6E-11	2.4E-11
Aniline	62-53-3	4	0	1.3E-10	3.9E-10	0	9.7E-10	1.9E-09
Anthracene	120-12-7	20	0	4.4E-11	5.7E-11	3.0E-11	1.1E-10	2.9E-10
Anthracene, 2-methyl-	613-12-7	35	1.5E-11	6.3E-11	5.1E-11	4.1E-11	1.4E-10	2.5E-10
Anthracene, 9,10-diphenyl-	1499-10-1	5	0	8.6E-12	2.4E-11	0	5.2E-11	1.2E-10
Anthracene, 9-phenyl	602-55-1	9	0	2.1E-11	4.8E-11	0	1.2E-10	2.1E-10
Benz[a]anthracene	56-55-3	31	0	1.7E-10	2.0E-10	9.1E-11	4.9E-10	9.2E-10
Benzene, n-butyl-	104-51-8	1	0	2.6E-13	1.5E-12	0	0	9.1E-12

Chemical	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	32	0	1.2E-08	1.9E-08	4.9E-09	3.6E-08	1.0E-07
Benzo[b]fluoranthene	205-99-2	34	0	2.5E-10	2.2E-10	1.9E-10	6.1E-10	9.5E-10
7H-Benzo[c]fluorene	205-12-9	26	0	2.1E-11	2.7E-11	1.1E-11	6.9E-11	1.1E-10
Benzo[k]fluoranthene	207-08-9	29	0	1.1E-10	1.1E-10	6.5E-11	3.5E-10	4.3E-10
Benzothiazole	95-16-9	35	3.2E-08	1.4E-07	7.2E-08	1.2E-07	2.7E-07	3.1E-07
Benzothiazole, 2-phenyl-	883-93-2	35	1.0E-09	3.4E-09	2.7E-09	2.4E-09	9.1E-09	1.3E-08
1,3-Benzothiazole-2-thiol	149-30-4	1	0	9.3E-10	5.5E-09	0	0	3.2E-08
Benzothiazolone	934-34-9	35	8.4E-08	3.9E-07	1.3E-07	4.4E-07	5.5E-07	5.6E-07
Benzyl butyl phthalate	85-68-7	35	1.1E-10	1.6E-09	1.1E-09	1.3E-09	4.0E-09	4.5E-09
Cyclohexyl isothiocyanate	1122-82-3	1	0	5.9E-12	3.5E-11	0	0	2.1E-10
Dibenz[a,h]anthracene	53-70-3	14	0	6.4E-11	1.2E-10	0	3.1E-10	4.9E-10
Dibenzothiophene	132-65-0	20	0	3.8E-11	4.7E-11	3.2E-11	1.1E-10	2.3E-10
Diethyl Phthalate	84-66-2	5	0	2.9E-10	8.6E-10	0	1.6E-09	4.4E-09
Diisobutyl Phthalate	84-69-5	28	0	2.4E-10	4.1E-10	1.6E-10	6.4E-10	2.4E-09
Diisooctylphthalate	27554-26-3	35	6.9E-11	8.0E-09	5.6E-09	6.9E-09	2.0E-08	2.3E-08
Di-n-octyl phthalate	117-84-0	33	0	1.7E-09	2.4E-09	9.5E-10	5.9E-09	1.2E-08
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	4	0	1.5E-12	4.4E-12	0	1.2E-11	1.9E-11
3,5-Di-tert-butyl-4-hydroxybenzaldehyde	1620-98-0	25	0	7.4E-09	1.9E-08	1.7E-09	2.0E-08	1.1E-07
Fluoranthene	206-44-0	35	2.2E-10	1.3E-09	1.0E-09	9.3E-10	3.4E-09	3.6E-09
Fluorene	86-73-7	6	0	5.6E-12	1.7E-11	0	2.4E-11	9.6E-11
Hexanoic Acid, 2-ethyl	149-57-5	1	0	6.4E-12	3.8E-11	0	0	2.3E-10
1-Hydroxypyrene	5315-79-7	1	0	3.7E-10	2.2E-09	0	0	1.3E-08
2-(Methylthio)benzothiazole	615-22-5	9	0	5.1E-09	1.1E-08	0	2.4E-08	5.1E-08
Naphthalene	91-20-3	2	0	8.2E-12	3.4E-11	0	4.2E-11	1.5E-10
Naphthalene, 1,2-dimethyl-	573-98-8	1	0	5.8E-13	3.4E-12	0	0	2.0E-11
Naphthalene, 1,6-dimethyl-	575-43-9	6	0	6.1E-12	1.5E-11	0	4.4E-11	4.5E-11
Naphthalene, 1-methyl-	90-12-0	1	0	1.3E-12	7.7E-12	0	0	4.6E-11
Naphthalene, 2-(bromomethyl)-	939-26-4	33	0	2.4E-10	1.9E-10	1.5E-10	5.8E-10	7.6E-10
Naphthalene, 2,3-dimethyl-	581-40-8	33	0	7.1E-11	6.3E-11	4.3E-11	2.1E-10	2.9E-10
Naphthalene, 2-methyl	91-57-6	1	0	1.3E-12	7.5E-12	0	0	4.4E-11
1-Octadecene	112-88-9	27	0	4.1E-10	1.1E-09	1.1E-10	7.2E-10	6.8E-09
Phenanthrene	85-01-8	29	0	2.8E-10	3.8E-10	1.4E-10	9.4E-10	1.8E-09

Chemical	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Phenanthrene, 1-methyl	832-69-9	35	2.8E-11	1.5E-10	1.1E-10	1.2E-10	3.6E-10	4.5E-10
Phenanthrene, 2-methyl-	2531-84-2	34	0	1.8E-10	1.7E-10	1.4E-10	5.0E-10	6.8E-10
Phenanthrene, 3-methyl	832-71-3	3	0	6.6E-11	2.5E-10	0	4.7E-10	1.3E-09
N-Phenylbenzamide	93-98-1	8	0	4.1E-10	8.3E-10	0	2.0E-09	3.0E-09
Phthalimide	85-41-6	26	0	2.7E-09	6.2E-09	3.6E-11	1.5E-08	2.7E-08
Pyrene	129-00-0	35	6.6E-10	3.6E-09	2.3E-09	3.1E-09	8.4E-09	9.5E-09
Pyridine, 2-(4-methylphenyl)-	4467-06-5	14	0	1.3E-10	2.5E-10	0	5.6E-10	1.1E-09
Triethylene glycol monobutyl ether	143-22-6	7	0	6.9E-10	1.7E-09	0	4.3E-09	7.5E-09
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	32	0	9.3E-11	1.1E-10	3.3E-11	2.8E-10	4.5E-10

[a] 35 field-specific $ADD_{der\text{-}field}$ are included in the table. $ADD_{der\text{-}field}$ was calculated from field-specific average concentrations ($C_{der\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial sweat extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-256. Field-Specific Average Dermal Daily Dose[a] for Chronic Non-Cancer Hazard ($ADD_{der\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related General Chemicals**[b]—Combined Gender **Coaches 50<70 Years**

Chemical	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Acenaphthylene	208-96-8	10	0	3.9E-12	6.8E-12	0	1.6E-11	2.5E-11
Aniline	62-53-3	4	0	1.3E-10	3.9E-10	0	9.7E-10	1.9E-09
Anthracene	120-12-7	20	0	4.4E-11	5.7E-11	3.0E-11	1.1E-10	2.9E-10
Anthracene, 2-methyl-	613-12-7	35	1.5E-11	6.3E-11	5.1E-11	4.2E-11	1.5E-10	2.5E-10
Anthracene, 9,10-diphenyl-	1499-10-1	5	0	8.6E-12	2.4E-11	0	5.2E-11	1.2E-10
Anthracene, 9-phenyl	602-55-1	9	0	2.1E-11	4.8E-11	0	1.2E-10	2.1E-10
Benz[a]anthracene	56-55-3	31	0	1.7E-10	2.0E-10	9.2E-11	4.9E-10	9.2E-10
Benzene, n-butyl-	104-51-8	1	0	2.6E-13	1.5E-12	0	0	9.1E-12
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	32	0	1.2E-08	1.9E-08	4.9E-09	3.6E-08	1.0E-07
Benzo[b]fluoranthene	205-99-2	34	0	2.5E-10	2.2E-10	1.9E-10	6.2E-10	9.5E-10
7H-Benzo[c]fluorene	205-12-9	26	0	2.1E-11	2.7E-11	1.1E-11	6.9E-11	1.1E-10
Benzo[k]fluoranthene	207-08-9	29	0	1.1E-10	1.1E-10	6.5E-11	3.5E-10	4.3E-10
Benzothiazole	95-16-9	35	3.2E-08	1.4E-07	7.2E-08	1.2E-07	2.7E-07	3.1E-07
Benzothiazole, 2-phenyl-	883-93-2	35	1.0E-09	3.4E-09	2.7E-09	2.4E-09	9.2E-09	1.3E-08

Chemical	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
1,3-Benzothiazole-2-thiol	149-30-4	1	0	9.3E-10	5.5E-09	0	0	3.3E-08
Benzothiazolone	934-34-9	35	8.5E-08	3.9E-07	1.3E-07	4.4E-07	5.5E-07	5.6E-07
Benzyl butyl phthalate	85-68-7	35	1.1E-10	1.6E-09	1.1E-09	1.3E-09	4.0E-09	4.5E-09
Cyclohexyl isothiocyanate	1122-82-3	1	0	5.9E-12	3.5E-11	0	0	2.1E-10
Dibenz[a,h]anthracene	53-70-3	14	0	6.4E-11	1.2E-10	0	3.1E-10	4.9E-10
Dibenzothiophene	132-65-0	20	0	3.8E-11	4.7E-11	3.2E-11	1.1E-10	2.3E-10
Diethyl Phthalate	84-66-2	5	0	2.9E-10	8.6E-10	0	1.6E-09	4.4E-09
Diisobutyl Phthalate	84-69-5	28	0	2.4E-10	4.1E-10	1.6E-10	6.4E-10	2.4E-09
Diisooctylphthalate	27554-26-3	35	6.9E-11	8.0E-09	5.6E-09	6.9E-09	2.0E-08	2.3E-08
Di-n-octyl phthalate	117-84-0	33	0	1.7E-09	2.4E-09	9.5E-10	5.9E-09	1.2E-08
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	4	0	1.5E-12	4.4E-12	0	1.2E-11	2.0E-11
3,5-Di-tert-butyl-4-hydroxybenzaldehyde	1620-98-0	25	0	7.5E-09	1.9E-08	1.7E-09	2.0E-08	1.1E-07
Fluoranthene	206-44-0	35	2.2E-10	1.3E-09	1.0E-09	9.3E-10	3.4E-09	3.7E-09
Fluorene	86-73-7	6	0	5.6E-12	1.8E-11	0	2.4E-11	9.6E-11
Hexanoic Acid, 2-ethyl	149-57-5	1	0	6.5E-12	3.8E-11	0	0	2.3E-10
1-Hydroxypyrene	5315-79-7	1	0	3.7E-10	2.2E-09	0	0	1.3E-08
2-(Methylthio)benzothiazole	615-22-5	9	0	5.1E-09	1.1E-08	0	2.4E-08	5.2E-08
Naphthalene	91-20-3	2	0	8.3E-12	3.4E-11	0	4.2E-11	1.5E-10
Naphthalene, 1,2-dimethyl-	573-98-8	1	0	5.8E-13	3.4E-12	0	0	2.0E-11
Naphthalene, 1,6-dimethyl-	575-43-9	6	0	6.2E-12	1.5E-11	0	4.4E-11	4.6E-11
Naphthalene, 1-methyl-	90-12-0	1	0	1.3E-12	7.7E-12	0	0	4.6E-11
Naphthalene, 2-(bromomethyl)-	939-26-4	33	0	2.4E-10	1.9E-10	1.5E-10	5.8E-10	7.6E-10
Naphthalene, 2,3-dimethyl-	581-40-8	33	0	7.2E-11	6.3E-11	4.3E-11	2.1E-10	2.9E-10
Naphthalene, 2-methyl	91-57-6	1	0	1.3E-12	7.5E-12	0	0	4.4E-11
1-Octadecene	112-88-9	27	0	4.1E-10	1.1E-09	1.1E-10	7.2E-10	6.9E-09
Phenanthrene	85-01-8	29	0	2.9E-10	3.9E-10	1.4E-10	9.5E-10	1.8E-09
Phenanthrene, 1-methyl	832-69-9	35	2.8E-11	1.5E-10	1.1E-10	1.2E-10	3.6E-10	4.6E-10
Phenanthrene, 2-methyl-	2531-84-2	34	0	1.8E-10	1.7E-10	1.4E-10	5.1E-10	6.8E-10
Phenanthrene, 3-methyl	832-71-3	3	0	6.6E-11	2.5E-10	0	4.7E-10	1.3E-09
N-Phenylbenzamide	93-98-1	8	0	4.1E-10	8.3E-10	0	2.0E-09	3.0E-09
Phthalimide	85-41-6	26	0	2.7E-09	6.2E-09	3.6E-11	1.5E-08	2.7E-08
Pyrene	129-00-0	35	6.6E-10	3.6E-09	2.3E-09	3.1E-09	8.5E-09	9.5E-09
Pyridine, 2-(4-methylphenyl)-	4467-06-5	14	0	1.3E-10	2.5E-10	0	5.6E-10	1.2E-09

Chemical	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Triethylene glycol monobutyl ether	143-22-6	7	0	6.9E-10	1.7E-09	0	4.3E-09	7.5E-09
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	32	0	9.3E-11	1.1E-10	3.3E-11	2.8E-10	4.5E-10

[a] 35 field-specific $ADD_{der\text{-}field}$ are included in the table. $ADD_{der\text{-}field}$ was calculated from field-specific average concentrations ($C_{der\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial sweat extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-257. Field-Specific Average Dermal Daily Dose[a] for Chronic Non-Cancer Hazard ($ADD_{der\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related General Chemicals**[b]—Combined Gender **Referees 16<30 Years**

Chemical	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Acenaphthylene	208-96-8	10	0	1.7E-12	2.9E-12	0	6.9E-12	1.0E-11
Aniline	62-53-3	4	0	5.4E-11	1.7E-10	0	4.1E-10	8.0E-10
Anthracene	120-12-7	20	0	1.9E-11	2.4E-11	1.3E-11	4.6E-11	1.2E-10
Anthracene, 2-methyl-	613-12-7	35	6.4E-12	2.7E-11	2.2E-11	1.8E-11	6.2E-11	1.0E-10
Anthracene, 9,10-diphenyl-	1499-10-1	5	0	3.7E-12	1.0E-11	0	2.2E-11	5.0E-11
Anthracene, 9-phenyl	602-55-1	9	0	9.1E-12	2.0E-11	0	5.1E-11	9.1E-11
Benz[a]anthracene	56-55-3	31	0	7.3E-11	8.5E-11	3.9E-11	2.1E-10	3.9E-10
Benzene, n-butyl-	104-51-8	1	0	1.1E-13	6.5E-13	0	0	3.9E-12
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	32	0	5.0E-09	8.0E-09	2.1E-09	1.5E-08	4.3E-08
Benzo[b]fluoranthene	205-99-2	34	0	1.0E-10	9.2E-11	8.2E-11	2.6E-10	4.0E-10
7H-Benzo[c]fluorene	205-12-9	26	0	9.1E-12	1.1E-11	4.7E-12	2.9E-11	4.8E-11
Benzo[k]fluoranthene	207-08-9	29	0	4.6E-11	4.8E-11	2.8E-11	1.5E-10	1.8E-10
Benzothiazole	95-16-9	35	1.4E-08	5.9E-08	3.1E-08	5.0E-08	1.2E-07	1.3E-07
Benzothiazole, 2-phenyl-	883-93-2	35	4.2E-10	1.4E-09	1.1E-09	1.0E-09	3.9E-09	5.7E-09
1,3-Benzothiazole-2-thiol	149-30-4	1	0	3.9E-10	2.3E-09	0	0	1.4E-08
Benzothiazolone	934-34-9	35	3.6E-08	1.7E-07	5.3E-08	1.9E-07	2.3E-07	2.4E-07
Benzyl butyl phthalate	85-68-7	35	4.6E-11	6.8E-10	4.8E-10	5.7E-10	1.7E-09	1.9E-09
Cyclohexyl isothiocyanate	1122-82-3	1	0	2.5E-12	1.5E-11	0	0	8.8E-11
Dibenz[a,h]anthracene	53-70-3	14	0	2.7E-11	4.9E-11	0	1.3E-10	2.1E-10
Dibenzothiophene	132-65-0	20	0	1.6E-11	2.0E-11	1.4E-11	4.5E-11	9.6E-11
Diethyl Phthalate	84-66-2	5	0	1.2E-10	3.7E-10	0	6.8E-10	1.9E-09

Chemical	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Diisobutyl Phthalate	84-69-5	28	0	1.0E-10	1.7E-10	6.9E-11	2.7E-10	1.0E-09
Diisooctylphthalate	27554-26-3	35	2.9E-11	3.4E-09	2.4E-09	2.9E-09	8.4E-09	9.7E-09
Di-n-octyl phthalate	117-84-0	33	0	7.2E-10	1.0E-09	4.0E-10	2.5E-09	4.9E-09
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	4	0	6.4E-13	1.9E-12	0	5.0E-12	8.3E-12
3,5-Di-tert-butyl-4-hydroxybenzaldehyde	1620-98-0	25	0	3.2E-09	8.2E-09	7.3E-10	8.6E-09	4.7E-08
Fluoranthene	206-44-0	35	9.2E-11	5.6E-10	4.4E-10	4.0E-10	1.5E-09	1.5E-09
Fluorene	86-73-7	6	0	2.4E-12	7.4E-12	0	1.0E-11	4.1E-11
Hexanoic Acid, 2-ethyl	149-57-5	1	0	2.7E-12	1.6E-11	0	0	9.6E-11
1-Hydroxypyrene	5315-79-7	1	0	1.6E-10	9.4E-10	0	0	5.6E-09
2-(Methylthio)benzothiazole	615-22-5	9	0	2.2E-09	4.8E-09	0	1.0E-08	2.2E-08
Naphthalene	91-20-3	2	0	3.5E-12	1.4E-11	0	1.8E-11	6.4E-11
Naphthalene, 1,2-dimethyl-	573-98-8	1	0	2.5E-13	1.5E-12	0	0	8.6E-12
Naphthalene, 1,6-dimethyl-	575-43-9	6	0	2.6E-12	6.2E-12	0	1.9E-11	1.9E-11
Naphthalene, 1-methyl-	90-12-0	1	0	5.5E-13	3.3E-12	0	0	1.9E-11
Naphthalene, 2-(bromomethyl)-	939-26-4	33	0	1.0E-10	8.2E-11	6.3E-11	2.4E-10	3.2E-10
Naphthalene, 2,3-dimethyl-	581-40-8	33	0	3.0E-11	2.7E-11	1.8E-11	8.7E-11	1.2E-10
Naphthalene, 2-methyl	91-57-6	1	0	5.4E-13	3.2E-12	0	0	1.9E-11
1-Octadecene	112-88-9	27	0	1.8E-10	4.9E-10	4.9E-11	3.1E-10	2.9E-09
Phenanthrene	85-01-8	29	0	1.2E-10	1.6E-10	5.9E-11	4.0E-10	7.6E-10
Phenanthrene, 1-methyl	832-69-9	35	1.2E-11	6.3E-11	4.8E-11	5.0E-11	1.5E-10	1.9E-10
Phenanthrene, 2-methyl-	2531-84-2	34	0	7.7E-11	7.1E-11	5.8E-11	2.1E-10	2.9E-10
Phenanthrene, 3-methyl	832-71-3	3	0	2.8E-11	1.0E-10	0	2.0E-10	5.6E-10
N-Phenylbenzamide	93-98-1	8	0	1.7E-10	3.5E-10	0	8.4E-10	1.3E-09
Phthalimide	85-41-6	26	0	1.1E-09	2.6E-09	1.5E-11	6.5E-09	1.1E-08
Pyrene	129-00-0	35	2.8E-10	1.5E-09	9.9E-10	1.3E-09	3.6E-09	4.0E-09
Pyridine, 2-(4-methylphenyl)-	4467-06-5	14	0	5.6E-11	1.1E-10	0	2.4E-10	4.9E-10
Triethylene glycol monobutyl ether	143-22-6	7	0	2.9E-10	7.1E-10	0	1.8E-09	3.2E-09
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	32	0	3.9E-11	4.7E-11	1.4E-11	1.2E-10	1.9E-10

[a] 35 field-specific $ADD_{der\text{-}field}$ are included in the table. $ADD_{der\text{-}field}$ was calculated from field-specific average concentrations ($C_{der\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial sweat extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number

Values are rounded to two significant figures.

Table F-258. Field-Specific Average Dermal Daily Dose[a] for Chronic Non-Cancer Hazard ($ADD_{der\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related General Chemicals**[b]—Combined Gender **Referees 30<40 Years**

Chemical	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Acenaphthylene	208-96-8	10	0	1.7E-12	2.9E-12	0	6.9E-12	1.0E-11
Aniline	62-53-3	4	0	5.4E-11	1.7E-10	0	4.1E-10	8.0E-10
Anthracene	120-12-7	20	0	1.9E-11	2.4E-11	1.3E-11	4.6E-11	1.2E-10
Anthracene, 2-methyl-	613-12-7	35	6.4E-12	2.7E-11	2.2E-11	1.8E-11	6.2E-11	1.0E-10
Anthracene, 9,10-diphenyl-	1499-10-1	5	0	3.7E-12	1.0E-11	0	2.2E-11	5.0E-11
Anthracene, 9-phenyl	602-55-1	9	0	9.1E-12	2.0E-11	0	5.1E-11	9.1E-11
Benz[a]anthracene	56-55-3	31	0	7.3E-11	8.5E-11	3.9E-11	2.1E-10	3.9E-10
Benzene, n-butyl-	104-51-8	1	0	1.1E-13	6.5E-13	0	0	3.9E-12
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	32	0	5.0E-09	8.0E-09	2.1E-09	1.5E-08	4.3E-08
Benzo[b]fluoranthene	205-99-2	34	0	1.0E-10	9.2E-11	8.2E-11	2.6E-10	4.0E-10
7H-Benzo[c]fluorene	205-12-9	26	0	9.1E-12	1.1E-11	4.7E-12	2.9E-11	4.8E-11
Benzo[k]fluoranthene	207-08-9	29	0	4.6E-11	4.8E-11	2.8E-11	1.5E-10	1.8E-10
Benzothiazole	95-16-9	35	1.4E-08	5.9E-08	3.1E-08	5.0E-08	1.2E-07	1.3E-07
Benzothiazole, 2-phenyl-	883-93-2	35	4.2E-10	1.4E-09	1.1E-09	1.0E-09	3.9E-09	5.7E-09
1,3-Benzothiazole-2-thiol	149-30-4	1	0	3.9E-10	2.3E-09	0	0	1.4E-08
Benzothiazolone	934-34-9	35	3.6E-08	1.7E-07	5.3E-08	1.9E-07	2.3E-07	2.4E-07
Benzyl butyl phthalate	85-68-7	35	4.6E-11	6.8E-10	4.8E-10	5.7E-10	1.7E-09	1.9E-09
Cyclohexyl isothiocyanate	1122-82-3	1	0	2.5E-12	1.5E-11	0	0	8.8E-11
Dibenz[a,h]anthracene	53-70-3	14	0	2.7E-11	4.9E-11	0	1.3E-10	2.1E-10
Dibenzothiophene	132-65-0	20	0	1.6E-11	2.0E-11	1.4E-11	4.5E-11	9.6E-11
Diethyl Phthalate	84-66-2	5	0	1.2E-10	3.7E-10	0	6.8E-10	1.9E-09
Diisobutyl Phthalate	84-69-5	28	0	1.0E-10	1.7E-10	6.9E-11	2.7E-10	1.0E-09
Diisooctylphthalate	27554-26-3	35	2.9E-11	3.4E-09	2.4E-09	2.9E-09	8.4E-09	9.7E-09
Di-n-octyl phthalate	117-84-0	33	0	7.2E-10	1.0E-09	4.0E-10	2.5E-09	4.9E-09
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	4	0	6.4E-13	1.9E-12	0	5.0E-12	8.3E-12
3,5-Di-tert-butyl-4-hydroxybenzaldehyde	1620-98-0	25	0	3.2E-09	8.2E-09	7.3E-10	8.6E-09	4.7E-08
Fluoranthene	206-44-0	35	9.2E-11	5.6E-10	4.4E-10	4.0E-10	1.5E-09	1.5E-09
Fluorene	86-73-7	6	0	2.4E-12	7.4E-12	0	1.0E-11	4.1E-11
Hexanoic Acid, 2-ethyl	149-57-5	1	0	2.7E-12	1.6E-11	0	0	9.6E-11
1-Hydroxypyrene	5315-79-7	1	0	1.6E-10	9.4E-10	0	0	5.6E-09

Chemical	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
2-(Methylthio)benzothiazole	615-22-5	9	0	2.2E-09	4.8E-09	0	1.0E-08	2.2E-08
Naphthalene	91-20-3	2	0	3.5E-12	1.4E-11	0	1.8E-11	6.4E-11
Naphthalene, 1,2-dimethyl-	573-98-8	1	0	2.5E-13	1.5E-12	0	0	8.6E-12
Naphthalene, 1,6-dimethyl-	575-43-9	6	0	2.6E-12	6.2E-12	0	1.9E-11	1.9E-11
Naphthalene, 1-methyl-	90-12-0	1	0	5.5E-13	3.3E-12	0	0	1.9E-11
Naphthalene, 2-(bromomethyl)-	939-26-4	33	0	1.0E-10	8.2E-11	6.3E-11	2.4E-10	3.2E-10
Naphthalene, 2,3-dimethyl-	581-40-8	33	0	3.0E-11	2.7E-11	1.8E-11	8.7E-11	1.2E-10
Naphthalene, 2-methyl	91-57-6	1	0	5.4E-13	3.2E-12	0	0	1.9E-11
1-Octadecene	112-88-9	27	0	1.8E-10	4.9E-10	4.9E-11	3.1E-10	2.9E-09
Phenanthrene	85-01-8	29	0	1.2E-10	1.6E-10	5.9E-11	4.0E-10	7.6E-10
Phenanthrene, 1-methyl	832-69-9	35	1.2E-11	6.3E-11	4.8E-11	5.0E-11	1.5E-10	1.9E-10
Phenanthrene, 2-methyl-	2531-84-2	34	0	7.7E-11	7.1E-11	5.8E-11	2.1E-10	2.9E-10
Phenanthrene, 3-methyl	832-71-3	3	0	2.8E-11	1.0E-10	0	2.0E-10	5.6E-10
N-Phenylbenzamide	93-98-1	8	0	1.7E-10	3.5E-10	0	8.4E-10	1.3E-09
Phthalimide	85-41-6	26	0	1.1E-09	2.6E-09	1.5E-11	6.5E-09	1.1E-08
Pyrene	129-00-0	35	2.8E-10	1.5E-09	9.9E-10	1.3E-09	3.6E-09	4.0E-09
Pyridine, 2-(4-methylphenyl)-	4467-06-5	14	0	5.6E-11	1.1E-10	0	2.4E-10	4.9E-10
Triethylene glycol monobutyl ether	143-22-6	7	0	2.9E-10	7.1E-10	0	1.8E-09	3.2E-09
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	32	0	3.9E-11	4.7E-11	1.4E-11	1.2E-10	1.9E-10

[a] 35 field-specific $ADD_{der\text{-}field}$ are included in the table. $ADD_{der\text{-}field}$ was calculated from field-specific average concentrations ($C_{der\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial sweat extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-259. Field-Specific Average Dermal Daily Dose[a] for Chronic Non-Cancer Hazard ($ADD_{der\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related General Chemicals**[b]—Combined Gender **Referees 40<50 Years**

Chemical	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Acenaphthylene	208-96-8	10	0	1.6E-12	2.7E-12	0	6.5E-12	9.8E-12
Aniline	62-53-3	4	0	5.1E-11	1.6E-10	0	3.9E-10	7.6E-10
Anthracene	120-12-7	20	0	1.8E-11	2.3E-11	1.2E-11	4.4E-11	1.2E-10

Chemical	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Anthracene, 2-methyl-	613-12-7	35	6.1E-12	2.5E-11	2.1E-11	1.7E-11	5.8E-11	9.9E-11
Anthracene, 9,10-diphenyl-	1499-10-1	5	0	3.5E-12	9.7E-12	0	2.1E-11	4.7E-11
Anthracene, 9-phenyl	602-55-1	9	0	8.6E-12	1.9E-11	0	4.8E-11	8.6E-11
Benz[a]anthracene	56-55-3	31	0	7.0E-11	8.0E-11	3.7E-11	2.0E-10	3.7E-10
Benzene, n-butyl-	104-51-8	1	0	1.0E-13	6.2E-13	0	0	3.7E-12
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	32	0	4.7E-09	7.6E-09	2.0E-09	1.5E-08	4.1E-08
Benzo[b]fluoranthene	205-99-2	34	0	9.9E-11	8.7E-11	7.8E-11	2.5E-10	3.8E-10
7H-Benzo[c]fluorene	205-12-9	26	0	8.6E-12	1.1E-11	4.4E-12	2.8E-11	4.6E-11
Benzo[k]fluoranthene	207-08-9	29	0	4.3E-11	4.6E-11	2.6E-11	1.4E-10	1.7E-10
Benzothiazole	95-16-9	35	1.3E-08	5.6E-08	2.9E-08	4.7E-08	1.1E-07	1.3E-07
Benzothiazole, 2-phenyl-	883-93-2	35	4.0E-10	1.4E-09	1.1E-09	9.7E-10	3.7E-09	5.4E-09
1,3-Benzothiazole-2-thiol	149-30-4	1	0	3.7E-10	2.2E-09	0	0	1.3E-08
Benzothiazolone	934-34-9	35	3.4E-08	1.6E-07	5.0E-08	1.8E-07	2.2E-07	2.2E-07
Benzyl butyl phthalate	85-68-7	35	4.4E-11	6.4E-10	4.6E-10	5.4E-10	1.6E-09	1.8E-09
Cyclohexyl isothiocyanate	1122-82-3	1	0	2.4E-12	1.4E-11	0	0	8.3E-11
Dibenz[a,h]anthracene	53-70-3	14	0	2.6E-11	4.7E-11	0	1.2E-10	2.0E-10
Dibenzothiophene	132-65-0	20	0	1.5E-11	1.9E-11	1.3E-11	4.2E-11	9.1E-11
Diethyl Phthalate	84-66-2	5	0	1.2E-10	3.5E-10	0	6.4E-10	1.8E-09
Diisobutyl Phthalate	84-69-5	28	0	9.8E-11	1.6E-10	6.5E-11	2.6E-10	9.6E-10
Diisooctylphthalate	27554-26-3	35	2.8E-11	3.2E-09	2.2E-09	2.8E-09	8.0E-09	9.2E-09
Di-n-octyl phthalate	117-84-0	33	0	6.8E-10	9.7E-10	3.8E-10	2.4E-09	4.7E-09
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	4	0	6.0E-13	1.8E-12	0	4.7E-12	7.8E-12
3,5-Di-tert-butyl-4-hydroxybenzaldehyde	1620-98-0	25	0	3.0E-09	7.7E-09	6.9E-10	8.1E-09	4.5E-08
Fluoranthene	206-44-0	35	8.7E-11	5.3E-10	4.2E-10	3.7E-10	1.4E-09	1.5E-09
Fluorene	86-73-7	6	0	2.3E-12	7.0E-12	0	9.6E-12	3.9E-11
Hexanoic Acid, 2-ethyl	149-57-5	1	0	2.6E-12	1.5E-11	0	0	9.1E-11
1-Hydroxypyrene	5315-79-7	1	0	1.5E-10	8.9E-10	0	0	5.3E-09
2-(Methylthio)benzothiazole	615-22-5	9	0	2.1E-09	4.6E-09	0	9.6E-09	2.1E-08
Naphthalene	91-20-3	2	0	3.3E-12	1.4E-11	0	1.7E-11	6.0E-11
Naphthalene, 1,2-dimethyl-	573-98-8	1	0	2.3E-13	1.4E-12	0	0	8.2E-12
Naphthalene, 1,6-dimethyl-	575-43-9	6	0	2.5E-12	5.9E-12	0	1.8E-11	1.8E-11
Naphthalene, 1-methyl-	90-12-0	1	0	5.2E-13	3.1E-12	0	0	1.8E-11

Chemical	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Naphthalene, 2-(bromomethyl)-	939-26-4	33	0	9.7E-11	7.8E-11	6.0E-11	2.3E-10	3.0E-10
Naphthalene, 2,3-dimethyl-	581-40-8	33	0	2.9E-11	2.5E-11	1.7E-11	8.3E-11	1.2E-10
Naphthalene, 2-methyl	91-57-6	1	0	5.1E-13	3.0E-12	0	0	1.8E-11
1-Octadecene	112-88-9	27	0	1.7E-10	4.6E-10	4.6E-11	2.9E-10	2.8E-09
Phenanthrene	85-01-8	29	0	1.1E-10	1.5E-10	5.6E-11	3.8E-10	7.2E-10
Phenanthrene, 1-methyl	832-69-9	35	1.1E-11	6.0E-11	4.6E-11	4.7E-11	1.5E-10	1.8E-10
Phenanthrene, 2-methyl-	2531-84-2	34	0	7.3E-11	6.7E-11	5.5E-11	2.0E-10	2.7E-10
Phenanthrene, 3-methyl	832-71-3	3	0	2.6E-11	9.9E-11	0	1.9E-10	5.3E-10
N-Phenylbenzamide	93-98-1	8	0	1.7E-10	3.3E-10	0	7.9E-10	1.2E-09
Phthalimide	85-41-6	26	0	1.1E-09	2.5E-09	1.5E-11	6.1E-09	1.1E-08
Pyrene	129-00-0	35	2.7E-10	1.4E-09	9.4E-10	1.3E-09	3.4E-09	3.8E-09
Pyridine, 2-(4-methylphenyl)-	4467-06-5	14	0	5.3E-11	1.0E-10	0	2.3E-10	4.6E-10
Triethylene glycol monobutyl ether	143-22-6	7	0	2.8E-10	6.8E-10	0	1.7E-09	3.0E-09
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	32	0	3.7E-11	4.5E-11	1.3E-11	1.1E-10	1.8E-10

[a] 35 field-specific $ADD_{der\text{-}field}$ are included in the table. $ADD_{der\text{-}field}$ was calculated from field-specific average concentrations ($C_{der\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial sweat extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-260. Field-Specific Average Dermal Daily Dose[a] for Chronic Non-Cancer Hazard ($ADD_{der\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related General Chemicals**[b]—Combined Gender **Referees 50<70 Years**

Chemical	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Acenaphthylene	208-96-8	10	0	1.6E-12	2.7E-12	0	6.5E-12	9.9E-12
Aniline	62-53-3	4	0	5.1E-11	1.6E-10	0	3.9E-10	7.6E-10
Anthracene	120-12-7	20	0	1.8E-11	2.3E-11	1.2E-11	4.4E-11	1.2E-10
Anthracene, 2-methyl-	613-12-7	35	6.1E-12	2.5E-11	2.1E-11	1.7E-11	5.8E-11	9.9E-11
Anthracene, 9,10-diphenyl-	1499-10-1	5	0	3.5E-12	9.8E-12	0	2.1E-11	4.7E-11
Anthracene, 9-phenyl	602-55-1	9	0	8.6E-12	1.9E-11	0	4.8E-11	8.6E-11
Benz[a]anthracene	56-55-3	31	0	7.0E-11	8.1E-11	3.7E-11	2.0E-10	3.7E-10
Benzene, n-butyl-	104-51-8	1	0	1.0E-13	6.2E-13	0	0	3.7E-12
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	32	0	4.7E-09	7.6E-09	2.0E-09	1.5E-08	4.1E-08

Chemical	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Benzo[b]fluoranthene	205-99-2	34	0	9.9E-11	8.7E-11	7.8E-11	2.5E-10	3.8E-10
7H-Benzo[c]fluorene	205-12-9	26	0	8.6E-12	1.1E-11	4.5E-12	2.8E-11	4.6E-11
Benzo[k]fluoranthene	207-08-9	29	0	4.3E-11	4.6E-11	2.6E-11	1.4E-10	1.7E-10
Benzothiazole	95-16-9	35	1.3E-08	5.6E-08	2.9E-08	4.7E-08	1.1E-07	1.3E-07
Benzothiazole, 2-phenyl-	883-93-2	35	4.0E-10	1.4E-09	1.1E-09	9.7E-10	3.7E-09	5.4E-09
1,3-Benzothiazole-2-thiol	149-30-4	1	0	3.7E-10	2.2E-09	0	0	1.3E-08
Benzothiazolone	934-34-9	35	3.4E-08	1.6E-07	5.1E-08	1.8E-07	2.2E-07	2.3E-07
Benzyl butyl phthalate	85-68-7	35	4.4E-11	6.4E-10	4.6E-10	5.4E-10	1.6E-09	1.8E-09
Cyclohexyl isothiocyanate	1122-82-3	1	0	2.4E-12	1.4E-11	0	0	8.3E-11
Dibenz[a,h]anthracene	53-70-3	14	0	2.6E-11	4.7E-11	0	1.3E-10	2.0E-10
Dibenzothiophene	132-65-0	20	0	1.5E-11	1.9E-11	1.3E-11	4.3E-11	9.2E-11
Diethyl Phthalate	84-66-2	5	0	1.2E-10	3.5E-10	0	6.5E-10	1.8E-09
Diisobutyl Phthalate	84-69-5	28	0	9.8E-11	1.7E-10	6.6E-11	2.6E-10	9.6E-10
Diisooctylphthalate	27554-26-3	35	2.8E-11	3.2E-09	2.2E-09	2.8E-09	8.0E-09	9.3E-09
Di-n-octyl phthalate	117-84-0	33	0	6.9E-10	9.7E-10	3.8E-10	2.4E-09	4.7E-09
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	4	0	6.0E-13	1.8E-12	0	4.7E-12	7.9E-12
3,5-Di-tert-butyl-4-hydroxybenzaldehyde	1620-98-0	25	0	3.0E-09	7.8E-09	6.9E-10	8.1E-09	4.5E-08
Fluoranthene	206-44-0	35	8.7E-11	5.4E-10	4.2E-10	3.8E-10	1.4E-09	1.5E-09
Fluorene	86-73-7	6	0	2.3E-12	7.0E-12	0	9.6E-12	3.9E-11
Hexanoic Acid, 2-ethyl	149-57-5	1	0	2.6E-12	1.5E-11	0	0	9.1E-11
1-Hydroxypyrene	5315-79-7	1	0	1.5E-10	8.9E-10	0	0	5.3E-09
2-(Methylthio)benzothiazole	615-22-5	9	0	2.1E-09	4.6E-09	0	9.6E-09	2.1E-08
Naphthalene	91-20-3	2	0	3.3E-12	1.4E-11	0	1.7E-11	6.0E-11
Naphthalene, 1,2-dimethyl-	573-98-8	1	0	2.3E-13	1.4E-12	0	0	8.2E-12
Naphthalene, 1,6-dimethyl-	575-43-9	6	0	2.5E-12	5.9E-12	0	1.8E-11	1.8E-11
Naphthalene, 1-methyl-	90-12-0	1	0	5.3E-13	3.1E-12	0	0	1.8E-11
Naphthalene, 2-(bromomethyl)-	939-26-4	33	0	9.7E-11	7.8E-11	6.0E-11	2.3E-10	3.1E-10
Naphthalene, 2,3-dimethyl-	581-40-8	33	0	2.9E-11	2.5E-11	1.7E-11	8.3E-11	1.2E-10
Naphthalene, 2-methyl	91-57-6	1	0	5.1E-13	3.0E-12	0	0	1.8E-11
1-Octadecene	112-88-9	27	0	1.7E-10	4.6E-10	4.6E-11	2.9E-10	2.8E-09
Phenanthrene	85-01-8	29	0	1.1E-10	1.6E-10	5.6E-11	3.8E-10	7.2E-10
Phenanthrene, 1-methyl	832-69-9	35	1.1E-11	6.0E-11	4.6E-11	4.7E-11	1.5E-10	1.8E-10
Phenanthrene, 2-methyl-	2531-84-2	34	0	7.3E-11	6.7E-11	5.5E-11	2.0E-10	2.7E-10

Chemical	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Phenanthrene, 3-methyl	832-71-3	3	0	2.6E-11	1.0E-10	0	1.9E-10	5.3E-10
N-Phenylbenzamide	93-98-1	8	0	1.7E-10	3.3E-10	0	7.9E-10	1.2E-09
Phthalimide	85-41-6	26	0	1.1E-09	2.5E-09	1.5E-11	6.1E-09	1.1E-08
Pyrene	129-00-0	35	2.7E-10	1.4E-09	9.4E-10	1.3E-09	3.4E-09	3.8E-09
Pyridine, 2-(4-methylphenyl)-	4467-06-5	14	0	5.3E-11	1.0E-10	0	2.3E-10	4.6E-10
Triethylene glycol monobutyl ether	143-22-6	7	0	2.8E-10	6.8E-10	0	1.7E-09	3.0E-09
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	32	0	3.7E-11	4.5E-11	1.3E-11	1.1E-10	1.8E-10

[a] 35 field-specific $ADD_{der\text{-}field}$ are included in the table. $ADD_{der\text{-}field}$ was calculated from field-specific average concentrations ($C_{der\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial sweat extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-261. Field-Specific Average Dermal Daily Dose[a] for Chronic Non-Cancer Hazard ($ADD_{der\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related General Chemicals**[b]—Combined Gender **Spectators Third Trimester Fetus<0 Years**

Chemical	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Acenaphthylene	208-96-8	10	0	2.4E-12	4.1E-12	0	9.7E-12	1.5E-11
Aniline	62-53-3	4	0	7.6E-11	2.3E-10	0	5.8E-10	1.1E-09
Anthracene	120-12-7	20	0	2.6E-11	3.4E-11	1.8E-11	6.5E-11	1.7E-10
Anthracene, 2-methyl-	613-12-7	35	9.1E-12	3.8E-11	3.1E-11	2.5E-11	8.7E-11	1.5E-10
Anthracene, 9,10-diphenyl-	1499-10-1	5	0	5.1E-12	1.4E-11	0	3.1E-11	7.0E-11
Anthracene, 9-phenyl	602-55-1	9	0	1.3E-11	2.9E-11	0	7.2E-11	1.3E-10
Benz[a]anthracene	56-55-3	31	0	1.0E-10	1.2E-10	5.5E-11	2.9E-10	5.5E-10
Benzene, n-butyl-	104-51-8	1	0	1.6E-13	9.2E-13	0	0	5.4E-12
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	32	0	7.0E-09	1.1E-08	2.9E-09	2.2E-08	6.0E-08
Benzo[b]fluoranthene	205-99-2	34	0	1.5E-10	1.3E-10	1.2E-10	3.7E-10	5.7E-10
7H-Benzo[c]fluorene	205-12-9	26	0	1.3E-11	1.6E-11	6.6E-12	4.1E-11	6.8E-11
Benzo[k]fluoranthene	207-08-9	29	0	6.4E-11	6.8E-11	3.9E-11	2.1E-10	2.6E-10
Benzothiazole	95-16-9	35	1.9E-08	8.4E-08	4.3E-08	7.0E-08	1.6E-07	1.9E-07
Benzothiazole, 2-phenyl-	883-93-2	35	6.0E-10	2.0E-09	1.6E-09	1.4E-09	5.5E-09	8.0E-09
1,3-Benzothiazole-2-thiol	149-30-4	1	0	5.6E-10	3.3E-09	0	0	1.9E-08
Benzothiazolone	934-34-9	35	5.0E-08	2.3E-07	7.5E-08	2.6E-07	3.3E-07	3.3E-07

Chemical	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Benzyl butyl phthalate	85-68-7	35	6.5E-11	9.5E-10	6.8E-10	8.1E-10	2.4E-09	2.7E-09
Cyclohexyl isothiocyanate	1122-82-3	1	0	3.5E-12	2.1E-11	0	0	1.2E-10
Dibenz[a,h]anthracene	53-70-3	14	0	3.8E-11	7.0E-11	0	1.9E-10	2.9E-10
Dibenzothiophene	132-65-0	20	0	2.3E-11	2.8E-11	1.9E-11	6.3E-11	1.4E-10
Diethyl Phthalate	84-66-2	5	0	1.7E-10	5.2E-10	0	9.6E-10	2.6E-09
Diisobutyl Phthalate	84-69-5	28	0	1.5E-10	2.5E-10	9.7E-11	3.8E-10	1.4E-09
Diisooctylphthalate	27554-26-3	35	4.1E-11	4.8E-09	3.3E-09	4.1E-09	1.2E-08	1.4E-08
Di-n-octyl phthalate	117-84-0	33	0	1.0E-09	1.4E-09	5.7E-10	3.5E-09	6.9E-09
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	4	0	9.0E-13	2.7E-12	0	7.0E-12	1.2E-11
3,5-Di-tert-butyl-4-hydroxybenzaldehyde	1620-98-0	25	0	4.5E-09	1.2E-08	1.0E-09	1.2E-08	6.7E-08
Fluoranthene	206-44-0	35	1.3E-10	8.0E-10	6.2E-10	5.6E-10	2.1E-09	2.2E-09
Fluorene	86-73-7	6	0	3.4E-12	1.0E-11	0	1.4E-11	5.8E-11
Hexanoic Acid, 2-ethyl	149-57-5	1	0	3.9E-12	2.3E-11	0	0	1.3E-10
1-Hydroxypyrene	5315-79-7	1	0	2.2E-10	1.3E-09	0	0	7.8E-09
2-(Methylthio)benzothiazole	615-22-5	9	0	3.1E-09	6.8E-09	0	1.4E-08	3.1E-08
Naphthalene	91-20-3	2	0	4.9E-12	2.0E-11	0	2.5E-11	9.0E-11
Naphthalene, 1,2-dimethyl-	573-98-8	1	0	3.5E-13	2.1E-12	0	0	1.2E-11
Naphthalene, 1,6-dimethyl-	575-43-9	6	0	3.7E-12	8.7E-12	0	2.6E-11	2.7E-11
Naphthalene, 1-methyl-	90-12-0	1	0	7.8E-13	4.6E-12	0	0	2.7E-11
Naphthalene, 2-(bromomethyl)-	939-26-4	33	0	1.4E-10	1.2E-10	8.9E-11	3.4E-10	4.5E-10
Naphthalene, 2,3-dimethyl-	581-40-8	33	0	4.3E-11	3.8E-11	2.6E-11	1.2E-10	1.7E-10
Naphthalene, 2-methyl	91-57-6	1	0	7.6E-13	4.5E-12	0	0	2.6E-11
1-Octadecene	112-88-9	27	0	2.5E-10	6.9E-10	6.8E-11	4.3E-10	4.1E-09
Phenanthrene	85-01-8	29	0	1.7E-10	2.3E-10	8.3E-11	5.6E-10	1.1E-09
Phenanthrene, 1-methyl	832-69-9	35	1.7E-11	8.9E-11	6.8E-11	7.0E-11	2.2E-10	2.7E-10
Phenanthrene, 2-methyl-	2531-84-2	34	0	1.1E-10	1.0E-10	8.2E-11	3.0E-10	4.1E-10
Phenanthrene, 3-methyl	832-71-3	3	0	3.9E-11	1.5E-10	0	2.8E-10	7.9E-10
N-Phenylbenzamide	93-98-1	8	0	2.5E-10	5.0E-10	0	1.2E-09	1.8E-09
Phthalimide	85-41-6	26	0	1.6E-09	3.7E-09	2.2E-11	9.1E-09	1.6E-08
Pyrene	129-00-0	35	4.0E-10	2.2E-09	1.4E-09	1.9E-09	5.0E-09	5.7E-09
Pyridine, 2-(4-methylphenyl)-	4467-06-5	14	0	7.9E-11	1.5E-10	0	3.4E-10	6.9E-10
Triethylene glycol monobutyl ether	143-22-6	7	0	4.1E-10	1.0E-09	0	2.6E-09	4.5E-09

Chemical	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	32	0	5.5E-11	6.7E-11	2.0E-11	1.6E-10	2.7E-10

[a] 35 field-specific $ADD_{der\text{-}field}$ are included in the table. $ADD_{der\text{-}field}$ was calculated from field-specific average concentrations ($C_{der\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial sweat extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-262. Field-Specific Average Dermal Daily Dose[a] for Chronic Non-Cancer Hazard ($ADD_{der\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related General Chemicals**[b]—Combined Gender **Spectators 0<2 Years**

Chemical	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Acenaphthylene	208-96-8	10	0	1.3E-11	2.2E-11	0	5.2E-11	7.9E-11
Aniline	62-53-3	4	0	4.1E-10	1.3E-09	0	3.1E-09	6.0E-09
Anthracene	120-12-7	20	0	1.4E-10	1.8E-10	9.6E-11	3.5E-10	9.4E-10
Anthracene, 2-methyl-	613-12-7	35	4.9E-11	2.0E-10	1.6E-10	1.3E-10	4.7E-10	7.9E-10
Anthracene, 9,10-diphenyl-	1499-10-1	5	0	2.8E-11	7.8E-11	0	1.7E-10	3.8E-10
Anthracene, 9-phenyl	602-55-1	9	0	6.9E-11	1.5E-10	0	3.8E-10	6.8E-10
Benz[a]anthracene	56-55-3	31	0	5.6E-10	6.4E-10	2.9E-10	1.6E-09	3.0E-09
Benzene, n-butyl-	104-51-8	1	0	8.3E-13	4.9E-12	0	0	2.9E-11
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	32	0	3.8E-08	6.0E-08	1.6E-08	1.2E-07	3.2E-07
Benzo[b]fluoranthene	205-99-2	34	0	7.9E-10	7.0E-10	6.2E-10	2.0E-09	3.1E-09
7H-Benzo[c]fluorene	205-12-9	26	0	6.9E-11	8.7E-11	3.5E-11	2.2E-10	3.6E-10
Benzo[k]fluoranthene	207-08-9	29	0	3.4E-10	3.6E-10	2.1E-10	1.1E-09	1.4E-09
Benzothiazole	95-16-9	35	1.0E-07	4.5E-07	2.3E-07	3.8E-07	8.8E-07	1.0E-06
Benzothiazole, 2-phenyl-	883-93-2	35	3.2E-09	1.1E-08	8.6E-09	7.8E-09	2.9E-08	4.3E-08
1,3-Benzothiazole-2-thiol	149-30-4	1	0	3.0E-09	1.8E-08	0	0	1.0E-07
Benzothiazolone	934-34-9	35	2.7E-07	1.3E-06	4.0E-07	1.4E-06	1.8E-06	1.8E-06
Benzyl butyl phthalate	85-68-7	35	3.5E-10	5.1E-09	3.6E-09	4.3E-09	1.3E-08	1.5E-08
Cyclohexyl isothiocyanate	1122-82-3	1	0	1.9E-11	1.1E-10	0	0	6.6E-10
Dibenz[a,h]anthracene	53-70-3	14	0	2.0E-10	3.7E-10	0	1.0E-09	1.6E-09
Dibenzothiophene	132-65-0	20	0	1.2E-10	1.5E-10	1.0E-10	3.4E-10	7.3E-10
Diethyl Phthalate	84-66-2	5	0	9.3E-10	2.8E-09	0	5.1E-09	1.4E-08
Diisobutyl Phthalate	84-69-5	28	0	7.8E-10	1.3E-09	5.2E-10	2.0E-09	7.7E-09

Chemical	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Diisooctylphthalate	27554-26-3	35	2.2E-10	2.6E-08	1.8E-08	2.2E-08	6.4E-08	7.4E-08
Di-n-octyl phthalate	117-84-0	33	0	5.5E-09	7.7E-09	3.0E-09	1.9E-08	3.7E-08
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	4	0	4.8E-12	1.4E-11	0	3.7E-11	6.3E-11
3,5-Di-tert-butyl-4-hydroxybenzaldehyde	1620-98-0	25	0	2.4E-08	6.2E-08	5.5E-09	6.5E-08	3.6E-07
Fluoranthene	206-44-0	35	6.9E-10	4.3E-09	3.3E-09	3.0E-09	1.1E-08	1.2E-08
Fluorene	86-73-7	6	0	1.8E-11	5.6E-11	0	7.7E-11	3.1E-10
Hexanoic Acid, 2-ethyl	149-57-5	1	0	2.1E-11	1.2E-10	0	0	7.2E-10
1-Hydroxypyrene	5315-79-7	1	0	1.2E-09	7.1E-09	0	0	4.2E-08
2-(Methylthio)benzothiazole	615-22-5	9	0	1.6E-08	3.6E-08	0	7.7E-08	1.7E-07
Naphthalene	91-20-3	2	0	2.6E-11	1.1E-10	0	1.3E-10	4.8E-10
Naphthalene, 1,2-dimethyl-	573-98-8	1	0	1.9E-12	1.1E-11	0	0	6.5E-11
Naphthalene, 1,6-dimethyl-	575-43-9	6	0	2.0E-11	4.7E-11	0	1.4E-10	1.5E-10
Naphthalene, 1-methyl-	90-12-0	1	0	4.2E-12	2.5E-11	0	0	1.5E-10
Naphthalene, 2-(bromomethyl)-	939-26-4	33	0	7.7E-10	6.2E-10	4.8E-10	1.8E-09	2.4E-09
Naphthalene, 2,3-dimethyl-	581-40-8	33	0	2.3E-10	2.0E-10	1.4E-10	6.6E-10	9.2E-10
Naphthalene, 2-methyl	91-57-6	1	0	4.1E-12	2.4E-11	0	0	1.4E-10
1-Octadecene	112-88-9	27	0	1.3E-09	3.7E-09	3.7E-10	2.3E-09	2.2E-08
Phenanthrene	85-01-8	29	0	9.1E-10	1.2E-09	4.4E-10	3.0E-09	5.7E-09
Phenanthrene, 1-methyl	832-69-9	35	8.9E-11	4.8E-10	3.6E-10	3.8E-10	1.2E-09	1.5E-09
Phenanthrene, 2-methyl-	2531-84-2	34	0	5.8E-10	5.4E-10	4.4E-10	1.6E-09	2.2E-09
Phenanthrene, 3-methyl	832-71-3	3	0	2.1E-10	7.9E-10	0	1.5E-09	4.2E-09
N-Phenylbenzamide	93-98-1	8	0	1.3E-09	2.7E-09	0	6.3E-09	9.5E-09
Phthalimide	85-41-6	26	0	8.6E-09	2.0E-08	1.2E-10	4.9E-08	8.6E-08
Pyrene	129-00-0	35	2.1E-09	1.2E-08	7.5E-09	1.0E-08	2.7E-08	3.1E-08
Pyridine, 2-(4-methylphenyl)-	4467-06-5	14	0	4.3E-10	8.1E-10	0	1.8E-09	3.7E-09
Triethylene glycol monobutyl ether	143-22-6	7	0	2.2E-09	5.4E-09	0	1.4E-08	2.4E-08
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	32	0	3.0E-10	3.6E-10	1.1E-10	8.8E-10	1.4E-09

[a] 35 field-specific $ADD_{der\text{-}field}$ are included in the table. $ADD_{der\text{-}field}$ was calculated from field-specific average concentrations ($C_{der\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial sweat extracts of crumb rubber samples from an individual field.

[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.

CASRN: Chemical Abstracts Service Registry Number

Values are rounded to two significant figures.

Table F-263. Field-Specific Average Dermal Daily Dose[a] for Chronic Non-Cancer Hazard ($ADD_{der\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related General Chemicals**[b]—Combined Gender **Spectators 2<6 Years**

Chemical	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Acenaphthylene	208-96-8	10	0	9.3E-12	1.6E-11	0	3.8E-11	5.8E-11
Aniline	62-53-3	4	0	3.0E-10	9.3E-10	0	2.3E-09	4.4E-09
Anthracene	120-12-7	20	0	1.0E-10	1.3E-10	7.0E-11	2.6E-10	6.9E-10
Anthracene, 2-methyl-	613-12-7	35	3.6E-11	1.5E-10	1.2E-10	9.8E-11	3.4E-10	5.8E-10
Anthracene, 9,10-diphenyl-	1499-10-1	5	0	2.0E-11	5.7E-11	0	1.2E-10	2.8E-10
Anthracene, 9-phenyl	602-55-1	9	0	5.0E-11	1.1E-10	0	2.8E-10	5.0E-10
Benz[a]anthracene	56-55-3	31	0	4.1E-10	4.7E-10	2.2E-10	1.1E-09	2.2E-09
Benzene, n-butyl-	104-51-8	1	0	6.1E-13	3.6E-12	0	0	2.1E-11
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	32	0	2.8E-08	4.4E-08	1.1E-08	8.5E-08	2.4E-07
Benzo[b]fluoranthene	205-99-2	34	0	5.8E-10	5.1E-10	4.6E-10	1.4E-09	2.2E-09
7H-Benzo[c]fluorene	205-12-9	26	0	5.1E-11	6.4E-11	2.6E-11	1.6E-10	2.7E-10
Benzo[k]fluoranthene	207-08-9	29	0	2.5E-10	2.7E-10	1.5E-10	8.2E-10	1.0E-09
Benzothiazole	95-16-9	35	7.6E-08	3.3E-07	1.7E-07	2.8E-07	6.5E-07	7.4E-07
Benzothiazole, 2-phenyl-	883-93-2	35	2.4E-09	8.0E-09	6.3E-09	5.7E-09	2.2E-08	3.1E-08
1,3-Benzothiazole-2-thiol	149-30-4	1	0	2.2E-09	1.3E-08	0	0	7.7E-08
Benzothiazolone	934-34-9	35	2.0E-07	9.3E-07	3.0E-07	1.0E-06	1.3E-06	1.3E-06
Benzyl butyl phthalate	85-68-7	35	2.6E-10	3.8E-09	2.7E-09	3.2E-09	9.3E-09	1.1E-08
Cyclohexyl isothiocyanate	1122-82-3	1	0	1.4E-11	8.2E-11	0	0	4.9E-10
Dibenz[a,h]anthracene	53-70-3	14	0	1.5E-10	2.7E-10	0	7.3E-10	1.1E-09
Dibenzothiophene	132-65-0	20	0	9.0E-11	1.1E-10	7.6E-11	2.5E-10	5.4E-10
Diethyl Phthalate	84-66-2	5	0	6.9E-10	2.0E-09	0	3.8E-09	1.0E-08
Diisobutyl Phthalate	84-69-5	28	0	5.7E-10	9.7E-10	3.8E-10	1.5E-09	5.6E-09
Diisooctylphthalate	27554-26-3	35	1.6E-10	1.9E-08	1.3E-08	1.6E-08	4.7E-08	5.4E-08
Di-n-octyl phthalate	117-84-0	33	0	4.0E-09	5.7E-09	2.2E-09	1.4E-08	2.7E-08
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	4	0	3.5E-12	1.0E-11	0	2.8E-11	4.6E-11
3,5-Di-tert-butyl-4-hydroxybenzaldehyde	1620-98-0	25	0	1.8E-08	4.5E-08	4.1E-09	4.8E-08	2.6E-07
Fluoranthene	206-44-0	35	5.1E-10	3.1E-09	2.5E-09	2.2E-09	8.1E-09	8.6E-09
Fluorene	86-73-7	6	0	1.3E-11	4.1E-11	0	5.6E-11	2.3E-10
Hexanoic Acid, 2-ethyl	149-57-5	1	0	1.5E-11	9.0E-11	0	0	5.3E-10
1-Hydroxypyrene	5315-79-7	1	0	8.8E-10	5.2E-09	0	0	3.1E-08

Chemical	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
2-(Methylthio)benzothiazole	615-22-5	9	0	1.2E-08	2.7E-08	0	5.6E-08	1.2E-07
Naphthalene	91-20-3	2	0	1.9E-11	8.0E-11	0	9.8E-11	3.5E-10
Naphthalene, 1,2-dimethyl-	573-98-8	1	0	1.4E-12	8.1E-12	0	0	4.8E-11
Naphthalene, 1,6-dimethyl-	575-43-9	6	0	1.4E-11	3.4E-11	0	1.0E-10	1.1E-10
Naphthalene, 1-methyl-	90-12-0	1	0	3.1E-12	1.8E-11	0	0	1.1E-10
Naphthalene, 2-(bromomethyl)-	939-26-4	33	0	5.7E-10	4.6E-10	3.5E-10	1.4E-09	1.8E-09
Naphthalene, 2,3-dimethyl-	581-40-8	33	0	1.7E-10	1.5E-10	1.0E-10	4.9E-10	6.8E-10
Naphthalene, 2-methyl	91-57-6	1	0	3.0E-12	1.8E-11	0	0	1.0E-10
1-Octadecene	112-88-9	27	0	9.7E-10	2.7E-09	2.7E-10	1.7E-09	1.6E-08
Phenanthrene	85-01-8	29	0	6.7E-10	9.1E-10	3.3E-10	2.2E-09	4.2E-09
Phenanthrene, 1-methyl	832-69-9	35	6.6E-11	3.5E-10	2.7E-10	2.8E-10	8.5E-10	1.1E-09
Phenanthrene, 2-methyl-	2531-84-2	34	0	4.3E-10	3.9E-10	3.2E-10	1.2E-09	1.6E-09
Phenanthrene, 3-methyl	832-71-3	3	0	1.6E-10	5.8E-10	0	1.1E-09	3.1E-09
N-Phenylbenzamide	93-98-1	8	0	9.7E-10	2.0E-09	0	4.7E-09	7.0E-09
Phthalimide	85-41-6	26	0	6.3E-09	1.5E-08	8.6E-11	3.6E-08	6.3E-08
Pyrene	129-00-0	35	1.6E-09	8.5E-09	5.5E-09	7.4E-09	2.0E-08	2.2E-08
Pyridine, 2-(4-methylphenyl)-	4467-06-5	14	0	3.1E-10	6.0E-10	0	1.3E-09	2.7E-09
Triethylene glycol monobutyl ether	143-22-6	7	0	1.6E-09	4.0E-09	0	1.0E-08	1.8E-08
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	32	0	2.2E-10	2.6E-10	7.8E-11	6.5E-10	1.1E-09

[a] 35 field-specific $ADD_{der\text{-}field}$ are included in the table. $ADD_{der\text{-}field}$ was calculated from field-specific average concentrations ($C_{der\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial sweat extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-264. Field-Specific Average Dermal Daily Dose[a] for Chronic Non-Cancer Hazard ($ADD_{der\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related General Chemicals**[b]—Combined Gender **Spectators 6<11 Years**

Chemical	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Acenaphthylene	208-96-8	10	0	8.4E-12	1.5E-11	0	3.5E-11	5.2E-11
Aniline	62-53-3	4	0	2.7E-10	8.4E-10	0	2.1E-09	4.0E-09
Anthracene	120-12-7	20	0	9.3E-11	1.2E-10	6.4E-11	2.3E-10	6.2E-10

Chemical	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Anthracene, 2-methyl-	613-12-7	35	3.2E-11	1.3E-10	1.1E-10	8.9E-11	3.1E-10	5.3E-10
Anthracene, 9,10-diphenyl-	1499-10-1	5	0	1.8E-11	5.2E-11	0	1.1E-10	2.5E-10
Anthracene, 9-phenyl	602-55-1	9	0	4.6E-11	1.0E-10	0	2.6E-10	4.6E-10
Benz[a]anthracene	56-55-3	31	0	3.7E-10	4.3E-10	2.0E-10	1.0E-09	2.0E-09
Benzene, n-butyl-	104-51-8	1	0	5.6E-13	3.3E-12	0	0	1.9E-11
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	32	0	2.5E-08	4.0E-08	1.0E-08	7.7E-08	2.2E-07
Benzo[b]fluoranthene	205-99-2	34	0	5.3E-10	4.6E-10	4.1E-10	1.3E-09	2.0E-09
7H-Benzo[c]fluorene	205-12-9	26	0	4.6E-11	5.8E-11	2.4E-11	1.5E-10	2.4E-10
Benzo[k]fluoranthene	207-08-9	29	0	2.3E-10	2.4E-10	1.4E-10	7.5E-10	9.3E-10
Benzothiazole	95-16-9	35	6.9E-08	3.0E-07	1.5E-07	2.5E-07	5.9E-07	6.7E-07
Benzothiazole, 2-phenyl-	883-93-2	35	2.1E-09	7.3E-09	5.7E-09	5.2E-09	2.0E-08	2.9E-08
1,3-Benzothiazole-2-thiol	149-30-4	1	0	2.0E-09	1.2E-08	0	0	7.0E-08
Benzothiazolone	934-34-9	35	1.8E-07	8.4E-07	2.7E-07	9.4E-07	1.2E-06	1.2E-06
Benzyl butyl phthalate	85-68-7	35	2.3E-10	3.4E-09	2.4E-09	2.9E-09	8.5E-09	9.7E-09
Cyclohexyl isothiocyanate	1122-82-3	1	0	1.3E-11	7.5E-11	0	0	4.4E-10
Dibenz[a,h]anthracene	53-70-3	14	0	1.4E-10	2.5E-10	0	6.7E-10	1.0E-09
Dibenzothiophene	132-65-0	20	0	8.2E-11	1.0E-10	6.9E-11	2.3E-10	4.9E-10
Diethyl Phthalate	84-66-2	5	0	6.2E-10	1.8E-09	0	3.4E-09	9.4E-09
Diisobutyl Phthalate	84-69-5	28	0	5.2E-10	8.8E-10	3.5E-10	1.4E-09	5.1E-09
Diisooctylphthalate	27554-26-3	35	1.5E-10	1.7E-08	1.2E-08	1.5E-08	4.2E-08	4.9E-08
Di-n-octyl phthalate	117-84-0	33	0	3.6E-09	5.1E-09	2.0E-09	1.3E-08	2.5E-08
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	4	0	3.2E-12	9.5E-12	0	2.5E-11	4.2E-11
3,5-Di-tert-butyl-4-hydroxybenzaldehyde	1620-98-0	25	0	1.6E-08	4.1E-08	3.7E-09	4.3E-08	2.4E-07
Fluoranthene	206-44-0	35	4.6E-10	2.8E-09	2.2E-09	2.0E-09	7.4E-09	7.8E-09
Fluorene	86-73-7	6	0	1.2E-11	3.7E-11	0	5.1E-11	2.1E-10
Hexanoic Acid, 2-ethyl	149-57-5	1	0	1.4E-11	8.2E-11	0	0	4.8E-10
1-Hydroxypyrene	5315-79-7	1	0	8.0E-10	4.7E-09	0	0	2.8E-08
2-(Methylthio)benzothiazole	615-22-5	9	0	1.1E-08	2.4E-08	0	5.1E-08	1.1E-07
Naphthalene	91-20-3	2	0	1.8E-11	7.3E-11	0	8.9E-11	3.2E-10
Naphthalene, 1,2-dimethyl-	573-98-8	1	0	1.2E-12	7.4E-12	0	0	4.4E-11
Naphthalene, 1,6-dimethyl-	575-43-9	6	0	1.3E-11	3.1E-11	0	9.5E-11	9.7E-11
Naphthalene, 1-methyl-	90-12-0	1	0	2.8E-12	1.7E-11	0	0	9.8E-11

Chemical	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Naphthalene, 2-(bromomethyl)-	939-26-4	33	0	5.2E-10	4.2E-10	3.2E-10	1.2E-09	1.6E-09
Naphthalene, 2,3-dimethyl-	581-40-8	33	0	1.5E-10	1.4E-10	9.1E-11	4.4E-10	6.2E-10
Naphthalene, 2-methyl	91-57-6	1	0	2.7E-12	1.6E-11	0	0	9.5E-11
1-Octadecene	112-88-9	27	0	8.8E-10	2.5E-09	2.4E-10	1.5E-09	1.5E-08
Phenanthrene	85-01-8	29	0	6.1E-10	8.2E-10	3.0E-10	2.0E-09	3.8E-09
Phenanthrene, 1-methyl	832-69-9	35	5.9E-11	3.2E-10	2.4E-10	2.5E-10	7.7E-10	9.7E-10
Phenanthrene, 2-methyl-	2531-84-2	34	0	3.9E-10	3.6E-10	2.9E-10	1.1E-09	1.4E-09
Phenanthrene, 3-methyl	832-71-3	3	0	1.4E-10	5.3E-10	0	1.0E-09	2.8E-09
N-Phenylbenzamide	93-98-1	8	0	8.8E-10	1.8E-09	0	4.2E-09	6.4E-09
Phthalimide	85-41-6	26	0	5.7E-09	1.3E-08	7.8E-11	3.3E-08	5.7E-08
Pyrene	129-00-0	35	1.4E-09	7.7E-09	5.0E-09	6.7E-09	1.8E-08	2.0E-08
Pyridine, 2-(4-methylphenyl)-	4467-06-5	14	0	2.8E-10	5.4E-10	0	1.2E-09	2.5E-09
Triethylene glycol monobutyl ether	143-22-6	7	0	1.5E-09	3.6E-09	0	9.3E-09	1.6E-08
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	32	0	2.0E-10	2.4E-10	7.0E-11	5.9E-10	9.5E-10

[a] 35 field-specific $ADD_{der\text{-}field}$ are included in the table. $ADD_{der\text{-}field}$ was calculated from field-specific average concentrations ($C_{der\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial sweat extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-265. Field-Specific Average Dermal Daily Dose[a] for Chronic Non-Cancer Hazard ($ADD_{der\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related General Chemicals**[b]—Combined Gender **Spectators 11<16 Years**

Chemical	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Acenaphthylene	208-96-8	10	0	7.2E-12	1.2E-11	0	3.0E-11	4.5E-11
Aniline	62-53-3	4	0	2.3E-10	7.2E-10	0	1.8E-09	3.4E-09
Anthracene	120-12-7	20	0	8.0E-11	1.0E-10	5.5E-11	2.0E-10	5.3E-10
Anthracene, 2-methyl-	613-12-7	35	2.8E-11	1.2E-10	9.4E-11	7.6E-11	2.7E-10	4.5E-10
Anthracene, 9,10-diphenyl-	1499-10-1	5	0	1.6E-11	4.4E-11	0	9.6E-11	2.2E-10
Anthracene, 9-phenyl	602-55-1	9	0	3.9E-11	8.8E-11	0	2.2E-10	3.9E-10
Benz[a]anthracene	56-55-3	31	0	3.2E-10	3.7E-10	1.7E-10	8.9E-10	1.7E-09
Benzene, n-butyl-	104-51-8	1	0	4.8E-13	2.8E-12	0	0	1.7E-11
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	32	0	2.1E-08	3.4E-08	8.9E-09	6.6E-08	1.8E-07

Chemical	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Benzo[b]fluoranthene	205-99-2	34	0	4.5E-10	4.0E-10	3.5E-10	1.1E-09	1.7E-09
7H-Benzo[c]fluorene	205-12-9	26	0	3.9E-11	5.0E-11	2.0E-11	1.3E-10	2.1E-10
Benzo[k]fluoranthene	207-08-9	29	0	2.0E-10	2.1E-10	1.2E-10	6.4E-10	7.9E-10
Benzothiazole	95-16-9	35	5.9E-08	2.6E-07	1.3E-07	2.1E-07	5.0E-07	5.7E-07
Benzothiazole, 2-phenyl-	883-93-2	35	1.8E-09	6.2E-09	4.9E-09	4.4E-09	1.7E-08	2.4E-08
1,3-Benzothiazole-2-thiol	149-30-4	1	0	1.7E-09	1.0E-08	0	0	6.0E-08
Benzothiazolone	934-34-9	35	1.5E-07	7.2E-07	2.3E-07	8.1E-07	1.0E-06	1.0E-06
Benzyl butyl phthalate	85-68-7	35	2.0E-10	2.9E-09	2.1E-09	2.5E-09	7.3E-09	8.3E-09
Cyclohexyl isothiocyanate	1122-82-3	1	0	1.1E-11	6.4E-11	0	0	3.8E-10
Dibenz[a,h]anthracene	53-70-3	14	0	1.2E-10	2.1E-10	0	5.7E-10	8.9E-10
Dibenzothiophene	132-65-0	20	0	7.0E-11	8.7E-11	5.9E-11	1.9E-10	4.2E-10
Diethyl Phthalate	84-66-2	5	0	5.3E-10	1.6E-09	0	2.9E-09	8.0E-09
Diisobutyl Phthalate	84-69-5	28	0	4.5E-10	7.5E-10	3.0E-10	1.2E-09	4.4E-09
Diisooctylphthalate	27554-26-3	35	1.3E-10	1.5E-08	1.0E-08	1.3E-08	3.6E-08	4.2E-08
Di-n-octyl phthalate	117-84-0	33	0	3.1E-09	4.4E-09	1.7E-09	1.1E-08	2.1E-08
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	4	0	2.7E-12	8.1E-12	0	2.1E-11	3.6E-11
3,5-Di-tert-butyl-4-hydroxybenzaldehyde	1620-98-0	25	0	1.4E-08	3.5E-08	3.2E-09	3.7E-08	2.0E-07
Fluoranthene	206-44-0	35	4.0E-10	2.4E-09	1.9E-09	1.7E-09	6.3E-09	6.7E-09
Fluorene	86-73-7	6	0	1.0E-11	3.2E-11	0	4.4E-11	1.8E-10
Hexanoic Acid, 2-ethyl	149-57-5	1	0	1.2E-11	7.0E-11	0	0	4.1E-10
1-Hydroxypyrene	5315-79-7	1	0	6.9E-10	4.1E-09	0	0	2.4E-08
2-(Methylthio)benzothiazole	615-22-5	9	0	9.4E-09	2.1E-08	0	4.4E-08	9.4E-08
Naphthalene	91-20-3	2	0	1.5E-11	6.2E-11	0	7.6E-11	2.7E-10
Naphthalene, 1,2-dimethyl-	573-98-8	1	0	1.1E-12	6.3E-12	0	0	3.7E-11
Naphthalene, 1,6-dimethyl-	575-43-9	6	0	1.1E-11	2.7E-11	0	8.1E-11	8.3E-11
Naphthalene, 1-methyl-	90-12-0	1	0	2.4E-12	1.4E-11	0	0	8.4E-11
Naphthalene, 2-(bromomethyl)-	939-26-4	33	0	4.4E-10	3.6E-10	2.7E-10	1.1E-09	1.4E-09
Naphthalene, 2,3-dimethyl-	581-40-8	33	0	1.3E-10	1.2E-10	7.8E-11	3.8E-10	5.3E-10
Naphthalene, 2-methyl	91-57-6	1	0	2.3E-12	1.4E-11	0	0	8.1E-11
1-Octadecene	112-88-9	27	0	7.6E-10	2.1E-09	2.1E-10	1.3E-09	1.3E-08
Phenanthrene	85-01-8	29	0	5.2E-10	7.1E-10	2.5E-10	1.7E-09	3.3E-09
Phenanthrene, 1-methyl	832-69-9	35	5.1E-11	2.7E-10	2.1E-10	2.1E-10	6.6E-10	8.3E-10
Phenanthrene, 2-methyl-	2531-84-2	34	0	3.3E-10	3.1E-10	2.5E-10	9.2E-10	1.2E-09

Chemical	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Phenanthrene, 3-methyl	832-71-3	3	0	1.2E-10	4.5E-10	0	8.6E-10	2.4E-09
N-Phenylbenzamide	93-98-1	8	0	7.5E-10	1.5E-09	0	3.6E-09	5.5E-09
Phthalimide	85-41-6	26	0	4.9E-09	1.1E-08	6.7E-11	2.8E-08	4.9E-08
Pyrene	129-00-0	35	1.2E-09	6.6E-09	4.3E-09	5.7E-09	1.5E-08	1.7E-08
Pyridine, 2-(4-methylphenyl)-	4467-06-5	14	0	2.4E-10	4.6E-10	0	1.0E-09	2.1E-09
Triethylene glycol monobutyl ether	143-22-6	7	0	1.3E-09	3.1E-09	0	7.9E-09	1.4E-08
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	32	0	1.7E-10	2.0E-10	6.0E-11	5.0E-10	8.2E-10

[a] 35 field-specific $ADD_{der\text{-}field}$ are included in the table. $ADD_{der\text{-}field}$ was calculated from field-specific average concentrations ($C_{der\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial sweat extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-266. Field-Specific Average Dermal Daily Dose[a] for Chronic Non-Cancer Hazard ($ADD_{der\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related General Chemicals**[b]—Combined Gender **Spectators 16<30 Years**

Chemical	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Acenaphthylene	208-96-8	10	0	3.2E-12	5.4E-12	0	1.3E-11	2.0E-11
Aniline	62-53-3	4	0	1.0E-10	3.1E-10	0	7.8E-10	1.5E-09
Anthracene	120-12-7	20	0	3.5E-11	4.6E-11	2.4E-11	8.7E-11	2.3E-10
Anthracene, 2-methyl-	613-12-7	35	1.2E-11	5.0E-11	4.1E-11	3.3E-11	1.2E-10	2.0E-10
Anthracene, 9,10-diphenyl-	1499-10-1	5	0	6.9E-12	1.9E-11	0	4.2E-11	9.4E-11
Anthracene, 9-phenyl	602-55-1	9	0	1.7E-11	3.9E-11	0	9.6E-11	1.7E-10
Benz[a]anthracene	56-55-3	31	0	1.4E-10	1.6E-10	7.3E-11	3.9E-10	7.4E-10
Benzene, n-butyl-	104-51-8	1	0	2.1E-13	1.2E-12	0	0	7.3E-12
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	32	0	9.4E-09	1.5E-08	3.9E-09	2.9E-08	8.1E-08
Benzo[b]fluoranthene	205-99-2	34	0	2.0E-10	1.7E-10	1.6E-10	4.9E-10	7.6E-10
7H-Benzo[c]fluorene	205-12-9	26	0	1.7E-11	2.2E-11	8.9E-12	5.5E-11	9.1E-11
Benzo[k]fluoranthene	207-08-9	29	0	8.6E-11	9.1E-11	5.2E-11	2.8E-10	3.5E-10
Benzothiazole	95-16-9	35	2.6E-08	1.1E-07	5.8E-08	9.4E-08	2.2E-07	2.5E-07
Benzothiazole, 2-phenyl-	883-93-2	35	8.0E-10	2.7E-09	2.1E-09	1.9E-09	7.3E-09	1.1E-08
1,3-Benzothiazole-2-thiol	149-30-4	1	0	7.4E-10	4.4E-09	0	0	2.6E-08
Benzothiazolone	934-34-9	35	6.8E-08	3.1E-07	1.0E-07	3.5E-07	4.4E-07	4.5E-07

Chemical	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Benzyl butyl phthalate	85-68-7	35	8.7E-11	1.3E-09	9.1E-10	1.1E-09	3.2E-09	3.6E-09
Cyclohexyl isothiocyanate	1122-82-3	1	0	4.7E-12	2.8E-11	0	0	1.7E-10
Dibenz[a,h]anthracene	53-70-3	14	0	5.1E-11	9.3E-11	0	2.5E-10	3.9E-10
Dibenzothiophene	132-65-0	20	0	3.1E-11	3.8E-11	2.6E-11	8.5E-11	1.8E-10
Diethyl Phthalate	84-66-2	5	0	2.3E-10	6.9E-10	0	1.3E-09	3.5E-09
Diisobutyl Phthalate	84-69-5	28	0	2.0E-10	3.3E-10	1.3E-10	5.1E-10	1.9E-09
Diisooctylphthalate	27554-26-3	35	5.5E-11	6.4E-09	4.5E-09	5.5E-09	1.6E-08	1.8E-08
Di-n-octyl phthalate	117-84-0	33	0	1.4E-09	1.9E-09	7.6E-10	4.7E-09	9.3E-09
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	4	0	1.2E-12	3.6E-12	0	9.4E-12	1.6E-11
3,5-Di-tert-butyl-4-hydroxybenzaldehyde	1620-98-0	25	0	6.0E-09	1.5E-08	1.4E-09	1.6E-08	9.0E-08
Fluoranthene	206-44-0	35	1.7E-10	1.1E-09	8.4E-10	7.5E-10	2.8E-09	2.9E-09
Fluorene	86-73-7	6	0	4.5E-12	1.4E-11	0	1.9E-11	7.7E-11
Hexanoic Acid, 2-ethyl	149-57-5	1	0	5.2E-12	3.1E-11	0	0	1.8E-10
1-Hydroxypyrene	5315-79-7	1	0	3.0E-10	1.8E-09	0	0	1.1E-08
2-(Methylthio)benzothiazole	615-22-5	9	0	4.1E-09	9.1E-09	0	1.9E-08	4.1E-08
Naphthalene	91-20-3	2	0	6.6E-12	2.7E-11	0	3.3E-11	1.2E-10
Naphthalene, 1,2-dimethyl-	573-98-8	1	0	4.7E-13	2.8E-12	0	0	1.6E-11
Naphthalene, 1,6-dimethyl-	575-43-9	6	0	4.9E-12	1.2E-11	0	3.5E-11	3.6E-11
Naphthalene, 1-methyl-	90-12-0	1	0	1.0E-12	6.2E-12	0	0	3.7E-11
Naphthalene, 2-(bromomethyl)-	939-26-4	33	0	1.9E-10	1.6E-10	1.2E-10	4.6E-10	6.1E-10
Naphthalene, 2,3-dimethyl-	581-40-8	33	0	5.7E-11	5.1E-11	3.4E-11	1.7E-10	2.3E-10
Naphthalene, 2-methyl	91-57-6	1	0	1.0E-12	6.0E-12	0	0	3.6E-11
1-Octadecene	112-88-9	27	0	3.3E-10	9.2E-10	9.2E-11	5.8E-10	5.5E-09
Phenanthrene	85-01-8	29	0	2.3E-10	3.1E-10	1.1E-10	7.6E-10	1.4E-09
Phenanthrene, 1-methyl	832-69-9	35	2.2E-11	1.2E-10	9.1E-11	9.4E-11	2.9E-10	3.7E-10
Phenanthrene, 2-methyl-	2531-84-2	34	0	1.4E-10	1.3E-10	1.1E-10	4.0E-10	5.4E-10
Phenanthrene, 3-methyl	832-71-3	3	0	5.3E-11	2.0E-10	0	3.8E-10	1.1E-09
N-Phenylbenzamide	93-98-1	8	0	3.3E-10	6.6E-10	0	1.6E-09	2.4E-09
Phthalimide	85-41-6	26	0	2.1E-09	4.9E-09	2.9E-11	1.2E-08	2.1E-08
Pyrene	129-00-0	35	5.3E-10	2.9E-09	1.9E-09	2.5E-09	6.8E-09	7.6E-09
Pyridine, 2-(4-methylphenyl)-	4467-06-5	14	0	1.1E-10	2.0E-10	0	4.5E-10	9.2E-10
Triethylene glycol monobutyl ether	143-22-6	7	0	5.5E-10	1.3E-09	0	3.5E-09	6.0E-09

Chemical	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	32	0	7.4E-11	8.9E-11	2.6E-11	2.2E-10	3.6E-10

[a] 35 field-specific $ADD_{der\text{-}field}$ are included in the table. $ADD_{der\text{-}field}$ was calculated from field-specific average concentrations ($C_{der\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial sweat extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-267. Field-Specific Average Dermal Daily Dose[a] for Chronic Non-Cancer Hazard ($ADD_{der\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related General Chemicals**[b]—Combined Gender **Spectators 30<40 Years**

Chemical	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Acenaphthylene	208-96-8	10	0	2.7E-12	4.7E-12	0	1.1E-11	1.7E-11
Aniline	62-53-3	4	0	8.7E-11	2.7E-10	0	6.7E-10	1.3E-09
Anthracene	120-12-7	20	0	3.0E-11	4.0E-11	2.1E-11	7.5E-11	2.0E-10
Anthracene, 2-methyl-	613-12-7	35	1.0E-11	4.4E-11	3.6E-11	2.9E-11	1.0E-10	1.7E-10
Anthracene, 9,10-diphenyl-	1499-10-1	5	0	6.0E-12	1.7E-11	0	3.6E-11	8.2E-11
Anthracene, 9-phenyl	602-55-1	9	0	1.5E-11	3.3E-11	0	8.3E-11	1.5E-10
Benz[a]anthracene	56-55-3	31	0	1.2E-10	1.4E-10	6.3E-11	3.4E-10	6.4E-10
Benzene, n-butyl-	104-51-8	1	0	1.8E-13	1.1E-12	0	0	6.3E-12
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	32	0	8.1E-09	1.3E-08	3.4E-09	2.5E-08	7.0E-08
Benzo[b]fluoranthene	205-99-2	34	0	1.7E-10	1.5E-10	1.3E-10	4.3E-10	6.6E-10
7H-Benzo[c]fluorene	205-12-9	26	0	1.5E-11	1.9E-11	7.7E-12	4.8E-11	7.9E-11
Benzo[k]fluoranthene	207-08-9	29	0	7.4E-11	7.9E-11	4.5E-11	2.4E-10	3.0E-10
Benzothiazole	95-16-9	35	2.2E-08	9.7E-08	5.0E-08	8.1E-08	1.9E-07	2.2E-07
Benzothiazole, 2-phenyl-	883-93-2	35	6.9E-10	2.4E-09	1.8E-09	1.7E-09	6.3E-09	9.2E-09
1,3-Benzothiazole-2-thiol	149-30-4	1	0	6.4E-10	3.8E-09	0	0	2.3E-08
Benzothiazolone	934-34-9	35	5.8E-08	2.7E-07	8.7E-08	3.1E-07	3.8E-07	3.9E-07
Benzyl butyl phthalate	85-68-7	35	7.5E-11	1.1E-09	7.8E-10	9.3E-10	2.7E-09	3.1E-09
Cyclohexyl isothiocyanate	1122-82-3	1	0	4.1E-12	2.4E-11	0	0	1.4E-10
Dibenz[a,h]anthracene	53-70-3	14	0	4.4E-11	8.1E-11	0	2.2E-10	3.4E-10
Dibenzothiophene	132-65-0	20	0	2.7E-11	3.3E-11	2.2E-11	7.3E-11	1.6E-10
Diethyl Phthalate	84-66-2	5	0	2.0E-10	6.0E-10	0	1.1E-09	3.0E-09
Diisobutyl Phthalate	84-69-5	28	0	1.7E-10	2.8E-10	1.1E-10	4.4E-10	1.7E-09

Chemical	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Diisooctylphthalate	27554-26-3	35	4.8E-11	5.6E-09	3.9E-09	4.8E-09	1.4E-08	1.6E-08
Di-n-octyl phthalate	117-84-0	33	0	1.2E-09	1.7E-09	6.6E-10	4.1E-09	8.0E-09
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	4	0	1.0E-12	3.1E-12	0	8.1E-12	1.4E-11
3,5-Di-tert-butyl-4-hydroxybenzaldehyde	1620-98-0	25	0	5.2E-09	1.3E-08	1.2E-09	1.4E-08	7.7E-08
Fluoranthene	206-44-0	35	1.5E-10	9.2E-10	7.2E-10	6.5E-10	2.4E-09	2.5E-09
Fluorene	86-73-7	6	0	3.9E-12	1.2E-11	0	1.7E-11	6.7E-11
Hexanoic Acid, 2-ethyl	149-57-5	1	0	4.5E-12	2.6E-11	0	0	1.6E-10
1-Hydroxypyrene	5315-79-7	1	0	2.6E-10	1.5E-09	0	0	9.1E-09
2-(Methylthio)benzothiazole	615-22-5	9	0	3.6E-09	7.9E-09	0	1.7E-08	3.6E-08
Naphthalene	91-20-3	2	0	5.7E-12	2.4E-11	0	2.9E-11	1.0E-10
Naphthalene, 1,2-dimethyl-	573-98-8	1	0	4.0E-13	2.4E-12	0	0	1.4E-11
Naphthalene, 1,6-dimethyl-	575-43-9	6	0	4.3E-12	1.0E-11	0	3.1E-11	3.1E-11
Naphthalene, 1-methyl-	90-12-0	1	0	9.0E-13	5.3E-12	0	0	3.2E-11
Naphthalene, 2-(bromomethyl)-	939-26-4	33	0	1.7E-10	1.3E-10	1.0E-10	4.0E-10	5.3E-10
Naphthalene, 2,3-dimethyl-	581-40-8	33	0	5.0E-11	4.4E-11	3.0E-11	1.4E-10	2.0E-10
Naphthalene, 2-methyl	91-57-6	1	0	8.8E-13	5.2E-12	0	0	3.1E-11
1-Octadecene	112-88-9	27	0	2.9E-10	7.9E-10	7.9E-11	5.0E-10	4.7E-09
Phenanthrene	85-01-8	29	0	2.0E-10	2.7E-10	9.6E-11	6.5E-10	1.2E-09
Phenanthrene, 1-methyl	832-69-9	35	1.9E-11	1.0E-10	7.9E-11	8.1E-11	2.5E-10	3.2E-10
Phenanthrene, 2-methyl-	2531-84-2	34	0	1.2E-10	1.2E-10	9.5E-11	3.5E-10	4.7E-10
Phenanthrene, 3-methyl	832-71-3	3	0	4.5E-11	1.7E-10	0	3.2E-10	9.2E-10
N-Phenylbenzamide	93-98-1	8	0	2.8E-10	5.7E-10	0	1.4E-09	2.1E-09
Phthalimide	85-41-6	26	0	1.9E-09	4.3E-09	2.5E-11	1.1E-08	1.8E-08
Pyrene	129-00-0	35	4.6E-10	2.5E-09	1.6E-09	2.2E-09	5.8E-09	6.6E-09
Pyridine, 2-(4-methylphenyl)-	4467-06-5	14	0	9.2E-11	1.8E-10	0	3.9E-10	8.0E-10
Triethylene glycol monobutyl ether	143-22-6	7	0	4.8E-10	1.2E-09	0	3.0E-09	5.2E-09
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	32	0	6.4E-11	7.7E-11	2.3E-11	1.9E-10	3.1E-10

[a] 35 field-specific $ADD_{der\text{-}field}$ are included in the table. $ADD_{der\text{-}field}$ was calculated from field-specific average concentrations ($C_{der\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial sweat extracts of crumb rubber samples from an individual field.

[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.

CASRN: Chemical Abstracts Service Registry Number

Values are rounded to two significant figures.

Table F-268. Field-Specific Average Dermal Daily Dose[a] for Chronic Non-Cancer Hazard ($ADD_{der\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related General Chemicals**[b]—Combined Gender **Spectators 40<50 Years**

Chemical	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Acenaphthylene	208-96-8	10	0	2.8E-12	4.7E-12	0	1.1E-11	1.7E-11
Aniline	62-53-3	4	0	8.8E-11	2.7E-10	0	6.8E-10	1.3E-09
Anthracene	120-12-7	20	0	3.1E-11	4.0E-11	2.1E-11	7.6E-11	2.0E-10
Anthracene, 2-methyl-	613-12-7	35	1.1E-11	4.4E-11	3.6E-11	2.9E-11	1.0E-10	1.7E-10
Anthracene, 9,10-diphenyl-	1499-10-1	5	0	6.0E-12	1.7E-11	0	3.7E-11	8.2E-11
Anthracene, 9-phenyl	602-55-1	9	0	1.5E-11	3.4E-11	0	8.4E-11	1.5E-10
Benz[a]anthracene	56-55-3	31	0	1.2E-10	1.4E-10	6.4E-11	3.4E-10	6.5E-10
Benzene, n-butyl-	104-51-8	1	0	1.8E-13	1.1E-12	0	0	6.4E-12
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	32	0	8.2E-09	1.3E-08	3.4E-09	2.5E-08	7.1E-08
Benzo[b]fluoranthene	205-99-2	34	0	1.7E-10	1.5E-10	1.4E-10	4.3E-10	6.7E-10
7H-Benzo[c]fluorene	205-12-9	26	0	1.5E-11	1.9E-11	7.7E-12	4.8E-11	7.9E-11
Benzo[k]fluoranthene	207-08-9	29	0	7.5E-11	7.9E-11	4.6E-11	2.4E-10	3.0E-10
Benzothiazole	95-16-9	35	2.3E-08	9.8E-08	5.0E-08	8.2E-08	1.9E-07	2.2E-07
Benzothiazole, 2-phenyl-	883-93-2	35	7.0E-10	2.4E-09	1.9E-09	1.7E-09	6.4E-09	9.3E-09
1,3-Benzothiazole-2-thiol	149-30-4	1	0	6.5E-10	3.8E-09	0	0	2.3E-08
Benzothiazolone	934-34-9	35	5.9E-08	2.7E-07	8.8E-08	3.1E-07	3.8E-07	3.9E-07
Benzyl butyl phthalate	85-68-7	35	7.6E-11	1.1E-09	7.9E-10	9.4E-10	2.8E-09	3.2E-09
Cyclohexyl isothiocyanate	1122-82-3	1	0	4.1E-12	2.4E-11	0	0	1.4E-10
Dibenz[a,h]anthracene	53-70-3	14	0	4.5E-11	8.1E-11	0	2.2E-10	3.4E-10
Dibenzothiophene	132-65-0	20	0	2.7E-11	3.3E-11	2.2E-11	7.4E-11	1.6E-10
Diethyl Phthalate	84-66-2	5	0	2.0E-10	6.0E-10	0	1.1E-09	3.1E-09
Diisobutyl Phthalate	84-69-5	28	0	1.7E-10	2.9E-10	1.1E-10	4.5E-10	1.7E-09
Diisooctylphthalate	27554-26-3	35	4.8E-11	5.6E-09	3.9E-09	4.8E-09	1.4E-08	1.6E-08
Di-n-octyl phthalate	117-84-0	33	0	1.2E-09	1.7E-09	6.6E-10	4.1E-09	8.1E-09
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	4	0	1.0E-12	3.1E-12	0	8.2E-12	1.4E-11
3,5-Di-tert-butyl-4-hydroxybenzaldehyde	1620-98-0	25	0	5.2E-09	1.3E-08	1.2E-09	1.4E-08	7.8E-08
Fluoranthene	206-44-0	35	1.5E-10	9.3E-10	7.3E-10	6.5E-10	2.4E-09	2.6E-09
Fluorene	86-73-7	6	0	3.9E-12	1.2E-11	0	1.7E-11	6.7E-11
Hexanoic Acid, 2-ethyl	149-57-5	1	0	4.5E-12	2.7E-11	0	0	1.6E-10
1-Hydroxypyrene	5315-79-7	1	0	2.6E-10	1.5E-09	0	0	9.2E-09

Chemical	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
2-(Methylthio)benzothiazole	615-22-5	9	0	3.6E-09	7.9E-09	0	1.7E-08	3.6E-08
Naphthalene	91-20-3	2	0	5.8E-12	2.4E-11	0	2.9E-11	1.0E-10
Naphthalene, 1,2-dimethyl-	573-98-8	1	0	4.1E-13	2.4E-12	0	0	1.4E-11
Naphthalene, 1,6-dimethyl-	575-43-9	6	0	4.3E-12	1.0E-11	0	3.1E-11	3.2E-11
Naphthalene, 1-methyl-	90-12-0	1	0	9.1E-13	5.4E-12	0	0	3.2E-11
Naphthalene, 2-(bromomethyl)-	939-26-4	33	0	1.7E-10	1.4E-10	1.0E-10	4.0E-10	5.3E-10
Naphthalene, 2,3-dimethyl-	581-40-8	33	0	5.0E-11	4.4E-11	3.0E-11	1.4E-10	2.0E-10
Naphthalene, 2-methyl	91-57-6	1	0	8.9E-13	5.2E-12	0	0	3.1E-11
1-Octadecene	112-88-9	27	0	2.9E-10	8.0E-10	8.0E-11	5.0E-10	4.8E-09
Phenanthrene	85-01-8	29	0	2.0E-10	2.7E-10	9.7E-11	6.6E-10	1.2E-09
Phenanthrene, 1-methyl	832-69-9	35	1.9E-11	1.0E-10	7.9E-11	8.2E-11	2.5E-10	3.2E-10
Phenanthrene, 2-methyl-	2531-84-2	34	0	1.3E-10	1.2E-10	9.6E-11	3.5E-10	4.7E-10
Phenanthrene, 3-methyl	832-71-3	3	0	4.6E-11	1.7E-10	0	3.3E-10	9.3E-10
N-Phenylbenzamide	93-98-1	8	0	2.9E-10	5.8E-10	0	1.4E-09	2.1E-09
Phthalimide	85-41-6	26	0	1.9E-09	4.3E-09	2.5E-11	1.1E-08	1.9E-08
Pyrene	129-00-0	35	4.6E-10	2.5E-09	1.6E-09	2.2E-09	5.9E-09	6.7E-09
Pyridine, 2-(4-methylphenyl)-	4467-06-5	14	0	9.3E-11	1.8E-10	0	3.9E-10	8.0E-10
Triethylene glycol monobutyl ether	143-22-6	7	0	4.8E-10	1.2E-09	0	3.0E-09	5.2E-09
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	32	0	6.5E-11	7.8E-11	2.3E-11	1.9E-10	3.1E-10

[a] 35 field-specific $ADD_{der\text{-}field}$ are included in the table. $ADD_{der\text{-}field}$ was calculated from field-specific average concentrations ($C_{der\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial sweat extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-269. Field-Specific Average Dermal Daily Dose[a] for Chronic Non-Cancer Hazard ($ADD_{der\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related General Chemicals**[b]—Combined Gender **Spectators 50<70 Years**

Chemical	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Acenaphthylene	208-96-8	10	0	2.6E-12	4.5E-12	0	1.1E-11	1.6E-11
Aniline	62-53-3	4	0	8.3E-11	2.6E-10	0	6.4E-10	1.2E-09
Anthracene	120-12-7	20	0	2.9E-11	3.8E-11	2.0E-11	7.2E-11	1.9E-10

Chemical	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Anthracene, 2-methyl-	613-12-7	35	1.0E-11	4.1E-11	3.4E-11	2.7E-11	9.6E-11	1.6E-10
Anthracene, 9,10-diphenyl-	1499-10-1	5	0	5.7E-12	1.6E-11	0	3.4E-11	7.8E-11
Anthracene, 9-phenyl	602-55-1	9	0	1.4E-11	3.2E-11	0	7.9E-11	1.4E-10
Benz[a]anthracene	56-55-3	31	0	1.1E-10	1.3E-10	6.0E-11	3.2E-10	6.1E-10
Benzene, n-butyl-	104-51-8	1	0	1.7E-13	1.0E-12	0	0	6.0E-12
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	32	0	7.7E-09	1.2E-08	3.2E-09	2.4E-08	6.7E-08
Benzo[b]fluoranthene	205-99-2	34	0	1.6E-10	1.4E-10	1.3E-10	4.0E-10	6.3E-10
7H-Benzo[c]fluorene	205-12-9	26	0	1.4E-11	1.8E-11	7.3E-12	4.5E-11	7.5E-11
Benzo[k]fluoranthene	207-08-9	29	0	7.1E-11	7.5E-11	4.3E-11	2.3E-10	2.9E-10
Benzothiazole	95-16-9	35	2.1E-08	9.2E-08	4.8E-08	7.7E-08	1.8E-07	2.1E-07
Benzothiazole, 2-phenyl-	883-93-2	35	6.6E-10	2.2E-09	1.8E-09	1.6E-09	6.0E-09	8.8E-09
1,3-Benzothiazole-2-thiol	149-30-4	1	0	6.1E-10	3.6E-09	0	0	2.1E-08
Benzothiazolone	934-34-9	35	5.6E-08	2.6E-07	8.3E-08	2.9E-07	3.6E-07	3.7E-07
Benzyl butyl phthalate	85-68-7	35	7.2E-11	1.1E-09	7.5E-10	8.9E-10	2.6E-09	3.0E-09
Cyclohexyl isothiocyanate	1122-82-3	1	0	3.9E-12	2.3E-11	0	0	1.4E-10
Dibenz[a,h]anthracene	53-70-3	14	0	4.2E-11	7.7E-11	0	2.1E-10	3.2E-10
Dibenzothiophene	132-65-0	20	0	2.5E-11	3.1E-11	2.1E-11	7.0E-11	1.5E-10
Diethyl Phthalate	84-66-2	5	0	1.9E-10	5.7E-10	0	1.1E-09	2.9E-09
Diisobutyl Phthalate	84-69-5	28	0	1.6E-10	2.7E-10	1.1E-10	4.2E-10	1.6E-09
Diisooctylphthalate	27554-26-3	35	4.5E-11	5.3E-09	3.7E-09	4.5E-09	1.3E-08	1.5E-08
Di-n-octyl phthalate	117-84-0	33	0	1.1E-09	1.6E-09	6.3E-10	3.9E-09	7.6E-09
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	4	0	9.9E-13	2.9E-12	0	7.7E-12	1.3E-11
3,5-Di-tert-butyl-4-hydroxybenzaldehyde	1620-98-0	25	0	4.9E-09	1.3E-08	1.1E-09	1.3E-08	7.4E-08
Fluoranthene	206-44-0	35	1.4E-10	8.8E-10	6.9E-10	6.1E-10	2.3E-09	2.4E-09
Fluorene	86-73-7	6	0	3.7E-12	1.2E-11	0	1.6E-11	6.3E-11
Hexanoic Acid, 2-ethyl	149-57-5	1	0	4.2E-12	2.5E-11	0	0	1.5E-10
1-Hydroxypyrene	5315-79-7	1	0	2.5E-10	1.5E-09	0	0	8.6E-09
2-(Methylthio)benzothiazole	615-22-5	9	0	3.4E-09	7.5E-09	0	1.6E-08	3.4E-08
Naphthalene	91-20-3	2	0	5.4E-12	2.2E-11	0	2.7E-11	9.9E-11
Naphthalene, 1,2-dimethyl-	573-98-8	1	0	3.8E-13	2.3E-12	0	0	1.3E-11
Naphthalene, 1,6-dimethyl-	575-43-9	6	0	4.1E-12	9.6E-12	0	2.9E-11	3.0E-11
Naphthalene, 1-methyl-	90-12-0	1	0	8.6E-13	5.1E-12	0	0	3.0E-11

Chemical	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Naphthalene, 2-(bromomethyl)-	939-26-4	33	0	1.6E-10	1.3E-10	9.8E-11	3.8E-10	5.0E-10
Naphthalene, 2,3-dimethyl-	581-40-8	33	0	4.7E-11	4.2E-11	2.8E-11	1.4E-10	1.9E-10
Naphthalene, 2-methyl	91-57-6	1	0	8.3E-13	4.9E-12	0	0	2.9E-11
1-Octadecene	112-88-9	27	0	2.7E-10	7.6E-10	7.5E-11	4.8E-10	4.5E-09
Phenanthrene	85-01-8	29	0	1.9E-10	2.5E-10	9.1E-11	6.2E-10	1.2E-09
Phenanthrene, 1-methyl	832-69-9	35	1.8E-11	9.8E-11	7.5E-11	7.7E-11	2.4E-10	3.0E-10
Phenanthrene, 2-methyl-	2531-84-2	34	0	1.2E-10	1.1E-10	9.1E-11	3.3E-10	4.5E-10
Phenanthrene, 3-methyl	832-71-3	3	0	4.3E-11	1.6E-10	0	3.1E-10	8.7E-10
N-Phenylbenzamide	93-98-1	8	0	2.7E-10	5.5E-10	0	1.3E-09	2.0E-09
Phthalimide	85-41-6	26	0	1.8E-09	4.1E-09	2.4E-11	1.0E-08	1.8E-08
Pyrene	129-00-0	35	4.4E-10	2.4E-09	1.5E-09	2.1E-09	5.6E-09	6.3E-09
Pyridine, 2-(4-methylphenyl)-	4467-06-5	14	0	8.7E-11	1.7E-10	0	3.7E-10	7.6E-10
Triethylene glycol monobutyl ether	143-22-6	7	0	4.5E-10	1.1E-09	0	2.9E-09	4.9E-09
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	32	0	6.1E-11	7.4E-11	2.2E-11	1.8E-10	2.9E-10

[a] 35 field-specific $ADD_{der\text{-}field}$ are included in the table. $ADD_{der\text{-}field}$ was calculated from field-specific average concentrations ($C_{der\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial sweat extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

F.5.4. Average Dermal Daily Dose (ADD_{der}) for Lifetime Cancer Risk Assessment of Carcinogens

Table F-270. Average Dermal Daily Dose[a] (ADD_{der}, milligrams per kilogram BW per day) for Lifetime Cancer Risk Assessment (ADD_{der}, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Athletes**

Chemical Name	CASRN	ADD_{der}						
		2<6 Years	6<11 Years	11<16 Years	16<30 Years	30<40 Years	40<50 Years	50<70 Years
Aniline	62-53-3	2.6E-10	2.0E-10	2.1E-10	2.7E-10	1.9E-10	1.6E-10	1.6E-10
Benz[a]anthracene	56-55-3	3.5E-10	2.8E-10	2.9E-10	3.7E-10	2.6E-10	2.2E-10	2.2E-10
Benzo[a]pyrene	50-32-8	2.6E-10	2.1E-10	2.2E-10	2.8E-10	2.0E-10	1.7E-10	1.7E-10
Benzo[b]fluoranthene	205-99-2	5.0E-10	3.9E-10	4.2E-10	5.2E-10	3.7E-10	3.2E-10	3.2E-10
Benzo[k]fluoranthene	207-08-9	2.2E-10	1.7E-10	1.8E-10	2.3E-10	1.6E-10	1.4E-10	1.4E-10
1,3-Benzothiazole-2-thiol	149-30-4	1.9E-09	1.5E-09	1.6E-09	2.0E-09	1.4E-09	1.2E-09	1.2E-09
Chrysene	218-01-9	2.3E-09	1.8E-09	1.9E-09	2.4E-09	1.7E-09	1.4E-09	1.4E-09

Chemical Name	CASRN	ADD_{der}						
		2<6 Years	6<11 Years	11<16 Years	16<30 Years	30<40 Years	40<50 Years	50<70 Years
Cyclopenta[cd]pyrene	27208-37-3	4.1E-10	3.2E-10	3.4E-10	4.3E-10	3.0E-10	2.6E-10	2.6E-10
Dibenz[a,h]anthracene	53-70-3	1.3E-10	1.0E-10	1.1E-10	1.4E-10	9.7E-11	8.2E-11	8.3E-11
Indeno[1,2,3-cd]pyrene	193-39-5	2.6E-10	2.1E-10	2.2E-10	2.7E-10	1.9E-10	1.6E-10	1.7E-10
Naphthalene	91-20-3	1.7E-11	1.3E-11	1.4E-11	1.8E-11	1.2E-11	1.1E-11	1.1E-11

[a] ADD_{der} was calculated from the mean of 35 individual field average concentrations ($C_{der\text{-}crumb\ rubber}$) of a chemical detected in artificial sweat extracts of crumb rubber samples.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-271. Average Dermal Daily Dose[a] (ADD_{der}, milligrams per kilogram BW per day) for Lifetime Cancer Risk Assessment (ADD_{der}, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Coaches**

Chemical Name	CASRN	ADD_{der}			
		16<30 Years	30<40 Years	40<50 Years	50<70 Years
Aniline	62-53-3	1.3E-10	1.2E-10	1.3E-10	1.3E-10
Benz[a]anthracene	56-55-3	1.8E-10	1.7E-10	1.7E-10	1.7E-10
Benzo[a]pyrene	50-32-8	1.4E-10	1.3E-10	1.3E-10	1.3E-10
Benzo[b]fluoranthene	205-99-2	2.6E-10	2.4E-10	2.5E-10	2.5E-10
Benzo[k]fluoranthene	207-08-9	1.1E-10	1.1E-10	1.1E-10	1.1E-10
1,3-Benzothiazole-2-thiol	149-30-4	9.8E-10	9.2E-10	9.3E-10	9.3E-10
Chrysene	218-01-9	1.2E-09	1.1E-09	1.1E-09	1.1E-09
Cyclopenta[cd]pyrene	27208-37-3	2.1E-10	2.0E-10	2.0E-10	2.0E-10
Dibenz[a,h]anthracene	53-70-3	6.7E-11	6.3E-11	6.4E-11	6.4E-11
Indeno[1,2,3-cd]pyrene	193-39-5	1.4E-10	1.3E-10	1.3E-10	1.3E-10
Naphthalene	91-20-3	8.7E-12	8.1E-12	8.2E-12	8.3E-12

[a] ADD_{der} was calculated from the mean of 35 individual field average concentrations ($C_{der\text{-}crumb\ rubber}$) of a chemical detected in artificial sweat extracts of crumb rubber samples.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-272. Average Dermal Daily Dose[a] (ADD_{der}, milligrams per kilogram BW per day) for Lifetime Cancer Risk Assessment (ADD_{der}, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Referees**

Chemical Name	CASRN	ADD_{der}			
		16<30 Years	30<40 Years	40<50 Years	50<70 Years
Aniline	62-53-3	5.4E-11	5.0E-11	5.1E-11	5.1E-11
Benz[a]anthracene	56-55-3	7.3E-11	6.9E-11	7.0E-11	7.0E-11
Benzo[a]pyrene	50-32-8	5.5E-11	5.2E-11	5.2E-11	5.3E-11

Chemical Name	CASRN	ADD_{der}			
		16<30 Years	30<40 Years	40<50 Years	50<70 Years
Benzo[b]fluoranthene	205-99-2	1.0E-10	9.8E-11	9.9E-11	9.9E-11
Benzo[k]fluoranthene	207-08-9	4.6E-11	4.3E-11	4.3E-11	4.3E-11
1,3-Benzothiazole-2-thiol	149-30-4	3.9E-10	3.7E-10	3.7E-10	3.7E-10
Chrysene	218-01-9	4.7E-10	4.4E-10	4.5E-10	4.5E-10
Cyclopenta[cd]pyrene	27208-37-3	8.5E-11	7.9E-11	8.0E-11	8.1E-11
Dibenz[a,h]anthracene	53-70-3	2.7E-11	2.5E-11	2.6E-11	2.6E-11
Indeno[1,2,3-cd]pyrene	193-39-5	5.4E-11	5.1E-11	5.2E-11	5.2E-11
Naphthalene	91-20-3	3.5E-12	3.3E-12	3.3E-12	3.3E-12

[a] ADD_{der} was calculated from the mean of 35 individual field average concentrations ($C_{der\text{-}crumb\ rubber}$) of a chemical detected in artificial sweat extracts of crumb rubber samples.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-273. Average Dermal Daily Dose[a] (ADD_{der}, milligrams per kilogram BW per day) for Lifetime Cancer Risk Assessment (ADD_{der}, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Spectators**

Chemical Name	CASRN	ADD_{der}								
		Third Trimester Fetus	0<2 Years	2<6 Years	6<11 Years	11<16 Years	16<30 Years	30<40 Years	40<50 Years	50<70 Years
Aniline	62-53-3	7.6E-11	4.1E-10	3.0E-10	2.7E-10	2.3E-10	1.0E-10	8.7E-11	8.8E-11	8.3E-11
Benz[a]anthracene	56-55-3	1.0E-10	5.6E-10	4.1E-10	3.7E-10	3.2E-10	1.4E-10	1.2E-10	1.2E-10	1.1E-10
Benzo[a]pyrene	50-32-8	7.8E-11	4.2E-10	3.1E-10	2.8E-10	2.4E-10	1.0E-10	9.0E-11	9.1E-11	8.6E-11
Benzo[b]fluoranthene	205-99-2	1.5E-10	7.9E-10	5.8E-10	5.3E-10	4.5E-10	2.0E-10	1.7E-10	1.7E-10	1.6E-10
Benzo[k]fluoranthene	207-08-9	6.4E-11	3.4E-10	2.5E-10	2.3E-10	2.0E-10	8.6E-11	7.4E-11	7.5E-11	7.1E-11
1,3-Benzothiazole-2-thiol	149-30-4	5.6E-10	3.0E-09	2.2E-09	2.0E-09	1.7E-09	7.4E-10	6.4E-10	6.5E-10	6.1E-10
Chrysene	218-01-9	6.7E-10	3.6E-09	2.6E-09	2.4E-09	2.0E-09	9.0E-10	7.7E-10	7.8E-10	7.4E-10
Cyclopenta[cd]pyrene	27208-37-3	1.2E-10	6.4E-10	4.7E-10	4.3E-10	3.7E-10	1.6E-10	1.4E-10	1.4E-10	1.3E-10
Dibenz[a,h]anthracene	53-70-3	3.8E-11	2.0E-10	1.5E-10	1.4E-10	1.2E-10	5.1E-11	4.4E-11	4.5E-11	4.2E-11
Indeno[1,2,3-cd]pyrene	193-39-5	7.7E-11	4.1E-10	3.0E-10	2.7E-10	2.3E-10	1.0E-10	8.9E-11	9.0E-11	8.5E-11
Naphthalene	91-20-3	4.9E-12	2.6E-11	1.9E-11	1.8E-11	1.5E-11	6.6E-12	5.7E-12	5.8E-12	5.4E-12

[a] ADD_{der} was calculated from the mean of 35 individual field average concentrations ($C_{der\text{-}crumb\ rubber}$) of a chemical detected in artificial sweat extracts of crumb rubber samples.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

INDIVIDUAL FIELD ASSESSMENT (Table F-274 to Table F-297)

Table F-274. Field-Specific Average Dermal Dose[a] (ADD_{der}, milligrams per kilogram BW per day) for Lifetime Cancer Risk Assessment (ADD_{der}, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Athletes 2<6 Years**

Chemical Name	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	4	0	2.6E-10	8.0E-10	0	2.0E-09	3.8E-09
Benz[a]anthracene	56-55-3	31	0	3.5E-10	4.1E-10	1.9E-10	9.9E-10	1.9E-09
Benzo[a]pyrene	50-32-8	32	0	2.6E-10	2.6E-10	1.7E-10	6.9E-10	1.1E-09
Benzo[b]fluoranthene	205-99-2	34	0	5.0E-10	4.4E-10	3.9E-10	1.2E-09	1.9E-09
Benzo[k]fluoranthene	207-08-9	29	0	2.2E-10	2.3E-10	1.3E-10	7.1E-10	8.8E-10
1,3-Benzothiazole-2-thiol	149-30-4	1	0	1.9E-09	1.1E-08	0	0	6.6E-08
Chrysene	218-01-9	35	2.5E-10	2.3E-09	1.5E-09	2.3E-09	4.6E-09	5.2E-09
Cyclopenta[cd]pyrene	27208-37-3	35	4.1E-11	4.1E-10	2.4E-10	3.9E-10	7.8E-10	9.3E-10
Dibenz[a,h]anthracene	53-70-3	14	0	1.3E-10	2.4E-10	0	6.3E-10	9.9E-10
Indeno[1,2,3-cd]pyrene	193-39-5	28	0	2.6E-10	2.2E-10	2.3E-10	6.1E-10	9.5E-10
Naphthalene	91-20-3	2	0	1.7E-11	6.9E-11	0	8.4E-11	3.0E-10

[a] 35 field-specific $ADD_{der\text{-}field}$ are included in the table. $ADD_{der\text{-}field}$ was calculated from field-specific average concentrations ($C_{der\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial sweat extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-275. Field-Specific Average Dermal Dose[a] (ADD_{der}, milligrams per kilogram BW per day) for Lifetime Cancer Risk Assessment (ADD_{der}, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Athletes 6<11 Years**

Chemical Name	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	4	0	2.0E-10	6.3E-10	0	1.6E-09	3.0E-09
Benz[a]anthracene	56-55-3	31	0	2.8E-10	3.2E-10	1.5E-10	7.8E-10	1.5E-09
Benzo[a]pyrene	50-32-8	32	0	2.1E-10	2.1E-10	1.4E-10	5.5E-10	8.5E-10
Benzo[b]fluoranthene	205-99-2	34	0	3.9E-10	3.5E-10	3.1E-10	9.9E-10	1.5E-09
Benzo[k]fluoranthene	207-08-9	29	0	1.7E-10	1.8E-10	1.0E-10	5.6E-10	6.9E-10
1,3-Benzothiazole-2-thiol	149-30-4	1	0	1.5E-09	8.8E-09	0	0	5.2E-08
Chrysene	218-01-9	35	2.0E-10	1.8E-09	1.2E-09	1.8E-09	3.6E-09	4.1E-09
Cyclopenta[cd]pyrene	27208-37-3	35	3.3E-11	3.2E-10	1.9E-10	3.1E-10	6.1E-10	7.3E-10
Dibenz[a,h]anthracene	53-70-3	14	0	1.0E-10	1.9E-10	0	5.0E-10	7.8E-10
Indeno[1,2,3-cd]pyrene	193-39-5	28	0	2.1E-10	1.7E-10	1.8E-10	4.8E-10	7.5E-10

Chemical Name	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Naphthalene	91-20-3	2	0	1.3E-11	5.5E-11	0	6.7E-11	2.4E-10

[a] 35 field-specific $ADD_{der\text{-}field}$ are included in the table. $ADD_{der\text{-}field}$ was calculated from field-specific average concentrations ($C_{der\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial sweat extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-276. Field-Specific Average Dermal Dose[a] (ADD_{der}, milligrams per kilogram BW per day) for Lifetime Cancer Risk Assessment (ADD_{der}, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Athletes 11<16 Years**

Chemical Name	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	4	0	2.1E-10	6.6E-10	0	1.6E-09	3.2E-09
Benz[a]anthracene	56-55-3	31	0	2.9E-10	3.4E-10	1.5E-10	8.2E-10	1.6E-09
Benzo[a]pyrene	50-32-8	32	0	2.2E-10	2.2E-10	1.4E-10	5.8E-10	9.0E-10
Benzo[b]fluoranthene	205-99-2	34	0	4.2E-10	3.7E-10	3.3E-10	1.0E-09	1.6E-09
Benzo[k]fluoranthene	207-08-9	29	0	1.8E-10	1.9E-10	1.1E-10	5.9E-10	7.3E-10
1,3-Benzothiazole-2-thiol	149-30-4	1	0	1.6E-09	9.3E-09	0	0	5.5E-08
Chrysene	218-01-9	35	2.1E-10	1.9E-09	1.2E-09	1.9E-09	3.8E-09	4.3E-09
Cyclopenta[cd]pyrene	27208-37-3	35	3.5E-11	3.4E-10	2.0E-10	3.3E-10	6.5E-10	7.7E-10
Dibenz[a,h]anthracene	53-70-3	14	0	1.1E-10	2.0E-10	0	5.3E-10	8.2E-10
Indeno[1,2,3-cd]pyrene	193-39-5	28	0	2.2E-10	1.8E-10	1.9E-10	5.1E-10	7.9E-10
Naphthalene	91-20-3	2	0	1.4E-11	5.8E-11	0	7.0E-11	2.5E-10

[a] 35 field-specific $ADD_{der\text{-}field}$ are included in the table. $ADD_{der\text{-}field}$ was calculated from field-specific average concentrations ($C_{der\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial sweat extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-277. Field-Specific Average Dermal Dose[a] (ADD_{der}, milligrams per kilogram BW per day) for Lifetime Cancer Risk Assessment (ADD_{der}, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Athletes 16<30 Years**

Chemical Name	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	4	0	2.7E-10	8.4E-10	0	2.1E-09	4.0E-09
Benz[a]anthracene	56-55-3	31	0	3.7E-10	4.3E-10	2.0E-10	1.0E-09	2.0E-09
Benzo[a]pyrene	50-32-8	32	0	2.8E-10	2.7E-10	1.8E-10	7.3E-10	1.1E-09

Chemical Name	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Benzo[b]fluoranthene	205-99-2	34	0	5.2E-10	4.6E-10	4.1E-10	1.3E-09	2.0E-09
Benzo[k]fluoranthene	207-08-9	29	0	2.3E-10	2.4E-10	1.4E-10	7.4E-10	9.2E-10
1,3-Benzothiazole-2-thiol	149-30-4	1	0	2.0E-09	1.2E-08	0	0	6.9E-08
Chrysene	218-01-9	35	2.6E-10	2.4E-09	1.5E-09	2.4E-09	4.8E-09	5.4E-09
Cyclopenta[cd]pyrene	27208-37-3	35	4.4E-11	4.3E-10	2.5E-10	4.1E-10	8.2E-10	9.8E-10
Dibenz[a,h]anthracene	53-70-3	14	0	1.4E-10	2.5E-10	0	6.6E-10	1.0E-09
Indeno[1,2,3-cd]pyrene	193-39-5	28	0	2.7E-10	2.3E-10	2.4E-10	6.4E-10	1.0E-09
Naphthalene	91-20-3	2	0	1.8E-11	7.3E-11	0	8.9E-11	3.2E-10

[a] 35 field-specific $ADD_{der\text{-}field}$ are included in the table. $ADD_{der\text{-}field}$ was calculated from field-specific average concentrations ($C_{der\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial sweat extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-278. Field-Specific Average Dermal Dose[a] (ADD_{der}, milligrams per kilogram BW per day) for Lifetime Cancer Risk Assessment (ADD_{der}, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Athletes 30<40 Years**

Chemical Name	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	4	0	1.9E-10	5.9E-10	0	1.5E-09	2.8E-09
Benz[a]anthracene	56-55-3	31	0	2.6E-10	3.0E-10	1.4E-10	7.4E-10	1.4E-09
Benzo[a]pyrene	50-32-8	32	0	2.0E-10	1.9E-10	1.3E-10	5.2E-10	8.1E-10
Benzo[b]fluoranthene	205-99-2	34	0	3.7E-10	3.3E-10	2.9E-10	9.3E-10	1.4E-09
Benzo[k]fluoranthene	207-08-9	29	0	1.6E-10	1.7E-10	9.9E-11	5.3E-10	6.6E-10
1,3-Benzothiazole-2-thiol	149-30-4	1	0	1.4E-09	8.3E-09	0	0	4.9E-08
Chrysene	218-01-9	35	1.8E-10	1.7E-09	1.1E-09	1.7E-09	3.4E-09	3.8E-09
Cyclopenta[cd]pyrene	27208-37-3	35	3.1E-11	3.0E-10	1.8E-10	2.9E-10	5.8E-10	6.9E-10
Dibenz[a,h]anthracene	53-70-3	14	0	9.7E-11	1.8E-10	0	4.7E-10	7.4E-10
Indeno[1,2,3-cd]pyrene	193-39-5	28	0	1.9E-10	1.6E-10	1.7E-10	4.5E-10	7.1E-10
Naphthalene	91-20-3	2	0	1.2E-11	5.1E-11	0	6.3E-11	2.3E-10

[a] 35 field-specific $ADD_{der\text{-}field}$ are included in the table. $ADD_{der\text{-}field}$ was calculated from field-specific average concentrations ($C_{der\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial sweat extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-279. Field-Specific Average Dermal Dose[a] (ADD_{der}, milligrams per kilogram BW per day) for Lifetime Cancer Risk Assessment (ADD_{der}, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Athletes 40<50 Years**

Chemical Name	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	4	0	1.6E-10	5.0E-10	0	1.2E-09	2.4E-09
Benz[a]anthracene	56-55-3	31	0	2.2E-10	2.6E-10	1.2E-10	6.3E-10	1.2E-09
Benzo[a]pyrene	50-32-8	32	0	1.7E-10	1.7E-10	1.1E-10	4.4E-10	6.8E-10
Benzo[b]fluoranthene	205-99-2	34	0	3.2E-10	2.8E-10	2.5E-10	7.9E-10	1.2E-09
Benzo[k]fluoranthene	207-08-9	29	0	1.4E-10	1.5E-10	8.4E-11	4.5E-10	5.6E-10
1,3-Benzothiazole-2-thiol	149-30-4	1	0	1.2E-09	7.1E-09	0	0	4.2E-08
Chrysene	218-01-9	35	1.6E-10	1.4E-09	9.3E-10	1.4E-09	2.9E-09	3.3E-09
Cyclopenta[cd]pyrene	27208-37-3	35	2.6E-11	2.6E-10	1.5E-10	2.5E-10	4.9E-10	5.9E-10
Dibenz[a,h]anthracene	53-70-3	14	0	8.2E-11	1.5E-10	0	4.0E-10	6.3E-10
Indeno[1,2,3-cd]pyrene	193-39-5	28	0	1.6E-10	1.4E-10	1.5E-10	3.8E-10	6.0E-10
Naphthalene	91-20-3	2	0	1.1E-11	4.4E-11	0	5.3E-11	1.9E-10

[a] 35 field-specific $ADD_{der\text{-}field}$ are included in the table. $ADD_{der\text{-}field}$ was calculated from field-specific average concentrations ($C_{der\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial sweat extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-280. Field-Specific Average Dermal Dose[a] (ADD_{der}, milligrams per kilogram BW per day) for Lifetime Cancer Risk Assessment (ADD_{der}, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Athletes 50<70 Years**

Chemical Name	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	4	0	1.6E-10	5.1E-10	0	1.3E-09	2.4E-09
Benz[a]anthracene	56-55-3	31	0	2.2E-10	2.6E-10	1.2E-10	6.3E-10	1.2E-09
Benzo[a]pyrene	50-32-8	32	0	1.7E-10	1.7E-10	1.1E-10	4.4E-10	6.9E-10
Benzo[b]fluoranthene	205-99-2	34	0	3.2E-10	2.8E-10	2.5E-10	8.0E-10	1.2E-09
Benzo[k]fluoranthene	207-08-9	29	0	1.4E-10	1.5E-10	8.4E-11	4.5E-10	5.6E-10
1,3-Benzothiazole-2-thiol	149-30-4	1	0	1.2E-09	7.1E-09	0	0	4.2E-08
Chrysene	218-01-9	35	1.6E-10	1.4E-09	9.3E-10	1.4E-09	2.9E-09	3.3E-09
Cyclopenta[cd]pyrene	27208-37-3	35	2.6E-11	2.6E-10	1.5E-10	2.5E-10	5.0E-10	5.9E-10
Dibenz[a,h]anthracene	53-70-3	14	0	8.3E-11	1.5E-10	0	4.0E-10	6.3E-10
Indeno[1,2,3-cd]pyrene	193-39-5	28	0	1.7E-10	1.4E-10	1.5E-10	3.9E-10	6.1E-10
Naphthalene	91-20-3	2	0	1.1E-11	4.4E-11	0	5.4E-11	1.9E-10

[a] 35 field-specific $ADD_{der\text{-}field}$ are included in the table. $ADD_{der\text{-}field}$ was calculated from field-specific average

concentrations ($C_{der\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial sweat extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-281. Field-Specific Average Dermal Dose[a] (ADD_{der}, milligrams per kilogram BW per day) for Lifetime Cancer Risk Assessment (ADD_{der}, milligrams per kilogram BW per day) of **Field-Related Carcinogens[b]**—Combined Gender **Coaches 16<30 Years**

Chemical Name	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	4	0	1.3E-10	4.1E-10	0	1.0E-09	2.0E-09
Benz[a]anthracene	56-55-3	31	0	1.8E-10	2.1E-10	9.6E-11	5.1E-10	9.7E-10
Benzo[a]pyrene	50-32-8	32	0	1.4E-10	1.4E-10	9.0E-11	3.6E-10	5.6E-10
Benzo[b]fluoranthene	205-99-2	34	0	2.6E-10	2.3E-10	2.0E-10	6.5E-10	1.0E-09
Benzo[k]fluoranthene	207-08-9	29	0	1.1E-10	1.2E-10	6.9E-11	3.7E-10	4.6E-10
1,3-Benzothiazole-2-thiol	149-30-4	1	0	9.8E-10	5.8E-09	0	0	3.4E-08
Chrysene	218-01-9	35	1.3E-10	1.2E-09	7.6E-10	1.2E-09	2.4E-09	2.7E-09
Cyclopenta[cd]pyrene	27208-37-3	35	2.2E-11	2.1E-10	1.3E-10	2.0E-10	4.0E-10	4.8E-10
Dibenz[a,h]anthracene	53-70-3	14	0	6.7E-11	1.2E-10	0	3.3E-10	5.1E-10
Indeno[1,2,3-cd]pyrene	193-39-5	28	0	1.4E-10	1.1E-10	1.2E-10	3.1E-10	4.9E-10
Naphthalene	91-20-3	2	0	8.7E-12	3.6E-11	0	4.4E-11	1.6E-10

[a] 35 field-specific $ADD_{der\text{-}field}$ are included in the table. $ADD_{der\text{-}field}$ was calculated from field-specific average concentrations ($C_{der\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial sweat extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-282. Field-Specific Average Dermal Dose[a] (ADD_{der}, milligrams per kilogram BW per day) for Lifetime Cancer Risk Assessment (ADD_{der}, milligrams per kilogram BW per day) of **Field-Related Carcinogens[b]**—Combined Gender **Coaches 30<40 Years**

Chemical Name	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	4	0	1.2E-10	3.9E-10	0	9.6E-10	1.9E-09
Benz[a]anthracene	56-55-3	31	0	1.7E-10	2.0E-10	9.0E-11	4.8E-10	9.1E-10
Benzo[a]pyrene	50-32-8	32	0	1.3E-10	1.3E-10	8.5E-11	3.4E-10	5.3E-10
Benzo[b]fluoranthene	205-99-2	34	0	2.4E-10	2.1E-10	1.9E-10	6.1E-10	9.4E-10
Benzo[k]fluoranthene	207-08-9	29	0	1.1E-10	1.1E-10	6.4E-11	3.4E-10	4.3E-10
1,3-Benzothiazole-2-thiol	149-30-4	1	0	9.2E-10	5.4E-09	0	0	3.2E-08

Chemical Name	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Chrysene	218-01-9	35	1.2E-10	1.1E-09	7.1E-10	1.1E-09	2.2E-09	2.5E-09
Cyclopenta[cd]pyrene	27208-37-3	35	2.0E-11	2.0E-10	1.2E-10	1.9E-10	3.8E-10	4.5E-10
Dibenz[a,h]anthracene	53-70-3	14	0	6.3E-11	1.2E-10	0	3.1E-10	4.8E-10
Indeno[1,2,3-cd]pyrene	193-39-5	28	0	1.3E-10	1.1E-10	1.1E-10	3.0E-10	4.6E-10
Naphthalene	91-20-3	2	0	8.1E-12	3.4E-11	0	4.1E-11	1.5E-10

[a] 35 field-specific $ADD_{der\text{-}field}$ are included in the table. $ADD_{der\text{-}field}$ was calculated from field-specific average concentrations ($C_{der\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial sweat extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-283. Field-Specific Average Dermal Dose[a] (ADD_{der}, milligrams per kilogram BW per day) for Lifetime Cancer Risk Assessment (ADD_{der}, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Coaches 40<50 Years**

Chemical Name	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	4	0	1.3E-10	3.9E-10	0	9.7E-10	1.9E-09
Benz[a]anthracene	56-55-3	31	0	1.7E-10	2.0E-10	9.1E-11	4.9E-10	9.2E-10
Benzo[a]pyrene	50-32-8	32	0	1.3E-10	1.3E-10	8.5E-11	3.4E-10	5.3E-10
Benzo[b]fluoranthene	205-99-2	34	0	2.5E-10	2.2E-10	1.9E-10	6.1E-10	9.5E-10
Benzo[k]fluoranthene	207-08-9	29	0	1.1E-10	1.1E-10	6.5E-11	3.5E-10	4.3E-10
1,3-Benzothiazole-2-thiol	149-30-4	1	0	9.3E-10	5.5E-09	0	0	3.2E-08
Chrysene	218-01-9	35	1.2E-10	1.1E-09	7.2E-10	1.1E-09	2.2E-09	2.5E-09
Cyclopenta[cd]pyrene	27208-37-3	35	2.0E-11	2.0E-10	1.2E-10	1.9E-10	3.8E-10	4.6E-10
Dibenz[a,h]anthracene	53-70-3	14	0	6.4E-11	1.2E-10	0	3.1E-10	4.9E-10
Indeno[1,2,3-cd]pyrene	193-39-5	28	0	1.3E-10	1.1E-10	1.1E-10	3.0E-10	4.7E-10
Naphthalene	91-20-3	2	0	8.2E-12	3.4E-11	0	4.2E-11	1.5E-10

[a] 35 field-specific $ADD_{der\text{-}field}$ are included in the table. $ADD_{der\text{-}field}$ was calculated from field-specific average concentrations ($C_{der\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial sweat extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-284. Field-Specific Average Dermal Dose[a] (ADD_{der}, milligrams per kilogram BW per day) for Lifetime Cancer Risk Assessment (ADD_{der}, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Coaches 50<70 Years**

Chemical Name	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	4	0	1.3E-10	3.9E-10	0	9.7E-10	1.9E-09
Benz[a]anthracene	56-55-3	31	0	1.7E-10	2.0E-10	9.2E-11	4.9E-10	9.2E-10
Benzo[a]pyrene	50-32-8	32	0	1.3E-10	1.3E-10	8.6E-11	3.4E-10	5.3E-10
Benzo[b]fluoranthene	205-99-2	34	0	2.5E-10	2.2E-10	1.9E-10	6.2E-10	9.5E-10
Benzo[k]fluoranthene	207-08-9	29	0	1.1E-10	1.1E-10	6.5E-11	3.5E-10	4.3E-10
1,3-Benzothiazole-2-thiol	149-30-4	1	0	9.3E-10	5.5E-09	0	0	3.3E-08
Chrysene	218-01-9	35	1.2E-10	1.1E-09	7.2E-10	1.1E-09	2.3E-09	2.5E-09
Cyclopenta[cd]pyrene	27208-37-3	35	2.0E-11	2.0E-10	1.2E-10	1.9E-10	3.8E-10	4.6E-10
Dibenz[a,h]anthracene	53-70-3	14	0	6.4E-11	1.2E-10	0	3.1E-10	4.9E-10
Indeno[1,2,3-cd]pyrene	193-39-5	28	0	1.3E-10	1.1E-10	1.1E-10	3.0E-10	4.7E-10
Naphthalene	91-20-3	2	0	8.3E-12	3.4E-11	0	4.2E-11	1.5E-10

[a] 35 field-specific $ADD_{der\text{-}field}$ are included in the table. $ADD_{der\text{-}field}$ was calculated from field-specific average concentrations ($C_{der\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial sweat extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-285. Field-Specific Average Dermal Dose[a] (ADD_{der}, milligrams per kilogram BW per day) for Lifetime Cancer Risk Assessment (ADD_{der}, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Referees 16<30 Years**

Chemical Name	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	4	0	5.4E-11	1.7E-10	0	4.1E-10	8.0E-10
Benz[a]anthracene	56-55-3	31	0	7.3E-11	8.5E-11	3.9E-11	2.1E-10	3.9E-10
Benzo[a]pyrene	50-32-8	32	0	5.5E-11	5.5E-11	3.6E-11	1.4E-10	2.3E-10
Benzo[b]fluoranthene	205-99-2	34	0	1.0E-10	9.2E-11	8.2E-11	2.6E-10	4.0E-10
Benzo[k]fluoranthene	207-08-9	29	0	4.6E-11	4.8E-11	2.8E-11	1.5E-10	1.8E-10
1,3-Benzothiazole-2-thiol	149-30-4	1	0	3.9E-10	2.3E-09	0	0	1.4E-08
Chrysene	218-01-9	35	5.2E-11	4.7E-10	3.1E-10	4.7E-10	9.5E-10	1.1E-09
Cyclopenta[cd]pyrene	27208-37-3	35	8.7E-12	8.5E-11	5.1E-11	8.2E-11	1.6E-10	1.9E-10
Dibenz[a,h]anthracene	53-70-3	14	0	2.7E-11	4.9E-11	0	1.3E-10	2.1E-10
Indeno[1,2,3-cd]pyrene	193-39-5	28	0	5.4E-11	4.5E-11	4.8E-11	1.3E-10	2.0E-10
Naphthalene	91-20-3	2	0	3.5E-12	1.4E-11	0	1.8E-11	6.4E-11

[a] 35 field-specific $ADD_{der\text{-}field}$ are included in the table. $ADD_{der\text{-}field}$ was calculated from field-specific average

concentrations ($C_{der\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial sweat extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-286. Field-Specific Average Dermal Dose[a] (ADD_{der}, milligrams per kilogram BW per day) for Lifetime Cancer Risk Assessment (ADD_{der}, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Referees 30<40 Years**

Chemical Name	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	4	0	5.0E-11	1.6E-10	0	3.8E-10	7.5E-10
Benz[a]anthracene	56-55-3	31	0	6.9E-11	8.0E-11	3.6E-11	1.9E-10	3.7E-10
Benzo[a]pyrene	50-32-8	32	0	5.2E-11	5.1E-11	3.4E-11	1.4E-10	2.1E-10
Benzo[b]fluoranthene	205-99-2	34	0	9.8E-11	8.6E-11	7.7E-11	2.4E-10	3.8E-10
Benzo[k]fluoranthene	207-08-9	29	0	4.3E-11	4.5E-11	2.6E-11	1.4E-10	1.7E-10
1,3-Benzothiazole-2-thiol	149-30-4	1	0	3.7E-10	2.2E-09	0	0	1.3E-08
Chrysene	218-01-9	35	4.8E-11	4.4E-10	2.9E-10	4.4E-10	8.9E-10	1.0E-09
Cyclopenta[cd]pyrene	27208-37-3	35	8.1E-12	7.9E-11	4.7E-11	7.7E-11	1.5E-10	1.8E-10
Dibenz[a,h]anthracene	53-70-3	14	0	2.5E-11	4.6E-11	0	1.2E-10	1.9E-10
Indeno[1,2,3-cd]pyrene	193-39-5	28	0	5.1E-11	4.3E-11	4.5E-11	1.2E-10	1.9E-10
Naphthalene	91-20-3	2	0	3.3E-12	1.4E-11	0	1.7E-11	6.0E-11

[a] 35 field-specific $ADD_{der\text{-}field}$ are included in the table. $ADD_{der\text{-}field}$ was calculated from field-specific average concentrations ($C_{der\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial sweat extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-287. Field-Specific Average Dermal Dose[a] (ADD_{der}, milligrams per kilogram BW per day) for Lifetime Cancer Risk Assessment (ADD_{der}, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Referees 40<50 Years**

Chemical Name	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	4	0	5.1E-11	1.6E-10	0	3.9E-10	7.6E-10
Benz[a]anthracene	56-55-3	31	0	7.0E-11	8.0E-11	3.7E-11	2.0E-10	3.7E-10
Benzo[a]pyrene	50-32-8	32	0	5.2E-11	5.2E-11	3.4E-11	1.4E-10	2.1E-10
Benzo[b]fluoranthene	205-99-2	34	0	9.9E-11	8.7E-11	7.8E-11	2.5E-10	3.8E-10
Benzo[k]fluoranthene	207-08-9	29	0	4.3E-11	4.6E-11	2.6E-11	1.4E-10	1.7E-10
1,3-Benzothiazole-2-thiol	149-30-4	1	0	3.7E-10	2.2E-09	0	0	1.3E-08

Chemical Name	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Chrysene	218-01-9	35	4.9E-11	4.5E-10	2.9E-10	4.5E-10	9.0E-10	1.0E-09
Cyclopenta[cd]pyrene	27208-37-3	35	8.2E-12	8.0E-11	4.8E-11	7.7E-11	1.5E-10	1.8E-10
Dibenz[a,h]anthracene	53-70-3	14	0	2.6E-11	4.7E-11	0	1.2E-10	2.0E-10
Indeno[1,2,3-cd]pyrene	193-39-5	28	0	5.2E-11	4.3E-11	4.6E-11	1.2E-10	1.9E-10
Naphthalene	91-20-3	2	0	3.3E-12	1.4E-11	0	1.7E-11	6.0E-11

[a] 35 field-specific $ADD_{der\text{-}field}$ are included in the table. $ADD_{der\text{-}field}$ was calculated from field-specific average concentrations ($C_{der\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial sweat extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-288. Field-Specific Average Dermal Dose[a] (ADD_{der}, milligrams per kilogram BW per day) for Lifetime Cancer Risk Assessment (ADD_{der}, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Referees 50<70 Years**

Chemical Name	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	4	0	5.1E-11	1.6E-10	0	3.9E-10	7.6E-10
Benz[a]anthracene	56-55-3	31	0	7.0E-11	8.1E-11	3.7E-11	2.0E-10	3.7E-10
Benzo[a]pyrene	50-32-8	32	0	5.3E-11	5.2E-11	3.4E-11	1.4E-10	2.1E-10
Benzo[b]fluoranthene	205-99-2	34	0	9.9E-11	8.7E-11	7.8E-11	2.5E-10	3.8E-10
Benzo[k]fluoranthene	207-08-9	29	0	4.3E-11	4.6E-11	2.6E-11	1.4E-10	1.7E-10
1,3-Benzothiazole-2-thiol	149-30-4	1	0	3.7E-10	2.2E-09	0	0	1.3E-08
Chrysene	218-01-9	35	4.9E-11	4.5E-10	2.9E-10	4.5E-10	9.1E-10	1.0E-09
Cyclopenta[cd]pyrene	27208-37-3	35	8.2E-12	8.1E-11	4.8E-11	7.8E-11	1.5E-10	1.8E-10
Dibenz[a,h]anthracene	53-70-3	14	0	2.6E-11	4.7E-11	0	1.3E-10	2.0E-10
Indeno[1,2,3-cd]pyrene	193-39-5	28	0	5.2E-11	4.3E-11	4.6E-11	1.2E-10	1.9E-10
Naphthalene	91-20-3	2	0	3.3E-12	1.4E-11	0	1.7E-11	6.0E-11

[a] 35 field-specific $ADD_{der\text{-}field}$ are included in the table. $ADD_{der\text{-}field}$ was calculated from field-specific average concentrations ($C_{der\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial sweat extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-289. Field-Specific Average Dermal Dose[a] (ADD_{der}, milligrams per kilogram BW per day) for Lifetime Cancer Risk Assessment (ADD_{der}, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Spectators Third Trimester Fetus<0 Years**

Chemical Name	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	4	0	7.6E-11	2.3E-10	0	5.8E-10	1.1E-09
Benz[a]anthracene	56-55-3	31	0	1.0E-10	1.2E-10	5.5E-11	2.9E-10	5.5E-10
Benzo[a]pyrene	50-32-8	32	0	7.8E-11	7.7E-11	5.1E-11	2.0E-10	3.2E-10
Benzo[b]fluoranthene	205-99-2	34	0	1.5E-10	1.3E-10	1.2E-10	3.7E-10	5.7E-10
Benzo[k]fluoranthene	207-08-9	29	0	6.4E-11	6.8E-11	3.9E-11	2.1E-10	2.6E-10
1,3-Benzothiazole-2-thiol	149-30-4	1	0	5.6E-10	3.3E-09	0	0	1.9E-08
Chrysene	218-01-9	35	7.3E-11	6.7E-10	4.3E-10	6.7E-10	1.3E-09	1.5E-09
Cyclopenta[cd]pyrene	27208-37-3	35	1.2E-11	1.2E-10	7.1E-11	1.2E-10	2.3E-10	2.7E-10
Dibenz[a,h]anthracene	53-70-3	14	0	3.8E-11	7.0E-11	0	1.9E-10	2.9E-10
Indeno[1,2,3-cd]pyrene	193-39-5	28	0	7.7E-11	6.4E-11	6.8E-11	1.8E-10	2.8E-10
Naphthalene	91-20-3	2	0	4.9E-12	2.0E-11	0	2.5E-11	9.0E-11

[a] 35 field-specific $ADD_{der\text{-}field}$ are included in the table. $ADD_{der\text{-}field}$ was calculated from field-specific average concentrations ($C_{der\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial sweat extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-290. Field-Specific Average Dermal Dose[a] (ADD_{der}, milligrams per kilogram BW per day) for Lifetime Cancer Risk Assessment (ADD_{der}, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Spectators 0<2 Years**

Chemical Name	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	4	0	4.1E-10	1.3E-09	0	3.1E-09	6.0E-09
Benz[a]anthracene	56-55-3	31	0	5.6E-10	6.4E-10	2.9E-10	1.6E-09	3.0E-09
Benzo[a]pyrene	50-32-8	32	0	4.2E-10	4.1E-10	2.7E-10	1.1E-09	1.7E-09
Benzo[b]fluoranthene	205-99-2	34	0	7.9E-10	7.0E-10	6.2E-10	2.0E-09	3.1E-09
Benzo[k]fluoranthene	207-08-9	29	0	3.4E-10	3.6E-10	2.1E-10	1.1E-09	1.4E-09
1,3-Benzothiazole-2-thiol	149-30-4	1	0	3.0E-09	1.8E-08	0	0	1.0E-07
Chrysene	218-01-9	35	3.9E-10	3.6E-09	2.3E-09	3.6E-09	7.2E-09	8.1E-09
Cyclopenta[cd]pyrene	27208-37-3	35	6.5E-11	6.4E-10	3.8E-10	6.2E-10	1.2E-09	1.5E-09
Dibenz[a,h]anthracene	53-70-3	14	0	2.0E-10	3.7E-10	0	1.0E-09	1.6E-09
Indeno[1,2,3-cd]pyrene	193-39-5	28	0	4.1E-10	3.4E-10	3.6E-10	9.6E-10	1.5E-09
Naphthalene	91-20-3	2	0	2.6E-11	1.1E-10	0	1.3E-10	4.8E-10

[a] 35 field-specific $ADD_{der\text{-}field}$ are included in the table. $ADD_{der\text{-}field}$ was calculated from field-specific average concentrations ($C_{der\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial sweat extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-291. Field-Specific Average Dermal Dose[a] (ADD_{der}, milligrams per kilogram BW per day) for Lifetime Cancer Risk Assessment (ADD_{der}, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Spectators 2<6 Years**

Chemical Name	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	4	0	3.0E-10	9.3E-10	0	2.3E-09	4.4E-09
Benz[a]anthracene	56-55-3	31	0	4.1E-10	4.7E-10	2.2E-10	1.1E-09	2.2E-09
Benzo[a]pyrene	50-32-8	32	0	3.1E-10	3.0E-10	2.0E-10	8.0E-10	1.3E-09
Benzo[b]fluoranthene	205-99-2	34	0	5.8E-10	5.1E-10	4.6E-10	1.4E-09	2.2E-09
Benzo[k]fluoranthene	207-08-9	29	0	2.5E-10	2.7E-10	1.5E-10	8.2E-10	1.0E-09
1,3-Benzothiazole-2-thiol	149-30-4	1	0	2.2E-09	1.3E-08	0	0	7.7E-08
Chrysene	218-01-9	35	2.9E-10	2.6E-09	1.7E-09	2.6E-09	5.3E-09	6.0E-09
Cyclopenta[cd]pyrene	27208-37-3	35	4.8E-11	4.7E-10	2.8E-10	4.5E-10	9.0E-10	1.1E-09
Dibenz[a,h]anthracene	53-70-3	14	0	1.5E-10	2.7E-10	0	7.3E-10	1.1E-09
Indeno[1,2,3-cd]pyrene	193-39-5	28	0	3.0E-10	2.5E-10	2.7E-10	7.0E-10	1.1E-09
Naphthalene	91-20-3	2	0	1.9E-11	8.0E-11	0	9.8E-11	3.5E-10

[a] 35 field-specific $ADD_{der\text{-}field}$ are included in the table. $ADD_{der\text{-}field}$ was calculated from field-specific average concentrations ($C_{der\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial sweat extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-292. Field-Specific Average Dermal Dose[a] (ADD_{der}, milligrams per kilogram BW per day) for Lifetime Cancer Risk Assessment (ADD_{der}, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Spectators 6<11 Years**

Chemical Name	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	4	0	2.7E-10	8.4E-10	0	2.1E-09	4.0E-09
Benz[a]anthracene	56-55-3	31	0	3.7E-10	4.3E-10	2.0E-10	1.0E-09	2.0E-09
Benzo[a]pyrene	50-32-8	32	0	2.8E-10	2.7E-10	1.8E-10	7.3E-10	1.1E-09
Benzo[b]fluoranthene	205-99-2	34	0	5.3E-10	4.6E-10	4.1E-10	1.3E-09	2.0E-09
Benzo[k]fluoranthene	207-08-9	29	0	2.3E-10	2.4E-10	1.4E-10	7.5E-10	9.3E-10
1,3-Benzothiazole-2-thiol	149-30-4	1	0	2.0E-09	1.2E-08	0	0	7.0E-08

Chemical Name	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Chrysene	218-01-9	35	2.6E-10	2.4E-09	1.5E-09	2.4E-09	4.8E-09	5.4E-09
Cyclopenta[cd]pyrene	27208-37-3	35	4.4E-11	4.3E-10	2.6E-10	4.1E-10	8.2E-10	9.8E-10
Dibenz[a,h]anthracene	53-70-3	14	0	1.4E-10	2.5E-10	0	6.7E-10	1.0E-09
Indeno[1,2,3-cd]pyrene	193-39-5	28	0	2.7E-10	2.3E-10	2.4E-10	6.4E-10	1.0E-09
Naphthalene	91-20-3	2	0	1.8E-11	7.3E-11	0	8.9E-11	3.2E-10

[a] 35 field-specific $ADD_{der\text{-}field}$ are included in the table. $ADD_{der\text{-}field}$ was calculated from field-specific average concentrations ($C_{der\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial sweat extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-293. Field-Specific Average Dermal Dose[a] (ADD_{der}, milligrams per kilogram BW per day) for Lifetime Cancer Risk Assessment (ADD_{der}, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Spectators 11<16 Years**

Chemical Name	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	4	0	2.3E-10	7.2E-10	0	1.8E-09	3.4E-09
Benz[a]anthracene	56-55-3	31	0	3.2E-10	3.7E-10	1.7E-10	8.9E-10	1.7E-09
Benzo[a]pyrene	50-32-8	32	0	2.4E-10	2.4E-10	1.6E-10	6.2E-10	9.8E-10
Benzo[b]fluoranthene	205-99-2	34	0	4.5E-10	4.0E-10	3.5E-10	1.1E-09	1.7E-09
Benzo[k]fluoranthene	207-08-9	29	0	2.0E-10	2.1E-10	1.2E-10	6.4E-10	7.9E-10
1,3-Benzothiazole-2-thiol	149-30-4	1	0	1.7E-09	1.0E-08	0	0	6.0E-08
Chrysene	218-01-9	35	2.2E-10	2.0E-09	1.3E-09	2.0E-09	4.1E-09	4.7E-09
Cyclopenta[cd]pyrene	27208-37-3	35	3.7E-11	3.7E-10	2.2E-10	3.5E-10	7.0E-10	8.4E-10
Dibenz[a,h]anthracene	53-70-3	14	0	1.2E-10	2.1E-10	0	5.7E-10	8.9E-10
Indeno[1,2,3-cd]pyrene	193-39-5	28	0	2.3E-10	2.0E-10	2.1E-10	5.5E-10	8.6E-10
Naphthalene	91-20-3	2	0	1.5E-11	6.2E-11	0	7.6E-11	2.7E-10

[a] 35 field-specific $ADD_{der\text{-}field}$ are included in the table. $ADD_{der\text{-}field}$ was calculated from field-specific average concentrations ($C_{der\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial sweat extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-294. Field-Specific Average Dermal Dose[a] (ADD_{der}, milligrams per kilogram BW per day) for Lifetime Cancer Risk Assessment (ADD_{der}, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Spectators 16<30 Years**

Chemical Name	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	4	0	1.0E-10	3.1E-10	0	7.8E-10	1.5E-09
Benz[a]anthracene	56-55-3	31	0	1.4E-10	1.6E-10	7.3E-11	3.9E-10	7.4E-10
Benzo[a]pyrene	50-32-8	32	0	1.0E-10	1.0E-10	6.9E-11	2.7E-10	4.3E-10
Benzo[b]fluoranthene	205-99-2	34	0	2.0E-10	1.7E-10	1.6E-10	4.9E-10	7.6E-10
Benzo[k]fluoranthene	207-08-9	29	0	8.6E-11	9.1E-11	5.2E-11	2.8E-10	3.5E-10
1,3-Benzothiazole-2-thiol	149-30-4	1	0	7.4E-10	4.4E-09	0	0	2.6E-08
Chrysene	218-01-9	35	9.8E-11	9.0E-10	5.8E-10	9.0E-10	1.8E-09	2.0E-09
Cyclopenta[cd]pyrene	27208-37-3	35	1.6E-11	1.6E-10	9.6E-11	1.5E-10	3.1E-10	3.7E-10
Dibenz[a,h]anthracene	53-70-3	14	0	5.1E-11	9.3E-11	0	2.5E-10	3.9E-10
Indeno[1,2,3-cd]pyrene	193-39-5	28	0	1.0E-10	8.6E-11	9.1E-11	2.4E-10	3.7E-10
Naphthalene	91-20-3	2	0	6.6E-12	2.7E-11	0	3.3E-11	1.2E-10

[a] 35 field-specific $ADD_{der\text{-}field}$ are included in the table. $ADD_{der\text{-}field}$ was calculated from field-specific average concentrations ($C_{der\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial sweat extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-295. Field-Specific Average Dermal Dose[a] (ADD_{der}, milligrams per kilogram BW per day) for Lifetime Cancer Risk Assessment (ADD_{der}, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Spectators 30<40 Years**

Chemical Name	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	4	0	8.7E-11	2.7E-10	0	6.7E-10	1.3E-09
Benz[a]anthracene	56-55-3	31	0	1.2E-10	1.4E-10	6.3E-11	3.4E-10	6.4E-10
Benzo[a]pyrene	50-32-8	32	0	9.0E-11	8.9E-11	5.9E-11	2.4E-10	3.7E-10
Benzo[b]fluoranthene	205-99-2	34	0	1.7E-10	1.5E-10	1.3E-10	4.3E-10	6.6E-10
Benzo[k]fluoranthene	207-08-9	29	0	7.4E-11	7.9E-11	4.5E-11	2.4E-10	3.0E-10
1,3-Benzothiazole-2-thiol	149-30-4	1	0	6.4E-10	3.8E-09	0	0	2.3E-08
Chrysene	218-01-9	35	8.4E-11	7.7E-10	5.0E-10	7.7E-10	1.6E-09	1.8E-09
Cyclopenta[cd]pyrene	27208-37-3	35	1.4E-11	1.4E-10	8.3E-11	1.3E-10	2.6E-10	3.2E-10
Dibenz[a,h]anthracene	53-70-3	14	0	4.4E-11	8.1E-11	0	2.2E-10	3.4E-10
Indeno[1,2,3-cd]pyrene	193-39-5	28	0	8.9E-11	7.4E-11	7.8E-11	2.1E-10	3.2E-10
Naphthalene	91-20-3	2	0	5.7E-12	2.4E-11	0	2.9E-11	1.0E-10

[a] 35 field-specific $ADD_{der\text{-}field}$ are included in the table. $ADD_{der\text{-}field}$ was calculated from field-specific average

concentrations ($C_{der\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial sweat extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-296. Field-Specific Average Dermal Dose[a] (ADD_{der}, milligrams per kilogram BW per day) for Lifetime Cancer Risk Assessment (ADD_{der}, milligrams per kilogram BW per day) of **Field-Related Carcinogens[b]**—Combined Gender **Spectators 40<50 Years**

Chemical Name	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	4	0	8.8E-11	2.7E-10	0	6.8E-10	1.3E-09
Benz[a]anthracene	56-55-3	31	0	1.2E-10	1.4E-10	6.4E-11	3.4E-10	6.5E-10
Benzo[a]pyrene	50-32-8	32	0	9.1E-11	9.0E-11	6.0E-11	2.4E-10	3.7E-10
Benzo[b]fluoranthene	205-99-2	34	0	1.7E-10	1.5E-10	1.4E-10	4.3E-10	6.7E-10
Benzo[k]fluoranthene	207-08-9	29	0	7.5E-11	7.9E-11	4.6E-11	2.4E-10	3.0E-10
1,3-Benzothiazole-2-thiol	149-30-4	1	0	6.5E-10	3.8E-09	0	0	2.3E-08
Chrysene	218-01-9	35	8.5E-11	7.8E-10	5.0E-10	7.8E-10	1.6E-09	1.8E-09
Cyclopenta[cd]pyrene	27208-37-3	35	1.4E-11	1.4E-10	8.4E-11	1.3E-10	2.7E-10	3.2E-10
Dibenz[a,h]anthracene	53-70-3	14	0	4.5E-11	8.1E-11	0	2.2E-10	3.4E-10
Indeno[1,2,3-cd]pyrene	193-39-5	28	0	9.0E-11	7.5E-11	7.9E-11	2.1E-10	3.3E-10
Naphthalene	91-20-3	2	0	5.8E-12	2.4E-11	0	2.9E-11	1.0E-10

[a] 35 field-specific $ADD_{der\text{-}field}$ are included in the table. $ADD_{der\text{-}field}$ was calculated from field-specific average concentrations ($C_{der\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial sweat extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-297. Field-Specific Average Dermal Dose[a] (ADD_{der}, milligrams per kilogram BW per day) for Lifetime Cancer Risk Assessment (ADD_{der}, milligrams per kilogram BW per day) of **Field-Related Carcinogens[b]**—Combined Gender **Spectators 50<70 Years**

Chemical Name	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	4	0	8.3E-11	2.6E-10	0	6.4E-10	1.2E-09
Benz[a]anthracene	56-55-3	31	0	1.1E-10	1.3E-10	6.0E-11	3.2E-10	6.1E-10
Benzo[a]pyrene	50-32-8	32	0	8.6E-11	8.5E-11	5.6E-11	2.2E-10	3.5E-10
Benzo[b]fluoranthene	205-99-2	34	0	1.6E-10	1.4E-10	1.3E-10	4.0E-10	6.3E-10
Benzo[k]fluoranthene	207-08-9	29	0	7.1E-11	7.5E-11	4.3E-11	2.3E-10	2.9E-10
1,3-Benzothiazole-2-thiol	149-30-4	1	0	6.1E-10	3.6E-09	0	0	2.1E-08

Chemical Name	CASRN	Detection	$ADD_{der\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Chrysene	218-01-9	35	8.0E-11	7.4E-10	4.7E-10	7.4E-10	1.5E-09	1.7E-09
Cyclopenta[cd]pyrene	27208-37-3	35	1.3E-11	1.3E-10	7.9E-11	1.3E-10	2.5E-10	3.0E-10
Dibenz[a,h]anthracene	53-70-3	14	0	4.2E-11	7.7E-11	0	2.1E-10	3.2E-10
Indeno[1,2,3-cd]pyrene	193-39-5	28	0	8.5E-11	7.1E-11	7.5E-11	2.0E-10	3.1E-10
Naphthalene	91-20-3	2	0	5.4E-12	2.2E-11	0	2.7E-11	9.9E-11

[a] 35 field-specific $ADD_{der\text{-}field}$ are included in the table. $ADD_{der\text{-}field}$ was calculated from field-specific average concentrations ($C_{der\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial sweat extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

F.5.5. Average Ingestion One-Day Dose ($AD_{ing\text{-}DART}$) for One-Day Non-Cancer Hazard Assessment of DART Chemicals

INDIVIDUAL FIELD ASSESSMENT (Table F-298 to Table F-321)

Table F-298. Field-Specific Average Ingestion One-Day Dose[a] ($AD_{ing\text{-}DART\text{-}field}$, milligrams per kilogram BW per day) for One-Day Non-Cancer Hazard Assessment of **Field-Related DARTs**[b]—Combined Gender **Athletes 2<6 Years**

Chemical	CASRN[c]	Detection	$AD_{ing\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Arsenic		35	1.8E-08	1.5E-07	1.1E-07	1.4E-07	2.8E-07	5.9E-07
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	7	0	8.2E-08	3.3E-07	0	3.1E-07	1.9E-06
Benzo[a]pyrene	50-32-8	35	7.0E-09	3.5E-08	2.9E-08	2.5E-08	9.8E-08	1.0E-07
Benzo[e]pyrene	192-97-2	35	3.2E-08	1.1E-07	6.3E-08	8.2E-08	2.2E-07	2.4E-07
Benzo[g,h,i]perylene	191-24-2	35	4.9E-09	7.2E-08	4.5E-08	6.4E-08	1.4E-07	2.0E-07
Bis(2-Ethylhexyl)adipate	103-23-1	33	0	2.3E-07	2.1E-07	1.6E-07	6.9E-07	8.4E-07
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	4	0	1.8E-07	5.3E-07	0	1.7E-06	2.0E-06
Boron		25	0	6.7E-06	7.5E-06	3.0E-06	2.0E-05	2.6E-05
n-Caproic acid vinyl ester	3050-69-9	1	0	2.0E-09	1.2E-08	0	0	7.0E-08
Chrysene	218-01-9	35	4.8E-08	1.9E-07	1.0E-07	1.9E-07	3.3E-07	5.3E-07
Coronene	191-07-1	7	0	2.6E-08	7.6E-08	0	1.1E-07	4.1E-07
Cyclopenta[cd]pyrene	27208-37-3	35	7.3E-09	4.1E-08	3.8E-08	3.6E-08	1.1E-07	1.9E-07
Dicyclohexylamine	101-83-7	25	0	6.1E-07	5.0E-07	5.8E-07	1.4E-06	1.7E-06
Dimethyl phthalate	131-11-3	9	0	1.4E-08	4.7E-08	0	1.2E-07	2.2E-07
Indeno[1,2,3-cd]pyrene	193-39-5	12	0	7.2E-09	1.3E-08	0	3.1E-08	4.9E-08
Methyl stearate	112-61-8	35	3.7E-08	1.5E-07	1.3E-07	1.2E-07	3.5E-07	7.1E-07
Nickel		35	3.1E-07	1.4E-06	1.2E-06	1.0E-06	4.0E-06	5.5E-06

Chemical	CASRN[c]	Detection	$AD_{ing\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
4-tert-Octylphenol	140-66-9	35	7.8E-08	1.0E-06	1.4E-06	4.5E-07	4.0E-06	6.4E-06
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	35	4.7E-08	3.8E-07	2.3E-07	3.4E-07	7.8E-07	1.0E-06
Phenol, 4-(1-phenylethyl)-	1988-89-2	34	0	2.2E-07	2.8E-07	1.2E-07	7.4E-07	1.4E-06

[a] 35 field-specific $AD_{ing\text{-}DART\text{-}field}$ are included in the table
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis
Values are rounded to two significant figures.

Table F-299. Field-Specific Average Ingestion One-Day Dose[a] ($AD_{ing\text{-}DART\text{-}field}$, milligrams per kilogram BW per day) for One-Day Non-Cancer Hazard Assessment of **Field-Related DARTs**[b]—Combined Gender **Athletes 6<11 Years**

Chemical	CASRN[c]	Detection	$AD_{ing\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Arsenic		35	1.1E-08	9.7E-08	6.8E-08	8.7E-08	1.7E-07	3.7E-07
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	7	0	5.2E-08	2.1E-07	0	1.9E-07	1.2E-06
Benzo[a]pyrene	50-32-8	35	4.4E-09	2.2E-08	1.8E-08	1.6E-08	6.2E-08	6.6E-08
Benzo[e]pyrene	192-97-2	35	2.0E-08	6.7E-08	4.0E-08	5.2E-08	1.4E-07	1.5E-07
Benzo[g,h,i]perylene	191-24-2	35	3.1E-09	4.6E-08	2.9E-08	4.1E-08	9.1E-08	1.3E-07
Bis(2-Ethylhexyl)adipate	103-23-1	33	0	1.5E-07	1.3E-07	1.0E-07	4.4E-07	5.4E-07
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	4	0	1.2E-07	3.4E-07	0	1.1E-06	1.2E-06
Boron		25	0	4.3E-06	4.8E-06	1.9E-06	1.3E-05	1.7E-05
n-Caproic acid vinyl ester	3050-69-9	1	0	1.3E-09	7.5E-09	0	0	4.5E-08
Chrysene	218-01-9	35	3.1E-08	1.2E-07	6.5E-08	1.2E-07	2.1E-07	3.3E-07
Coronene	191-07-1	7	0	1.7E-08	4.8E-08	0	7.1E-08	2.6E-07
Cyclopenta[cd]pyrene	27208-37-3	35	4.6E-09	2.6E-08	2.4E-08	2.3E-08	6.9E-08	1.2E-07
Dicyclohexylamine	101-83-7	25	0	3.9E-07	3.2E-07	3.7E-07	8.9E-07	1.1E-06
Dimethyl phthalate	131-11-3	9	0	8.8E-09	3.0E-08	0	7.9E-08	1.4E-07
Indeno[1,2,3-cd]pyrene	193-39-5	12	0	4.6E-09	8.0E-09	0	1.9E-08	3.1E-08
Methyl stearate	112-61-8	35	2.4E-08	9.4E-08	8.3E-08	7.3E-08	2.2E-07	4.5E-07
Nickel		35	2.0E-07	9.1E-07	7.5E-07	6.3E-07	2.6E-06	3.5E-06
4-tert-Octylphenol	140-66-9	35	5.0E-08	6.5E-07	8.9E-07	2.9E-07	2.5E-06	4.1E-06
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	35	3.0E-08	2.4E-07	1.5E-07	2.2E-07	4.9E-07	6.6E-07
Phenol, 4-(1-phenylethyl)-	1988-89-2	34	0	1.4E-07	1.8E-07	7.7E-08	4.7E-07	8.9E-07

[a] 35 field-specific $AD_{ing\text{-}DART\text{-}field}$ are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.

[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis
Values are rounded to two significant figures.

Table F-300. Field-Specific Average Ingestion One-Day Dose[a] ($AD_{ing\text{-}DART\text{-}field}$, milligrams per kilogram BW per day) for One-Day Non-Cancer Hazard Assessment of **Field-Related DARTs**[b]—Combined Gender **Athletes 11<16 Years**

Chemical	CASRN[c]	Detection	$AD_{ing\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Arsenic		35	7.2E-09	6.1E-08	4.3E-08	5.5E-08	1.1E-07	2.4E-07
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	7	0	3.3E-08	1.3E-07	0	1.2E-07	7.5E-07
Benzo[a]pyrene	50-32-8	35	2.8E-09	1.4E-08	1.2E-08	1.0E-08	3.9E-08	4.2E-08
Benzo[e]pyrene	192-97-2	35	1.3E-08	4.3E-08	2.5E-08	3.3E-08	8.8E-08	9.6E-08
Benzo[g,h,i]perylene	191-24-2	35	2.0E-09	2.9E-08	1.8E-08	2.6E-08	5.8E-08	8.0E-08
Bis(2-Ethylhexyl)adipate	103-23-1	33	0	9.3E-08	8.5E-08	6.5E-08	2.8E-07	3.4E-07
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	4	0	7.4E-08	2.1E-07	0	6.8E-07	7.9E-07
Boron		25	0	2.7E-06	3.0E-06	1.2E-06	7.9E-06	1.1E-05
n-Caproic acid vinyl ester	3050-69-9	1	0	8.1E-10	4.8E-09	0	0	2.8E-08
Chrysene	218-01-9	35	1.9E-08	7.7E-08	4.1E-08	7.7E-08	1.3E-07	2.1E-07
Coronene	191-07-1	7	0	1.1E-08	3.1E-08	0	4.5E-08	1.7E-07
Cyclopenta[cd]pyrene	27208-37-3	35	2.9E-09	1.7E-08	1.5E-08	1.4E-08	4.4E-08	7.8E-08
Dicyclohexylamine	101-83-7	25	0	2.5E-07	2.0E-07	2.3E-07	5.6E-07	6.8E-07
Dimethyl phthalate	131-11-3	9	0	5.6E-09	1.9E-08	0	5.0E-08	8.8E-08
Indeno[1,2,3-cd]pyrene	193-39-5	12	0	2.9E-09	5.1E-09	0	1.2E-08	2.0E-08
Methyl stearate	112-61-8	35	1.5E-08	6.0E-08	5.3E-08	4.6E-08	1.4E-07	2.8E-07
Nickel		35	1.2E-07	5.8E-07	4.7E-07	4.0E-07	1.6E-06	2.2E-06
4-tert-Octylphenol	140-66-9	35	3.2E-08	4.1E-07	5.6E-07	1.8E-07	1.6E-06	2.6E-06
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	35	1.9E-08	1.5E-07	9.3E-08	1.4E-07	3.1E-07	4.2E-07
Phenol, 4-(1-phenylethyl)-	1988-89-2	34	0	8.7E-08	1.1E-07	4.9E-08	3.0E-07	5.6E-07

[a] 35 field-specific $AD_{ing\text{-}DART\text{-}field}$ are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis
Values are rounded to two significant figures.

Table F-301. Field-Specific Average Ingestion One-Day Dose[a] ($AD_{ing\text{-}DART\text{-}field}$, milligrams per kilogram BW per day) for One-Day Non-Cancer Hazard Assessment of **Field-Related DARTs**[b]—Combined Gender **Athletes 16<30 Years**

Chemical	CASRN[c]	Detection	$AD_{ing\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Arsenic		35	5.8E-09	4.9E-08	3.5E-08	4.4E-08	8.8E-08	1.9E-07
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	7	0	2.6E-08	1.1E-07	0	9.9E-08	6.0E-07
Benzo[a]pyrene	50-32-8	35	2.2E-09	1.1E-08	9.3E-09	8.1E-09	3.2E-08	3.3E-08
Benzo[e]pyrene	192-97-2	35	1.0E-08	3.4E-08	2.0E-08	2.7E-08	7.0E-08	7.6E-08
Benzo[g,h,i]perylene	191-24-2	35	1.6E-09	2.3E-08	1.4E-08	2.1E-08	4.6E-08	6.4E-08
Bis(2-Ethylhexyl)adipate	103-23-1	33	0	7.4E-08	6.8E-08	5.2E-08	2.2E-07	2.7E-07
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	4	0	5.9E-08	1.7E-07	0	5.4E-07	6.3E-07
Boron		25	0	2.2E-06	2.4E-06	9.7E-07	6.3E-06	8.5E-06
n-Caproic acid vinyl ester	3050-69-9	1	0	6.5E-10	3.8E-09	0	0	2.3E-08
Chrysene	218-01-9	35	1.6E-08	6.2E-08	3.3E-08	6.2E-08	1.1E-07	1.7E-07
Coronene	191-07-1	7	0	8.5E-09	2.5E-08	0	3.6E-08	1.3E-07
Cyclopenta[cd]pyrene	27208-37-3	35	2.3E-09	1.3E-08	1.2E-08	1.1E-08	3.5E-08	6.2E-08
Dicyclohexylamine	101-83-7	25	0	2.0E-07	1.6E-07	1.9E-07	4.5E-07	5.4E-07
Dimethyl phthalate	131-11-3	9	0	4.4E-09	1.5E-08	0	4.0E-08	7.1E-08
Indeno[1,2,3-cd]pyrene	193-39-5	12	0	2.3E-09	4.1E-09	0	9.8E-09	1.6E-08
Methyl stearate	112-61-8	35	1.2E-08	4.8E-08	4.2E-08	3.7E-08	1.1E-07	2.3E-07
Nickel		35	9.9E-08	4.6E-07	3.8E-07	3.2E-07	1.3E-06	1.8E-06
4-tert-Octylphenol	140-66-9	35	2.5E-08	3.3E-07	4.5E-07	1.5E-07	1.3E-06	2.1E-06
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	35	1.5E-08	1.2E-07	7.4E-08	1.1E-07	2.5E-07	3.3E-07
Phenol, 4-(1-phenylethyl)-	1988-89-2	34	0	6.9E-08	9.0E-08	3.9E-08	2.4E-07	4.5E-07

[a] 35 field-specific $AD_{ing\text{-}DART\text{-}field}$ are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis
Values are rounded to two significant figures.

Table F-302. Field-Specific Average Ingestion One-Day Dose[a] ($AD_{ing\text{-}DART\text{-}field}$, milligrams per kilogram BW per day) for One-Day Non-Cancer Hazard Assessment of **Field-Related DARTs**[b]—Combined Gender **Athletes 30<40 Years**

Chemical	CASRN[c]	Detection	$AD_{ing\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Arsenic		35	4.9E-09	4.2E-08	3.0E-08	3.8E-08	7.6E-08	1.6E-07
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	7	0	2.3E-08	9.2E-08	0	8.5E-08	5.1E-07
Benzo[a]pyrene	50-32-8	35	1.9E-09	9.8E-09	8.0E-09	7.0E-09	2.7E-08	2.9E-08

Chemical	CASRN[c]	Detection	$AD_{ing\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Benzo[e]pyrene	192-97-2	35	8.8E-09	2.9E-08	1.7E-08	2.3E-08	6.0E-08	6.5E-08
Benzo[g,h,i]perylene	191-24-2	35	1.4E-09	2.0E-08	1.2E-08	1.8E-08	4.0E-08	5.5E-08
Bis(2-Ethylhexyl)adipate	103-23-1	33	0	6.4E-08	5.8E-08	4.4E-08	1.9E-07	2.3E-07
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	4	0	5.1E-08	1.5E-07	0	4.7E-07	5.4E-07
Boron		25	0	1.9E-06	2.1E-06	8.3E-07	5.4E-06	7.3E-06
n-Caproic acid vinyl ester	3050-69-9	1	0	5.5E-10	3.3E-09	0	0	1.9E-08
Chrysene	218-01-9	35	1.3E-08	5.3E-08	2.8E-08	5.3E-08	9.1E-08	1.5E-07
Coronene	191-07-1	7	0	7.3E-09	2.1E-08	0	3.1E-08	1.1E-07
Cyclopenta[cd]pyrene	27208-37-3	35	2.0E-09	1.1E-08	1.1E-08	9.8E-09	3.0E-08	5.3E-08
Dicyclohexylamine	101-83-7	25	0	1.7E-07	1.4E-07	1.6E-07	3.9E-07	4.6E-07
Dimethyl phthalate	131-11-3	9	0	3.8E-09	1.3E-08	0	3.4E-08	6.0E-08
Indeno[1,2,3-cd]pyrene	193-39-5	12	0	2.0E-09	3.5E-09	0	8.4E-09	1.4E-08
Methyl stearate	112-61-8	35	1.0E-08	4.1E-08	3.6E-08	3.2E-08	9.7E-08	1.9E-07
Nickel		35	8.5E-08	4.0E-07	3.2E-07	2.8E-07	1.1E-06	1.5E-06
4-tert-Octylphenol	140-66-9	35	2.2E-08	2.8E-07	3.9E-07	1.2E-07	1.1E-06	1.8E-06
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	35	1.3E-08	1.1E-07	6.4E-08	9.4E-08	2.1E-07	2.9E-07
Phenol, 4-(1-phenylethyl)-	1988-89-2	34	0	5.9E-08	7.8E-08	3.3E-08	2.0E-07	3.9E-07

[a] 35 field-specific $AD_{ing\text{-}DART\text{-}field}$ are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis
Values are rounded to two significant figures.

Table F-303. Field-Specific Average Ingestion One-Day Dose[a] ($AD_{ing\text{-}DART\text{-}field}$, milligrams per kilogram BW per day) for One-Day Non-Cancer Hazard Assessment of **Field-Related DARTs**[b]—Combined Gender **Athletes 40<50 Years**

Chemical	CASRN[c]	Detection	$AD_{ing\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Arsenic		35	4.9E-09	4.1E-08	2.9E-08	3.7E-08	7.5E-08	1.6E-07
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	7	0	2.2E-08	9.0E-08	0	8.3E-08	5.0E-07
Benzo[a]pyrene	50-32-8	35	1.9E-09	9.6E-09	7.9E-09	6.8E-09	2.7E-08	2.8E-08
Benzo[e]pyrene	192-97-2	35	8.6E-09	2.9E-08	1.7E-08	2.2E-08	5.9E-08	6.4E-08
Benzo[g,h,i]perylene	191-24-2	35	1.3E-09	2.0E-08	1.2E-08	1.7E-08	3.9E-08	5.4E-08
Bis(2-Ethylhexyl)adipate	103-23-1	33	0	6.3E-08	5.7E-08	4.4E-08	1.9E-07	2.3E-07
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	4	0	5.0E-08	1.4E-07	0	4.6E-07	5.3E-07
Boron		25	0	1.8E-06	2.0E-06	8.2E-07	5.3E-06	7.1E-06
n-Caproic acid vinyl ester	3050-69-9	1	0	5.4E-10	3.2E-09	0	0	1.9E-08

Chemical	CASRN[c]	Detection	$AD_{ing\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Chrysene	218-01-9	35	1.3E-08	5.2E-08	2.8E-08	5.2E-08	8.9E-08	1.4E-07
Coronene	191-07-1	7	0	7.1E-09	2.1E-08	0	3.0E-08	1.1E-07
Cyclopenta[cd]pyrene	27208-37-3	35	2.0E-09	1.1E-08	1.0E-08	9.6E-09	2.9E-08	5.2E-08
Dicyclohexylamine	101-83-7	25	0	1.6E-07	1.4E-07	1.6E-07	3.8E-07	4.6E-07
Dimethyl phthalate	131-11-3	9	0	3.7E-09	1.3E-08	0	3.4E-08	5.9E-08
Indeno[1,2,3-cd]pyrene	193-39-5	12	0	2.0E-09	3.4E-09	0	8.3E-09	1.3E-08
Methyl stearate	112-61-8	35	1.0E-08	4.0E-08	3.5E-08	3.1E-08	9.6E-08	1.9E-07
Nickel		35	8.3E-08	3.9E-07	3.2E-07	2.7E-07	1.1E-06	1.5E-06
4-tert-Octylphenol	140-66-9	35	2.1E-08	2.8E-07	3.8E-07	1.2E-07	1.1E-06	1.7E-06
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	35	1.3E-08	1.0E-07	6.3E-08	9.2E-08	2.1E-07	2.8E-07
Phenol, 4-(1-phenylethyl)-	1988-89-2	34	0	5.8E-08	7.6E-08	3.3E-08	2.0E-07	3.8E-07

[a] 35 field-specific $AD_{ing\text{-}DART\text{-}field}$ are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis
Values are rounded to two significant figures.

Table F-304. Field-Specific Average Ingestion One-Day Dose[a] ($AD_{ing\text{-}DART\text{-}field}$, milligrams per kilogram BW per day) for One-Day Non-Cancer Hazard Assessment of **Field-Related DARTs**[b]—Combined Gender **Athletes 50<70 Years**

Chemical	CASRN[c]	Detection	$AD_{ing\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Arsenic		35	4.9E-09	4.1E-08	2.9E-08	3.7E-08	7.5E-08	1.6E-07
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	7	0	2.2E-08	9.0E-08	0	8.3E-08	5.0E-07
Benzo[a]pyrene	50-32-8	35	1.9E-09	9.6E-09	7.9E-09	6.8E-09	2.7E-08	2.8E-08
Benzo[e]pyrene	192-97-2	35	8.6E-09	2.9E-08	1.7E-08	2.2E-08	5.9E-08	6.4E-08
Benzo[g,h,i]perylene	191-24-2	35	1.3E-09	2.0E-08	1.2E-08	1.7E-08	3.9E-08	5.4E-08
Bis(2-Ethylhexyl)adipate	103-23-1	33	0	6.3E-08	5.7E-08	4.4E-08	1.9E-07	2.3E-07
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	4	0	5.0E-08	1.4E-07	0	4.6E-07	5.3E-07
Boron		25	0	1.8E-06	2.0E-06	8.2E-07	5.4E-06	7.1E-06
n-Caproic acid vinyl ester	3050-69-9	1	0	5.5E-10	3.2E-09	0	0	1.9E-08
Chrysene	218-01-9	35	1.3E-08	5.2E-08	2.8E-08	5.2E-08	8.9E-08	1.4E-07
Coronene	191-07-1	7	0	7.1E-09	2.1E-08	0	3.0E-08	1.1E-07
Cyclopenta[cd]pyrene	27208-37-3	35	2.0E-09	1.1E-08	1.0E-08	9.7E-09	3.0E-08	5.3E-08
Dicyclohexylamine	101-83-7	25	0	1.7E-07	1.4E-07	1.6E-07	3.8E-07	4.6E-07
Dimethyl phthalate	131-11-3	9	0	3.8E-09	1.3E-08	0	3.4E-08	6.0E-08
Indeno[1,2,3-cd]pyrene	193-39-5	12	0	2.0E-09	3.4E-09	0	8.3E-09	1.3E-08

Chemical	CASRN[c]	Detection	$AD_{ing\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Methyl stearate	112-61-8	35	1.0E-08	4.0E-08	3.5E-08	3.1E-08	9.6E-08	1.9E-07
Nickel		35	8.3E-08	3.9E-07	3.2E-07	2.7E-07	1.1E-06	1.5E-06
4-tert-Octylphenol	140-66-9	35	2.1E-08	2.8E-07	3.8E-07	1.2E-07	1.1E-06	1.7E-06
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	35	1.3E-08	1.0E-07	6.3E-08	9.3E-08	2.1E-07	2.8E-07
Phenol, 4-(1-phenylethyl)-	1988-89-2	34	0	5.8E-08	7.6E-08	3.3E-08	2.0E-07	3.8E-07

[a] 35 field-specific $AD_{ing\text{-}DART\text{-}field}$ are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis
Values are rounded to two significant figures.

Table F-305. Field-Specific Average Ingestion One-Day Dose[a] ($AD_{ing\text{-}DART\text{-}field}$, milligrams per kilogram BW per day) for One-Day Non-Cancer Hazard Assessment of **Field-Related DARTs**[b]—Combined Gender **Coaches 16<30 Years**

Chemical	CASRN[c]	Detection	$AD_{ing\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Arsenic		35	1.7E-09	1.4E-08	1.0E-08	1.3E-08	2.6E-08	5.5E-08
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	7	0	7.7E-09	3.1E-08	0	2.9E-08	1.7E-07
Benzo[a]pyrene	50-32-8	35	6.5E-10	3.3E-09	2.7E-09	2.4E-09	9.2E-09	9.7E-09
Benzo[e]pyrene	192-97-2	35	3.0E-09	9.9E-09	5.9E-09	7.7E-09	2.0E-08	2.2E-08
Benzo[g,h,i]perylene	191-24-2	35	4.6E-10	6.7E-09	4.2E-09	6.0E-09	1.3E-08	1.9E-08
Bis(2-Ethylhexyl)adipate	103-23-1	33	0	2.2E-08	2.0E-08	1.5E-08	6.5E-08	7.9E-08
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	4	0	1.7E-08	5.0E-08	0	1.6E-07	1.8E-07
Boron		25	0	6.3E-07	7.1E-07	2.8E-07	1.8E-06	2.5E-06
n-Caproic acid vinyl ester	3050-69-9	1	0	1.9E-10	1.1E-09	0	0	6.6E-09
Chrysene	218-01-9	35	4.5E-09	1.8E-08	9.6E-09	1.8E-08	3.1E-08	4.9E-08
Coronene	191-07-1	7	0	2.5E-09	7.1E-09	0	1.0E-08	3.9E-08
Cyclopenta[cd]pyrene	27208-37-3	35	6.8E-10	3.9E-09	3.6E-09	3.3E-09	1.0E-08	1.8E-08
Dicyclohexylamine	101-83-7	25	0	5.7E-08	4.7E-08	5.5E-08	1.3E-07	1.6E-07
Dimethyl phthalate	131-11-3	9	0	1.3E-09	4.4E-09	0	1.2E-08	2.1E-08
Indeno[1,2,3-cd]pyrene	193-39-5	12	0	6.8E-10	1.2E-09	0	2.9E-09	4.6E-09
Methyl stearate	112-61-8	35	3.5E-09	1.4E-08	1.2E-08	1.1E-08	3.3E-08	6.6E-08
Nickel		35	2.9E-08	1.3E-07	1.1E-07	9.4E-08	3.8E-07	5.2E-07
4-tert-Octylphenol	140-66-9	35	7.3E-09	9.6E-08	1.3E-07	4.2E-08	3.8E-07	6.0E-07
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	35	4.4E-09	3.6E-08	2.2E-08	3.2E-08	7.3E-08	9.7E-08
Phenol, 4-(1-phenylethyl)-	1988-89-2	34	0	2.0E-08	2.6E-08	1.1E-08	6.9E-08	1.3E-07

[a] 35 field-specific $AD_{ing\text{-}DART\text{-}field}$ are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis
Values are rounded to two significant figures.

Table F-306. Field-Specific Average Ingestion One-Day Dose[a] ($AD_{ing\text{-}DART\text{-}field}$, milligrams per kilogram BW per day) for One-Day Non-Cancer Hazard Assessment of **Field-Related DARTs**[b]—Combined Gender **Coaches 30<40 Years**

Chemical	CASRN[c]	Detection	$AD_{ing\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Arsenic		35	1.6E-09	1.3E-08	9.5E-09	1.2E-08	2.4E-08	5.2E-08
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	7	0	7.2E-09	2.9E-08	0	2.7E-08	1.6E-07
Benzo[a]pyrene	50-32-8	35	6.1E-10	3.1E-09	2.6E-09	2.2E-09	8.6E-09	9.1E-09
Benzo[e]pyrene	192-97-2	35	2.8E-09	9.3E-09	5.5E-09	7.2E-09	1.9E-08	2.1E-08
Benzo[g,h,i]perylene	191-24-2	35	4.3E-10	6.3E-09	4.0E-09	5.7E-09	1.3E-08	1.8E-08
Bis(2-Ethylhexyl)adipate	103-23-1	33	0	2.0E-08	1.9E-08	1.4E-08	6.1E-08	7.4E-08
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	4	0	1.6E-08	4.7E-08	0	1.5E-07	1.7E-07
Boron		25	0	5.9E-07	6.6E-07	2.7E-07	1.7E-06	2.3E-06
n-Caproic acid vinyl ester	3050-69-9	1	0	1.8E-10	1.0E-09	0	0	6.2E-09
Chrysene	218-01-9	35	4.3E-09	1.7E-08	9.0E-09	1.7E-08	2.9E-08	4.6E-08
Coronene	191-07-1	7	0	2.3E-09	6.7E-09	0	9.8E-09	3.6E-08
Cyclopenta[cd]pyrene	27208-37-3	35	6.4E-10	3.6E-09	3.4E-09	3.1E-09	9.6E-09	1.7E-08
Dicyclohexylamine	101-83-7	25	0	5.3E-08	4.4E-08	5.1E-08	1.2E-07	1.5E-07
Dimethyl phthalate	131-11-3	9	0	1.2E-09	4.1E-09	0	1.1E-08	1.9E-08
Indeno[1,2,3-cd]pyrene	193-39-5	12	0	6.3E-10	1.1E-09	0	2.7E-09	4.3E-09
Methyl stearate	112-61-8	35	3.3E-09	1.3E-08	1.1E-08	1.0E-08	3.1E-08	6.2E-08
Nickel		35	2.7E-08	1.3E-07	1.0E-07	8.8E-08	3.6E-07	4.9E-07
4-tert-Octylphenol	140-66-9	35	6.9E-09	9.0E-08	1.2E-07	4.0E-08	3.5E-07	5.7E-07
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	35	4.1E-09	3.4E-08	2.0E-08	3.0E-08	6.8E-08	9.1E-08
Phenol, 4-(1-phenylethyl)-	1988-89-2	34	0	1.9E-08	2.5E-08	1.1E-08	6.5E-08	1.2E-07

[a] 35 field-specific $AD_{ing\text{-}DART\text{-}field}$ are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis
Values are rounded to two significant figures.

Table F-307. Field-Specific Average Ingestion One-Day Dose[a] ($AD_{ing\text{-}DART\text{-}field}$, milligrams per kilogram BW per day) for One-Day Non-Cancer Hazard Assessment of **Field-Related DARTs**[b]—Combined Gender **Coaches 40<50 Years**

Chemical	CASRN	Detection	$AD_{ing\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Arsenic		35	1.5E-09	1.3E-08	9.3E-09	1.2E-08	2.4E-08	5.1E-08
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	7	0	7.1E-09	2.9E-08	0	2.6E-08	1.6E-07
Benzo[a]pyrene	50-32-8	35	6.0E-10	3.0E-09	2.5E-09	2.2E-09	8.4E-09	9.0E-09
Benzo[e]pyrene	192-97-2	35	2.7E-09	9.1E-09	5.4E-09	7.1E-09	1.9E-08	2.0E-08
Benzo[g,h,i]perylene	191-24-2	35	4.2E-10	6.2E-09	3.9E-09	5.5E-09	1.2E-08	1.7E-08
Bis(2-Ethylhexyl)adipate	103-23-1	33	0	2.0E-08	1.8E-08	1.4E-08	5.9E-08	7.3E-08
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	4	0	1.6E-08	4.6E-08	0	1.5E-07	1.7E-07
Boron		25	0	5.8E-07	6.5E-07	2.6E-07	1.7E-06	2.3E-06
n-Caproic acid vinyl ester	3050-69-9	1	0	1.7E-10	1.0E-09	0	0	6.1E-09
Chrysene	218-01-9	35	4.2E-09	1.7E-08	8.8E-09	1.7E-08	2.8E-08	4.5E-08
Coronene	191-07-1	7	0	2.3E-09	6.6E-09	0	9.6E-09	3.5E-08
Cyclopenta[cd]pyrene	27208-37-3	35	6.2E-10	3.5E-09	3.3E-09	3.1E-09	9.4E-09	1.7E-08
Dicyclohexylamine	101-83-7	25	0	5.2E-08	4.3E-08	5.0E-08	1.2E-07	1.4E-07
Dimethyl phthalate	131-11-3	9	0	1.2E-09	4.0E-09	0	1.1E-08	1.9E-08
Indeno[1,2,3-cd]pyrene	193-39-5	12	0	6.2E-10	1.1E-09	0	2.6E-09	4.2E-09
Methyl stearate	112-61-8	35	3.2E-09	1.3E-08	1.1E-08	9.9E-09	3.0E-08	6.1E-08
Nickel		35	2.6E-08	1.2E-07	1.0E-07	8.6E-08	3.5E-07	4.8E-07
4-tert-Octylphenol	140-66-9	35	6.7E-09	8.8E-08	1.2E-07	3.9E-08	3.5E-07	5.5E-07
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	35	4.0E-09	3.3E-08	2.0E-08	2.9E-08	6.7E-08	8.9E-08
Phenol, 4-(1-phenylethyl)-	1988-89-2	34	0	1.9E-08	2.4E-08	1.0E-08	6.3E-08	1.2E-07

[a] 35 field-specific $AD_{ing\text{-}DART\text{-}field}$ are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis
Values are rounded to two significant figures.

Table F-308. Field-Specific Average Ingestion One-Day Dose[a] ($AD_{ing\text{-}DART\text{-}field}$, milligrams per kilogram BW per day) for One-Day Non-Cancer Hazard Assessment of **Field-Related DARTs**[b]—Combined Gender **Coaches 50<70 Years**

Chemical	CASRN[c]	Detection	$AD_{ing\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Arsenic		35	1.5E-09	1.3E-08	9.3E-09	1.2E-08	2.4E-08	5.1E-08
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	7	0	7.1E-09	2.9E-08	0	2.6E-08	1.6E-07
Benzo[a]pyrene	50-32-8	35	6.0E-10	3.1E-09	2.5E-09	2.2E-09	8.5E-09	9.0E-09

Chemical	CASRN[c]	Detection	$AD_{ing\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Benzo[e]pyrene	192-97-2	35	2.7E-09	9.1E-09	5.4E-09	7.1E-09	1.9E-08	2.0E-08
Benzo[g,h,i]perylene	191-24-2	35	4.3E-10	6.2E-09	3.9E-09	5.6E-09	1.2E-08	1.7E-08
Bis(2-Ethylhexyl)adipate	103-23-1	33	0	2.0E-08	1.8E-08	1.4E-08	6.0E-08	7.3E-08
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	4	0	1.6E-08	4.6E-08	0	1.5E-07	1.7E-07
Boron		25	0	5.8E-07	6.5E-07	2.6E-07	1.7E-06	2.3E-06
n-Caproic acid vinyl ester	3050-69-9	1	0	1.7E-10	1.0E-09	0	0	6.1E-09
Chrysene	218-01-9	35	4.2E-09	1.7E-08	8.8E-09	1.7E-08	2.8E-08	4.6E-08
Coronene	191-07-1	7	0	2.3E-09	6.6E-09	0	9.6E-09	3.6E-08
Cyclopenta[cd]pyrene	27208-37-3	35	6.3E-10	3.6E-09	3.3E-09	3.1E-09	9.4E-09	1.7E-08
Dicyclohexylamine	101-83-7	25	0	5.2E-08	4.3E-08	5.0E-08	1.2E-07	1.5E-07
Dimethyl phthalate	131-11-3	9	0	1.2E-09	4.0E-09	0	1.1E-08	1.9E-08
Indeno[1,2,3-cd]pyrene	193-39-5	12	0	6.2E-10	1.1E-09	0	2.6E-09	4.3E-09
Methyl stearate	112-61-8	35	3.2E-09	1.3E-08	1.1E-08	9.9E-09	3.0E-08	6.1E-08
Nickel		35	2.7E-08	1.2E-07	1.0E-07	8.6E-08	3.5E-07	4.8E-07
4-tert-Octylphenol	140-66-9	35	6.8E-09	8.8E-08	1.2E-07	3.9E-08	3.5E-07	5.6E-07
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	35	4.0E-09	3.3E-08	2.0E-08	2.9E-08	6.7E-08	8.9E-08
Phenol, 4-(1-phenylethyl)-	1988-89-2	34	0	1.9E-08	2.4E-08	1.0E-08	6.4E-08	1.2E-07

[a] 35 field-specific $AD_{ing\text{-}DART\text{-}field}$ are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis
Values are rounded to two significant figures.

Table F-309. Field-Specific Average Ingestion One-Day Dose[a] ($AD_{ing\text{-}DART\text{-}field}$, milligrams per kilogram BW per day) for One-Day Non-Cancer Hazard Assessment of **Field-Related DARTs**[b]—Combined Gender **Referees 16<30 Years**

Chemical	CASRN[c]	Detection	$AD_{ing\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Arsenic		35	1.7E-09	1.4E-08	1.0E-08	1.3E-08	2.6E-08	5.5E-08
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	7	0	7.7E-09	3.1E-08	0	2.9E-08	1.7E-07
Benzo[a]pyrene	50-32-8	35	6.5E-10	3.3E-09	2.7E-09	2.4E-09	9.2E-09	9.7E-09
Benzo[e]pyrene	192-97-2	35	3.0E-09	9.9E-09	5.9E-09	7.7E-09	2.0E-08	2.2E-08
Benzo[g,h,i]perylene	191-24-2	35	4.6E-10	6.7E-09	4.2E-09	6.0E-09	1.3E-08	1.9E-08
Bis(2-Ethylhexyl)adipate	103-23-1	33	0	2.2E-08	2.0E-08	1.5E-08	6.5E-08	7.9E-08
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	4	0	1.7E-08	5.0E-08	0	1.6E-07	1.8E-07
Boron		25	0	6.3E-07	7.1E-07	2.8E-07	1.8E-06	2.5E-06
n-Caproic acid vinyl ester	3050-69-9	1	0	1.9E-10	1.1E-09	0	0	6.6E-09

Chemical	CASRN[c]	Detection	$AD_{ing\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Chrysene	218-01-9	35	4.5E-09	1.8E-08	9.6E-09	1.8E-08	3.1E-08	4.9E-08
Coronene	191-07-1	7	0	2.5E-09	7.1E-09	0	1.0E-08	3.9E-08
Cyclopenta[cd]pyrene	27208-37-3	35	6.8E-10	3.9E-09	3.6E-09	3.3E-09	1.0E-08	1.8E-08
Dicyclohexylamine	101-83-7	25	0	5.7E-08	4.7E-08	5.5E-08	1.3E-07	1.6E-07
Dimethyl phthalate	131-11-3	9	0	1.3E-09	4.4E-09	0	1.2E-08	2.1E-08
Indeno[1,2,3-cd]pyrene	193-39-5	12	0	6.8E-10	1.2E-09	0	2.9E-09	4.6E-09
Methyl stearate	112-61-8	35	3.5E-09	1.4E-08	1.2E-08	1.1E-08	3.3E-08	6.6E-08
Nickel		35	2.9E-08	1.3E-07	1.1E-07	9.4E-08	3.8E-07	5.2E-07
4-tert-Octylphenol	140-66-9	35	7.3E-09	9.6E-08	1.3E-07	4.2E-08	3.8E-07	6.0E-07
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	35	4.4E-09	3.6E-08	2.2E-08	3.2E-08	7.3E-08	9.7E-08
Phenol, 4-(1-phenylethyl)-	1988-89-2	34	0	2.0E-08	2.6E-08	1.1E-08	6.9E-08	1.3E-07

[a] 35 field-specific $AD_{ing\text{-}DART\text{-}field}$ are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis
Values are rounded to two significant figures.

Table F-310. Field-Specific Average Ingestion One-Day Dose[a] ($AD_{ing\text{-}DART\text{-}field}$, milligrams per kilogram BW per day) for One-Day Non-Cancer Hazard Assessment of **Field-Related DARTs**[b]—Combined Gender **Referees 30<40 Years**

Chemical	CASRN[c]	Detection	$AD_{ing\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Arsenic		35	1.6E-09	1.3E-08	9.5E-09	1.2E-08	2.4E-08	5.2E-08
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	7	0	7.2E-09	2.9E-08	0	2.7E-08	1.6E-07
Benzo[a]pyrene	50-32-8	35	6.1E-10	3.1E-09	2.6E-09	2.2E-09	8.6E-09	9.1E-09
Benzo[e]pyrene	192-97-2	35	2.8E-09	9.3E-09	5.5E-09	7.2E-09	1.9E-08	2.1E-08
Benzo[g,h,i]perylene	191-24-2	35	4.3E-10	6.3E-09	4.0E-09	5.7E-09	1.3E-08	1.8E-08
Bis(2-Ethylhexyl)adipate	103-23-1	33	0	2.0E-08	1.9E-08	1.4E-08	6.1E-08	7.4E-08
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	4	0	1.6E-08	4.7E-08	0	1.5E-07	1.7E-07
Boron		25	0	5.9E-07	6.6E-07	2.7E-07	1.7E-06	2.3E-06
n-Caproic acid vinyl ester	3050-69-9	1	0	1.8E-10	1.0E-09	0	0	6.2E-09
Chrysene	218-01-9	35	4.3E-09	1.7E-08	9.0E-09	1.7E-08	2.9E-08	4.6E-08
Coronene	191-07-1	7	0	2.3E-09	6.7E-09	0	9.8E-09	3.6E-08
Cyclopenta[cd]pyrene	27208-37-3	35	6.4E-10	3.6E-09	3.4E-09	3.1E-09	9.6E-09	1.7E-08
Dicyclohexylamine	101-83-7	25	0	5.3E-08	4.4E-08	5.1E-08	1.2E-07	1.5E-07
Dimethyl phthalate	131-11-3	9	0	1.2E-09	4.1E-09	0	1.1E-08	1.9E-08
Indeno[1,2,3-cd]pyrene	193-39-5	12	0	6.3E-10	1.1E-09	0	2.7E-09	4.3E-09

Chemical	CASRN[c]	Detection	$AD_{ing\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Methyl stearate	112-61-8	35	3.3E-09	1.3E-08	1.1E-08	1.0E-08	3.1E-08	6.2E-08
Nickel		35	2.7E-08	1.3E-07	1.0E-07	8.8E-08	3.6E-07	4.9E-07
4-tert-Octylphenol	140-66-9	35	6.9E-09	9.0E-08	1.2E-07	4.0E-08	3.5E-07	5.7E-07
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	35	4.1E-09	3.4E-08	2.0E-08	3.0E-08	6.8E-08	9.1E-08
Phenol, 4-(1-phenylethyl)-	1988-89-2	34	0	1.9E-08	2.5E-08	1.1E-08	6.5E-08	1.2E-07

[a] 35 field-specific $AD_{ing\text{-}DART\text{-}field}$ are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis
Values are rounded to two significant figures.

Table F-311. Field-Specific Average Ingestion One-Day Dose[a] ($AD_{ing\text{-}DART\text{-}field}$, milligrams per kilogram BW per day) for One-Day Non-Cancer Hazard Assessment of **Field-Related DARTs**[b]—Combined Gender **Referees 40<50 Years**

Chemical	CASRN[c]	Detection	$AD_{ing\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Arsenic		35	1.5E-09	1.3E-08	9.3E-09	1.2E-08	2.4E-08	5.1E-08
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	7	0	7.1E-09	2.9E-08	0	2.6E-08	1.6E-07
Benzo[a]pyrene	50-32-8	35	6.0E-10	3.0E-09	2.5E-09	2.2E-09	8.4E-09	9.0E-09
Benzo[e]pyrene	192-97-2	35	2.7E-09	9.1E-09	5.4E-09	7.1E-09	1.9E-08	2.0E-08
Benzo[g,h,i]perylene	191-24-2	35	4.2E-10	6.2E-09	3.9E-09	5.5E-09	1.2E-08	1.7E-08
Bis(2-Ethylhexyl)adipate	103-23-1	33	0	2.0E-08	1.8E-08	1.4E-08	5.9E-08	7.3E-08
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	4	0	1.6E-08	4.6E-08	0	1.5E-07	1.7E-07
Boron		25	0	5.8E-07	6.5E-07	2.6E-07	1.7E-06	2.3E-06
n-Caproic acid vinyl ester	3050-69-9	1	0	1.7E-10	1.0E-09	0	0	6.1E-09
Chrysene	218-01-9	35	4.2E-09	1.7E-08	8.8E-09	1.7E-08	2.8E-08	4.5E-08
Coronene	191-07-1	7	0	2.3E-09	6.6E-09	0	9.6E-09	3.5E-08
Cyclopenta[cd]pyrene	27208-37-3	35	6.2E-10	3.5E-09	3.3E-09	3.1E-09	9.4E-09	1.7E-08
Dicyclohexylamine	101-83-7	25	0	5.2E-08	4.3E-08	5.0E-08	1.2E-07	1.4E-07
Dimethyl phthalate	131-11-3	9	0	1.2E-09	4.0E-09	0	1.1E-08	1.9E-08
Indeno[1,2,3-cd]pyrene	193-39-5	12	0	6.2E-10	1.1E-09	0	2.6E-09	4.2E-09
Methyl stearate	112-61-8	35	3.2E-09	1.3E-08	1.1E-08	9.9E-09	3.0E-08	6.1E-08
Nickel		35	2.6E-08	1.2E-07	1.0E-07	8.6E-08	3.5E-07	4.8E-07
4-tert-Octylphenol	140-66-9	35	6.7E-09	8.8E-08	1.2E-07	3.9E-08	3.5E-07	5.5E-07
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	35	4.0E-09	3.3E-08	2.0E-08	2.9E-08	6.7E-08	8.9E-08
Phenol, 4-(1-phenylethyl)-	1988-89-2	34	0	1.9E-08	2.4E-08	1.0E-08	6.3E-08	1.2E-07

[a] 35 field-specific $AD_{ing\text{-}DART\text{-}field}$ are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis
Values are rounded to two significant figures.

Table F-312. Field-Specific Average Ingestion One-Day Dose[a] ($AD_{ing\text{-}DART\text{-}field}$, milligrams per kilogram BW per day) for One-Day Non-Cancer Hazard Assessment of **Field-Related DARTs**[b]—Combined Gender **Referees 50<70 Years**

Chemical	CASRN[c]	Detection	$AD_{ing\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Arsenic		35	1.5E-09	1.3E-08	9.3E-09	1.2E-08	2.4E-08	5.1E-08
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	7	0	7.1E-09	2.9E-08	0	2.6E-08	1.6E-07
Benzo[a]pyrene	50-32-8	35	6.0E-10	3.1E-09	2.5E-09	2.2E-09	8.5E-09	9.0E-09
Benzo[e]pyrene	192-97-2	35	2.7E-09	9.1E-09	5.4E-09	7.1E-09	1.9E-08	2.0E-08
Benzo[g,h,i]perylene	191-24-2	35	4.3E-10	6.2E-09	3.9E-09	5.6E-09	1.2E-08	1.7E-08
Bis(2-Ethylhexyl)adipate	103-23-1	33	0	2.0E-08	1.8E-08	1.4E-08	6.0E-08	7.3E-08
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	4	0	1.6E-08	4.6E-08	0	1.5E-07	1.7E-07
Boron		25	0	5.8E-07	6.5E-07	2.6E-07	1.7E-06	2.3E-06
n-Caproic acid vinyl ester	3050-69-9	1	0	1.7E-10	1.0E-09	0	0	6.1E-09
Chrysene	218-01-9	35	4.2E-09	1.7E-08	8.8E-09	1.7E-08	2.8E-08	4.6E-08
Coronene	191-07-1	7	0	2.3E-09	6.6E-09	0	9.6E-09	3.6E-08
Cyclopenta[cd]pyrene	27208-37-3	35	6.3E-10	3.6E-09	3.3E-09	3.1E-09	9.4E-09	1.7E-08
Dicyclohexylamine	101-83-7	25	0	5.2E-08	4.3E-08	5.0E-08	1.2E-07	1.5E-07
Dimethyl phthalate	131-11-3	9	0	1.2E-09	4.0E-09	0	1.1E-08	1.9E-08
Indeno[1,2,3-cd]pyrene	193-39-5	12	0	6.2E-10	1.1E-09	0	2.6E-09	4.3E-09
Methyl stearate	112-61-8	35	3.2E-09	1.3E-08	1.1E-08	9.9E-09	3.0E-08	6.1E-08
Nickel		35	2.7E-08	1.2E-07	1.0E-07	8.6E-08	3.5E-07	4.8E-07
4-tert-Octylphenol	140-66-9	35	6.8E-09	8.8E-08	1.2E-07	3.9E-08	3.5E-07	5.6E-07
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	35	4.0E-09	3.3E-08	2.0E-08	2.9E-08	6.7E-08	8.9E-08
Phenol, 4-(1-phenylethyl)-	1988-89-2	34	0	1.9E-08	2.4E-08	1.0E-08	6.4E-08	1.2E-07

[a] 35 field-specific $AD_{ing\text{-}DART\text{-}field}$ are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis
Values are rounded to two significant figures.

Table F-313. Field-Specific Average Ingestion One-Day Dose[a] ($AD_{ing\text{-}DART\text{-}field}$, milligrams per kilogram BW per day) for One-Day Non-Cancer Hazard Assessment of **Field-Related DARTs**[b]—Combined Gender **Spectators Third Trimester Fetus<0 Years**

Chemical	CASRN[c]	Detection	$AD_{ing\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Arsenic		35	6.8E-10	5.7E-09	4.1E-09	5.2E-09	1.0E-08	2.2E-08
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	7	0	3.1E-09	1.3E-08	0	1.2E-08	7.0E-08
Benzo[a]pyrene	50-32-8	35	2.6E-10	1.3E-09	1.1E-09	9.5E-10	3.7E-09	3.9E-09
Benzo[e]pyrene	192-97-2	35	1.2E-09	4.0E-09	2.4E-09	3.1E-09	8.2E-09	8.9E-09
Benzo[g,h,i]perylene	191-24-2	35	1.9E-10	2.7E-09	1.7E-09	2.4E-09	5.4E-09	7.5E-09
Bis(2-Ethylhexyl)adipate	103-23-1	33	0	8.7E-09	7.9E-09	6.1E-09	2.6E-08	3.2E-08
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	4	0	6.9E-09	2.0E-08	0	6.4E-08	7.4E-08
Boron		25	0	2.5E-07	2.8E-07	1.1E-07	7.4E-07	9.9E-07
n-Caproic acid vinyl ester	3050-69-9	1	0	7.6E-11	4.5E-10	0	0	2.6E-09
Chrysene	218-01-9	35	1.8E-09	7.2E-09	3.8E-09	7.2E-09	1.2E-08	2.0E-08
Coronene	191-07-1	7	0	9.9E-10	2.9E-09	0	4.2E-09	1.6E-08
Cyclopenta[cd]pyrene	27208-37-3	35	2.7E-10	1.6E-09	1.4E-09	1.3E-09	4.1E-09	7.3E-09
Dicyclohexylamine	101-83-7	25	0	2.3E-08	1.9E-08	2.2E-08	5.3E-08	6.3E-08
Dimethyl phthalate	131-11-3	9	0	5.2E-10	1.8E-09	0	4.7E-09	8.3E-09
Indeno[1,2,3-cd]pyrene	193-39-5	12	0	2.7E-10	4.7E-10	0	1.2E-09	1.9E-09
Methyl stearate	112-61-8	35	1.4E-09	5.6E-09	4.9E-09	4.3E-09	1.3E-08	2.7E-08
Nickel		35	1.2E-08	5.4E-08	4.4E-08	3.8E-08	1.5E-07	2.1E-07
4-tert-Octylphenol	140-66-9	35	2.9E-09	3.9E-08	5.3E-08	1.7E-08	1.5E-07	2.4E-07
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	35	1.8E-09	1.4E-08	8.7E-09	1.3E-08	2.9E-08	3.9E-08
Phenol, 4-(1-phenylethyl)-	1988-89-2	34	0	8.1E-09	1.1E-08	4.5E-09	2.8E-08	5.3E-08

[a] 35 field-specific $AD_{ing\text{-}DART\text{-}field}$ are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis
Values are rounded to two significant figures.

Table F-314. Field-Specific Average Ingestion One-Day Dose[a] ($AD_{ing\text{-}DART\text{-}field}$, milligrams per kilogram BW per day) for One-Day Non-Cancer Hazard Assessment of **Field-Related DARTs**[b]—Combined Gender **Spectators 0<2 Years**

Chemical	CASRN[c]	Detection	$AD_{ing\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Arsenic		35	4.5E-08	3.9E-07	2.7E-07	3.5E-07	7.0E-07	1.5E-06
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	7	0	2.1E-07	8.4E-07	0	7.8E-07	4.7E-06
Benzo[a]pyrene	50-32-8	35	1.8E-08	9.0E-08	7.4E-08	6.4E-08	2.5E-07	2.6E-07

Chemical	CASRN[c]	Detection	$AD_{ing\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Benzo[e]pyrene	192-97-2	35	8.1E-08	2.7E-07	1.6E-07	2.1E-07	5.5E-07	6.0E-07
Benzo[g,h,i]perylene	191-24-2	35	1.2E-08	1.8E-07	1.1E-07	1.6E-07	3.6E-07	5.1E-07
Bis(2-Ethylhexyl)adipate	103-23-1	33	0	5.9E-07	5.3E-07	4.1E-07	1.7E-06	2.1E-06
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	4	0	4.6E-07	1.4E-06	0	4.3E-06	5.0E-06
Boron		25	0	1.7E-05	1.9E-05	7.7E-06	5.0E-05	6.7E-05
n-Caproic acid vinyl ester	3050-69-9	1	0	5.1E-09	3.0E-08	0	0	1.8E-07
Chrysene	218-01-9	35	1.2E-07	4.9E-07	2.6E-07	4.9E-07	8.3E-07	1.3E-06
Coronene	191-07-1	7	0	6.7E-08	1.9E-07	0	2.8E-07	1.0E-06
Cyclopenta[cd]pyrene	27208-37-3	35	1.8E-08	1.0E-07	9.7E-08	9.0E-08	2.8E-07	4.9E-07
Dicyclohexylamine	101-83-7	25	0	1.5E-06	1.3E-06	1.5E-06	3.5E-06	4.3E-06
Dimethyl phthalate	131-11-3	9	0	3.5E-08	1.2E-07	0	3.1E-07	5.6E-07
Indeno[1,2,3-cd]pyrene	193-39-5	12	0	1.8E-08	3.2E-08	0	7.7E-08	1.3E-07
Methyl stearate	112-61-8	35	9.4E-08	3.8E-07	3.3E-07	2.9E-07	8.9E-07	1.8E-06
Nickel		35	7.8E-07	3.6E-06	3.0E-06	2.5E-06	1.0E-05	1.4E-05
4-tert-Octylphenol	140-66-9	35	2.0E-07	2.6E-06	3.6E-06	1.1E-06	1.0E-05	1.6E-05
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	35	1.2E-07	9.7E-07	5.9E-07	8.7E-07	2.0E-06	2.6E-06
Phenol, 4-(1-phenylethyl)-	1988-89-2	34	0	5.4E-07	7.1E-07	3.1E-07	1.9E-06	3.5E-06

[a] 35 field-specific $AD_{ing\text{-}DART\text{-}field}$ are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis
Values are rounded to two significant figures.

Table F-315. Field-Specific Average Ingestion One-Day Dose[a] ($AD_{ing\text{-}DART\text{-}field}$, milligrams per kilogram BW per day) for One-Day Non-Cancer Hazard Assessment of **Field-Related DARTs**[b]—Combined Gender **Spectators 2<6 Years**

Chemical	CASRN[c]	Detection	$AD_{ing\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Arsenic		35	2.2E-08	1.8E-07	1.3E-07	1.7E-07	3.3E-07	7.1E-07
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	7	0	9.9E-08	4.0E-07	0	3.7E-07	2.2E-06
Benzo[a]pyrene	50-32-8	35	8.4E-09	4.3E-08	3.5E-08	3.0E-08	1.2E-07	1.3E-07
Benzo[e]pyrene	192-97-2	35	3.8E-08	1.3E-07	7.6E-08	9.9E-08	2.6E-07	2.9E-07
Benzo[g,h,i]perylene	191-24-2	35	5.9E-09	8.7E-08	5.4E-08	7.7E-08	1.7E-07	2.4E-07
Bis(2-Ethylhexyl)adipate	103-23-1	33	0	2.8E-07	2.5E-07	1.9E-07	8.3E-07	1.0E-06
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	4	0	2.2E-07	6.4E-07	0	2.0E-06	2.3E-06
Boron		25	0	8.1E-06	9.1E-06	3.6E-06	2.4E-05	3.2E-05
n-Caproic acid vinyl ester	3050-69-9	1	0	2.4E-09	1.4E-08	0	0	8.5E-08

Chemical	CASRN[c]	Detection	$AD_{ing\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Chrysene	218-01-9	35	5.8E-08	2.3E-07	1.2E-07	2.3E-07	4.0E-07	6.3E-07
Coronene	191-07-1	7	0	3.2E-08	9.2E-08	0	1.3E-07	5.0E-07
Cyclopenta[cd]pyrene	27208-37-3	35	8.7E-09	5.0E-08	4.6E-08	4.3E-08	1.3E-07	2.3E-07
Dicyclohexylamine	101-83-7	25	0	7.3E-07	6.0E-07	7.0E-07	1.7E-06	2.0E-06
Dimethyl phthalate	131-11-3	9	0	1.7E-08	5.6E-08	0	1.5E-07	2.6E-07
Indeno[1,2,3-cd]pyrene	193-39-5	12	0	8.7E-09	1.5E-08	0	3.7E-08	5.9E-08
Methyl stearate	112-61-8	35	4.5E-08	1.8E-07	1.6E-07	1.4E-07	4.2E-07	8.5E-07
Nickel		35	3.7E-07	1.7E-06	1.4E-06	1.2E-06	4.9E-06	6.6E-06
4-tert-Octylphenol	140-66-9	35	9.4E-08	1.2E-06	1.7E-06	5.4E-07	4.8E-06	7.7E-06
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	35	5.6E-08	4.6E-07	2.8E-07	4.1E-07	9.3E-07	1.2E-06
Phenol, 4-(1-phenylethyl)-	1988-89-2	34	0	2.6E-07	3.4E-07	1.4E-07	8.9E-07	1.7E-06

[a] 35 field-specific $AD_{ing\text{-}DART\text{-}field}$ are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis
Values are rounded to two significant figures.

Table F-316. Field-Specific Average Ingestion One-Day Dose[a] ($AD_{ing\text{-}DART\text{-}field}$, milligrams per kilogram BW per day) for One-Day Non-Cancer Hazard Assessment of **Field-Related DARTs**[b]—Combined Gender **Spectators 6<11 Years**

Chemical	CASRN[c]	Detection	$AD_{ing\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Arsenic		35	1.5E-08	1.3E-07	9.1E-08	1.2E-07	2.3E-07	5.0E-07
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	7	0	7.0E-08	2.8E-07	0	2.6E-07	1.6E-06
Benzo[a]pyrene	50-32-8	35	5.9E-09	3.0E-08	2.5E-08	2.1E-08	8.3E-08	8.8E-08
Benzo[e]pyrene	192-97-2	35	2.7E-08	8.9E-08	5.3E-08	7.0E-08	1.8E-07	2.0E-07
Benzo[g,h,i]perylene	191-24-2	35	4.2E-09	6.1E-08	3.8E-08	5.4E-08	1.2E-07	1.7E-07
Bis(2-Ethylhexyl)adipate	103-23-1	33	0	2.0E-07	1.8E-07	1.4E-07	5.8E-07	7.1E-07
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	4	0	1.5E-07	4.5E-07	0	1.4E-06	1.7E-06
Boron		25	0	5.7E-06	6.4E-06	2.6E-06	1.7E-05	2.2E-05
n-Caproic acid vinyl ester	3050-69-9	1	0	1.7E-09	1.0E-08	0	0	5.9E-08
Chrysene	218-01-9	35	4.1E-08	1.6E-07	8.6E-08	1.6E-07	2.8E-07	4.5E-07
Coronene	191-07-1	7	0	2.2E-08	6.4E-08	0	9.4E-08	3.5E-07
Cyclopenta[cd]pyrene	27208-37-3	35	6.1E-09	3.5E-08	3.2E-08	3.0E-08	9.2E-08	1.6E-07
Dicyclohexylamine	101-83-7	25	0	5.1E-07	4.2E-07	4.9E-07	1.2E-06	1.4E-06
Dimethyl phthalate	131-11-3	9	0	1.2E-08	4.0E-08	0	1.0E-07	1.9E-07
Indeno[1,2,3-cd]pyrene	193-39-5	12	0	6.1E-09	1.1E-08	0	2.6E-08	4.2E-08

Chemical	CASRN[c]	Detection	$AD_{ing\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Methyl stearate	112-61-8	35	3.1E-08	1.3E-07	1.1E-07	9.7E-08	3.0E-07	6.0E-07
Nickel		35	2.6E-07	1.2E-06	1.0E-06	8.4E-07	3.4E-06	4.7E-06
4-tert-Octylphenol	140-66-9	35	6.6E-08	8.7E-07	1.2E-06	3.8E-07	3.4E-06	5.4E-06
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	35	3.9E-08	3.2E-07	2.0E-07	2.9E-07	6.6E-07	8.8E-07
Phenol, 4-(1-phenylethyl)-	1988-89-2	34	0	1.8E-07	2.4E-07	1.0E-07	6.2E-07	1.2E-06

[a] 35 field-specific $AD_{ing\text{-}DART\text{-}field}$ are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis
Values are rounded to two significant figures.

Table F-317. Field-Specific Average Ingestion One-Day Dose[a] ($AD_{ing\text{-}DART\text{-}field}$, milligrams per kilogram BW per day) for One-Day Non-Cancer Hazard Assessment of **Field-Related DARTs**[b]—Combined Gender **Spectators 11<16 Years**

Chemical	CASRN[c]	Detection	$AD_{ing\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Arsenic		35	1.2E-09	1.0E-08	7.3E-09	9.4E-09	1.9E-08	4.0E-08
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	7	0	5.6E-09	2.3E-08	0	2.1E-08	1.3E-07
Benzo[a]pyrene	50-32-8	35	4.7E-10	2.4E-09	2.0E-09	1.7E-09	6.7E-09	7.1E-09
Benzo[e]pyrene	192-97-2	35	2.2E-09	7.2E-09	4.3E-09	5.6E-09	1.5E-08	1.6E-08
Benzo[g,h,i]perylene	191-24-2	35	3.4E-10	4.9E-09	3.1E-09	4.4E-09	9.8E-09	1.4E-08
Bis(2-Ethylhexyl)adipate	103-23-1	33	0	1.6E-08	1.4E-08	1.1E-08	4.7E-08	5.7E-08
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	4	0	1.2E-08	3.6E-08	0	1.2E-07	1.3E-07
Boron		25	0	4.6E-07	5.1E-07	2.1E-07	1.3E-06	1.8E-06
n-Caproic acid vinyl ester	3050-69-9	1	0	1.4E-10	8.1E-10	0	0	4.8E-09
Chrysene	218-01-9	35	3.3E-09	1.3E-08	7.0E-09	1.3E-08	2.2E-08	3.6E-08
Coronene	191-07-1	7	0	1.8E-09	5.2E-09	0	7.6E-09	2.8E-08
Cyclopenta[cd]pyrene	27208-37-3	35	4.9E-10	2.8E-09	2.6E-09	2.4E-09	7.4E-09	1.3E-08
Dicyclohexylamine	101-83-7	25	0	4.1E-08	3.4E-08	4.0E-08	9.5E-08	1.1E-07
Dimethyl phthalate	131-11-3	9	0	9.4E-10	3.2E-09	0	8.4E-09	1.5E-08
Indeno[1,2,3-cd]pyrene	193-39-5	12	0	4.9E-10	8.6E-10	0	2.1E-09	3.4E-09
Methyl stearate	112-61-8	35	2.5E-09	1.0E-08	8.9E-09	7.8E-09	2.4E-08	4.8E-08
Nickel		35	2.1E-08	9.8E-08	8.0E-08	6.8E-08	2.8E-07	3.8E-07
4-tert-Octylphenol	140-66-9	35	5.3E-09	7.0E-08	9.5E-08	3.1E-08	2.7E-07	4.4E-07
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	35	3.2E-09	2.6E-08	1.6E-08	2.3E-08	5.3E-08	7.1E-08
Phenol, 4-(1-phenylethyl)-	1988-89-2	34	0	1.5E-08	1.9E-08	8.2E-09	5.0E-08	9.5E-08

[a] 35 field-specific $AD_{ing\text{-}DART\text{-}field}$ are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis
Values are rounded to two significant figures.

Table F-318. Field-Specific Average Ingestion One-Day Dose[a] ($AD_{ing\text{-}DART\text{-}field}$, milligrams per kilogram BW per day) for One-Day Non-Cancer Hazard Assessment of **Field-Related DARTs**[b]—Combined Gender **Spectators 16<30 Years**

Chemical	CASRN[c]	Detection	$AD_{ing\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Arsenic		35	7.0E-10	5.9E-09	4.2E-09	5.3E-09	1.1E-08	2.3E-08
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	7	0	3.2E-09	1.3E-08	0	1.2E-08	7.2E-08
Benzo[a]pyrene	50-32-8	35	2.7E-10	1.4E-09	1.1E-09	9.8E-10	3.8E-09	4.0E-09
Benzo[e]pyrene	192-97-2	35	1.2E-09	4.1E-09	2.4E-09	3.2E-09	8.4E-09	9.2E-09
Benzo[g,h,i]perylene	191-24-2	35	1.9E-10	2.8E-09	1.7E-09	2.5E-09	5.6E-09	7.7E-09
Bis(2-Ethylhexyl)adipate	103-23-1	33	0	8.9E-09	8.2E-09	6.3E-09	2.7E-08	3.3E-08
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	4	0	7.1E-09	2.1E-08	0	6.6E-08	7.6E-08
Boron		25	0	2.6E-07	2.9E-07	1.2E-07	7.6E-07	1.0E-06
n-Caproic acid vinyl ester	3050-69-9	1	0	7.8E-11	4.6E-10	0	0	2.7E-09
Chrysene	218-01-9	35	1.9E-09	7.4E-09	4.0E-09	7.4E-09	1.3E-08	2.0E-08
Coronene	191-07-1	7	0	1.0E-09	3.0E-09	0	4.3E-09	1.6E-08
Cyclopenta[cd]pyrene	27208-37-3	35	2.8E-10	1.6E-09	1.5E-09	1.4E-09	4.2E-09	7.5E-09
Dicyclohexylamine	101-83-7	25	0	2.4E-08	1.9E-08	2.3E-08	5.4E-08	6.5E-08
Dimethyl phthalate	131-11-3	9	0	5.4E-10	1.8E-09	0	4.8E-09	8.5E-09
Indeno[1,2,3-cd]pyrene	193-39-5	12	0	2.8E-10	4.9E-10	0	1.2E-09	1.9E-09
Methyl stearate	112-61-8	35	1.4E-09	5.8E-09	5.1E-09	4.5E-09	1.4E-08	2.7E-08
Nickel		35	1.2E-08	5.6E-08	4.6E-08	3.9E-08	1.6E-07	2.1E-07
4-tert-Octylphenol	140-66-9	35	3.0E-09	4.0E-08	5.4E-08	1.7E-08	1.6E-07	2.5E-07
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	35	1.8E-09	1.5E-08	8.9E-09	1.3E-08	3.0E-08	4.0E-08
Phenol, 4-(1-phenylethyl)-	1988-89-2	34	0	8.3E-09	1.1E-08	4.7E-09	2.9E-08	5.4E-08

[a] 35 field-specific $AD_{ing\text{-}DART\text{-}field}$ are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis
Values are rounded to two significant figures.

Table F-319. Field-Specific Average Ingestion One-Day Dose[a] ($AD_{ing\text{-}DART\text{-}field}$, milligrams per kilogram BW per day) for One-Day Non-Cancer Hazard Assessment of **Field-Related DARTs**[b]—Combined Gender **Spectators 30<40 Years**

Chemical	CASRN[c]	Detection	$AD_{ing\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Arsenic		35	6.6E-10	5.6E-09	4.0E-09	5.0E-09	1.0E-08	2.2E-08
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	7	0	3.0E-09	1.2E-08	0	1.1E-08	6.8E-08
Benzo[a]pyrene	50-32-8	35	2.5E-10	1.3E-09	1.1E-09	9.2E-10	3.6E-09	3.8E-09
Benzo[e]pyrene	192-97-2	35	1.2E-09	3.9E-09	2.3E-09	3.0E-09	8.0E-09	8.7E-09
Benzo[g,h,i]perylene	191-24-2	35	1.8E-10	2.6E-09	1.6E-09	2.4E-09	5.3E-09	7.3E-09
Bis(2-Ethylhexyl)adipate	103-23-1	33	0	8.5E-09	7.7E-09	5.9E-09	2.5E-08	3.1E-08
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	4	0	6.7E-09	2.0E-08	0	6.2E-08	7.2E-08
Boron		25	0	2.5E-07	2.8E-07	1.1E-07	7.2E-07	9.6E-07
n-Caproic acid vinyl ester	3050-69-9	1	0	7.4E-11	4.4E-10	0	0	2.6E-09
Chrysene	218-01-9	35	1.8E-09	7.0E-09	3.7E-09	7.0E-09	1.2E-08	1.9E-08
Coronene	191-07-1	7	0	9.6E-10	2.8E-09	0	4.1E-09	1.5E-08
Cyclopenta[cd]pyrene	27208-37-3	35	2.7E-10	1.5E-09	1.4E-09	1.3E-09	4.0E-09	7.1E-09
Dicyclohexylamine	101-83-7	25	0	2.2E-08	1.8E-08	2.1E-08	5.1E-08	6.2E-08
Dimethyl phthalate	131-11-3	9	0	5.1E-10	1.7E-09	0	4.5E-09	8.0E-09
Indeno[1,2,3-cd]pyrene	193-39-5	12	0	2.6E-10	4.6E-10	0	1.1E-09	1.8E-09
Methyl stearate	112-61-8	35	1.4E-09	5.4E-09	4.8E-09	4.2E-09	1.3E-08	2.6E-08
Nickel		35	1.1E-08	5.3E-08	4.3E-08	3.7E-08	1.5E-07	2.0E-07
4-tert-Octylphenol	140-66-9	35	2.9E-09	3.8E-08	5.1E-08	1.7E-08	1.5E-07	2.4E-07
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	35	1.7E-09	1.4E-08	8.5E-09	1.3E-08	2.8E-08	3.8E-08
Phenol, 4-(1-phenylethyl)-	1988-89-2	34	0	7.9E-09	1.0E-08	4.4E-09	2.7E-08	5.1E-08

[a] 35 field-specific $AD_{ing\text{-}DART\text{-}field}$ are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis
Values are rounded to two significant figures.

Table F-320. Field-Specific Average Ingestion One-Day Dose[a] ($AD_{ing\text{-}DART\text{-}field}$, milligrams per kilogram BW per day) for One-Day Non-Cancer Hazard Assessment of **Field-Related DARTs**[b]—Combined Gender **Spectators 40<50 Years**

Chemical	CASRN[c]	Detection	$AD_{ing\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Arsenic		35	6.2E-10	5.3E-09	3.7E-09	4.8E-09	9.5E-09	2.0E-08
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	7	0	2.9E-09	1.2E-08	0	1.1E-08	6.4E-08
Benzo[a]pyrene	50-32-8	35	2.4E-10	1.2E-09	1.0E-09	8.7E-10	3.4E-09	3.6E-09

Chemical	CASRN[c]	Detection	$AD_{ing\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Benzo[e]pyrene	192-97-2	35	1.1E-09	3.7E-09	2.2E-09	2.9E-09	7.5E-09	8.2E-09
Benzo[g,h,i]perylene	191-24-2	35	1.7E-10	2.5E-09	1.6E-09	2.2E-09	5.0E-09	6.9E-09
Bis(2-Ethylhexyl)adipate	103-23-1	33	0	8.0E-09	7.3E-09	5.6E-09	2.4E-08	2.9E-08
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	4	0	6.4E-09	1.8E-08	0	5.9E-08	6.8E-08
Boron		25	0	2.3E-07	2.6E-07	1.0E-07	6.8E-07	9.1E-07
n-Caproic acid vinyl ester	3050-69-9	1	0	7.0E-11	4.1E-10	0	0	2.4E-09
Chrysene	218-01-9	35	1.7E-09	6.7E-09	3.5E-09	6.7E-09	1.1E-08	1.8E-08
Coronene	191-07-1	7	0	9.1E-10	2.6E-09	0	3.9E-09	1.4E-08
Cyclopenta[cd]pyrene	27208-37-3	35	2.5E-10	1.4E-09	1.3E-09	1.2E-09	3.8E-09	6.7E-09
Dicyclohexylamine	101-83-7	25	0	2.1E-08	1.7E-08	2.0E-08	4.9E-08	5.8E-08
Dimethyl phthalate	131-11-3	9	0	4.8E-10	1.6E-09	0	4.3E-09	7.6E-09
Indeno[1,2,3-cd]pyrene	193-39-5	12	0	2.5E-10	4.4E-10	0	1.1E-09	1.7E-09
Methyl stearate	112-61-8	35	1.3E-09	5.1E-09	4.5E-09	4.0E-09	1.2E-08	2.4E-08
Nickel		35	1.1E-08	5.0E-08	4.1E-08	3.5E-08	1.4E-07	1.9E-07
4-tert-Octylphenol	140-66-9	35	2.7E-09	3.6E-08	4.9E-08	1.6E-08	1.4E-07	2.2E-07
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	35	1.6E-09	1.3E-08	8.0E-09	1.2E-08	2.7E-08	3.6E-08
Phenol, 4-(1-phenylethyl)-	1988-89-2	34	0	7.5E-09	9.8E-09	4.2E-09	2.6E-08	4.9E-08

[a] 35 field-specific $AD_{ing\text{-}DART\text{-}field}$ are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

Table F-321. Field-Specific Average Ingestion One-Day Dose[a] ($AD_{ing\text{-}DART\text{-}field}$, milligrams per kilogram BW per day) for One-Day Non-Cancer Hazard Assessment of **Field-Related DARTs**[b]—Combined Gender **Spectators 50<70 Years**

Chemical	CASRN[c]	Detection	$AD_{ing\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Arsenic		35	6.2E-10	5.3E-09	3.8E-09	4.8E-09	9.6E-09	2.0E-08
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	7	0	2.9E-09	1.2E-08	0	1.1E-08	6.5E-08
Benzo[a]pyrene	50-32-8	35	2.4E-10	1.2E-09	1.0E-09	8.8E-10	3.4E-09	3.6E-09
Benzo[e]pyrene	192-97-2	35	1.1E-09	3.7E-09	2.2E-09	2.9E-09	7.6E-09	8.3E-09
Benzo[g,h,i]perylene	191-24-2	35	1.7E-10	2.5E-09	1.6E-09	2.2E-09	5.0E-09	6.9E-09
Bis(2-Ethylhexyl)adipate	103-23-1	33	0	8.0E-09	7.3E-09	5.6E-09	2.4E-08	2.9E-08
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	4	0	6.4E-09	1.9E-08	0	5.9E-08	6.8E-08
Boron		25	0	2.3E-07	2.6E-07	1.1E-07	6.9E-07	9.1E-07
n-Caproic acid vinyl ester	3050-69-9	1	0	7.0E-11	4.1E-10	0	0	2.4E-09

Chemical	CASRN[c]	Detection	$AD_{ing\text{-}DART\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Chrysene	218-01-9	35	1.7E-09	6.7E-09	3.5E-09	6.7E-09	1.1E-08	1.8E-08
Coronene	191-07-1	7	0	9.2E-10	2.7E-09	0	3.9E-09	1.4E-08
Cyclopenta[cd]pyrene	27208-37-3	35	2.5E-10	1.4E-09	1.3E-09	1.2E-09	3.8E-09	6.7E-09
Dicyclohexylamine	101-83-7	25	0	2.1E-08	1.7E-08	2.0E-08	4.9E-08	5.9E-08
Dimethyl phthalate	131-11-3	9	0	4.8E-10	1.6E-09	0	4.3E-09	7.6E-09
Indeno[1,2,3-cd]pyrene	193-39-5	12	0	2.5E-10	4.4E-10	0	1.1E-09	1.7E-09
Methyl stearate	112-61-8	35	1.3E-09	5.2E-09	4.5E-09	4.0E-09	1.2E-08	2.5E-08
Nickel		35	1.1E-08	5.0E-08	4.1E-08	3.5E-08	1.4E-07	1.9E-07
4-tert-Octylphenol	140-66-9	35	2.7E-09	3.6E-08	4.9E-08	1.6E-08	1.4E-07	2.2E-07
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	35	1.6E-09	1.3E-08	8.0E-09	1.2E-08	2.7E-08	3.6E-08
Phenol, 4-(1-phenylethyl)-	1988-89-2	34	0	7.5E-09	9.8E-09	4.2E-09	2.6E-08	4.9E-08

[a] 35 field-specific $AD_{ing\text{-}DART\text{-}field}$ are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

F.5.6. Average Ingestion Daily Dose (ADD_{ing}) for Chronic Non-Cancer Hazard of General Chemicals

Table F-322. Average Ingestion Daily Dose[a] for Chronic Non-Cancer Hazard (ADD_{ing}, milligrams per kilogram BW per day) of **Field-Related General Chemicals**[b]— Combined Gender **Athletes**

Chemical	CASRN[c]	ADD_{ing}						
		2<6 Years	6<11 Years	11<16 Years	16<30 Years	30<40 Years	40<50 Years	50<70 Years
Acenaphthylene	208-96-8	1.5E-09	9.8E-10	7.6E-10	8.5E-10	5.6E-10	4.8E-10	4.9E-10
Aluminum		1.0E-04	6.9E-05	5.3E-05	5.9E-05	4.0E-05	3.4E-05	3.4E-05
Aniline	62-53-3	8.2E-09	5.5E-09	4.2E-09	4.7E-09	3.1E-09	2.7E-09	2.7E-09
Anthracene	120-12-7	3.9E-09	2.6E-09	2.0E-09	2.2E-09	1.5E-09	1.3E-09	1.3E-09
Anthracene, 2-methyl-	613-12-7	1.5E-08	1.0E-08	8.0E-09	8.9E-09	5.9E-09	5.0E-09	5.1E-09
Anthracene, 9,10-dimethyl	781-43-1	1.2E-10	8.3E-11	6.4E-11	7.2E-11	4.8E-11	4.1E-11	4.1E-11
Anthracene, 9,10-diphenyl-	1499-10-1	9.6E-10	6.4E-10	5.0E-10	5.5E-10	3.7E-10	3.1E-10	3.2E-10
Anthracene, 9-phenyl	602-55-1	1.5E-09	9.7E-10	7.5E-10	8.4E-10	5.6E-10	4.7E-10	4.8E-10
Antimony		1.1E-07	7.5E-08	5.8E-08	6.4E-08	4.3E-08	3.6E-08	3.7E-08
Barium		7.1E-06	4.7E-06	3.7E-06	4.1E-06	2.7E-06	2.3E-06	2.4E-06
Benzene, n-butyl-	104-51-8	8.2E-10	5.5E-10	4.2E-10	4.7E-10	3.2E-10	2.7E-10	2.7E-10

Chemical	CASRN[c]	ADD_{ing}						
		2<6 Years	6<11 Years	11<16 Years	16<30 Years	30<40 Years	40<50 Years	50<70 Years
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	2.2E-07	1.5E-07	1.2E-07	1.3E-07	8.6E-08	7.3E-08	7.5E-08
Benz[a]anthracene	56-55-3	1.3E-08	9.0E-09	7.0E-09	7.8E-09	5.2E-09	4.4E-09	4.5E-09
Benzo[b]fluoranthene	205-99-2	1.9E-08	1.2E-08	9.6E-09	1.1E-08	7.1E-09	6.0E-09	6.2E-09
7H-Benzo[c]fluorene	205-12-9	3.6E-09	2.4E-09	1.8E-09	2.1E-09	1.4E-09	1.2E-09	1.2E-09
Benzo[k]fluoranthene	207-08-9	6.0E-09	4.0E-09	3.1E-09	3.5E-09	2.3E-09	2.0E-09	2.0E-09
Benzothiazole	95-16-9	2.3E-06	1.5E-06	1.2E-06	1.3E-06	8.8E-07	7.4E-07	7.6E-07
Benzothiazole, 2-phenyl-	883-93-2	2.4E-07	1.6E-07	1.3E-07	1.4E-07	9.4E-08	8.0E-08	8.1E-08
Benzothiazolone	934-34-9	5.8E-06	3.9E-06	3.0E-06	3.3E-06	2.2E-06	1.9E-06	1.9E-06
Benzyl butyl phthalate	85-68-7	1.2E-07	7.8E-08	6.0E-08	6.7E-08	4.5E-08	3.8E-08	3.9E-08
Beryllium		2.9E-09	2.0E-09	1.5E-09	1.7E-09	1.1E-09	9.5E-10	9.7E-10
Butylated Hydroxytoluene	128-37-0	3.1E-09	2.1E-09	1.6E-09	1.8E-09	1.2E-09	1.0E-09	1.0E-09
Cadmium		7.9E-08	5.3E-08	4.1E-08	4.6E-08	3.0E-08	2.6E-08	2.6E-08
Chromium		2.2E-07	1.5E-07	1.1E-07	1.3E-07	8.5E-08	7.2E-08	7.3E-08
Cobalt		5.0E-06	3.4E-06	2.6E-06	2.9E-06	1.9E-06	1.6E-06	1.7E-06
Copper		9.8E-06	6.6E-06	5.1E-06	5.7E-06	3.8E-06	3.2E-06	3.3E-06
Cyclohexyl isothiocyanate	1122-82-3	7.3E-07	4.9E-07	3.8E-07	4.2E-07	2.8E-07	2.4E-07	2.4E-07
Dibenz[a,h]anthracene	53-70-3	8.0E-10	5.3E-10	4.1E-10	4.6E-10	3.1E-10	2.6E-10	2.7E-10
Dibenzothiophene	132-65-0	3.1E-09	2.1E-09	1.6E-09	1.8E-09	1.2E-09	1.0E-09	1.0E-09
Dibutyl phthalate	84-74-2	2.2E-07	1.5E-07	1.1E-07	1.3E-07	8.5E-08	7.2E-08	7.4E-08
Diethyl Phthalate	84-66-2	1.9E-08	1.2E-08	9.6E-09	1.1E-08	7.2E-09	6.1E-09	6.2E-09
Diisobutyl Phthalate	84-69-5	2.2E-08	1.5E-08	1.1E-08	1.3E-08	8.5E-09	7.2E-09	7.4E-09
Diisooctylphthalate	27554-26-3	4.7E-07	3.1E-07	2.4E-07	2.7E-07	1.8E-07	1.5E-07	1.6E-07
Di-n-octyl phthalate	117-84-0	4.6E-08	3.1E-08	2.4E-08	2.7E-08	1.8E-08	1.5E-08	1.5E-08
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	3.8E-10	2.6E-10	2.0E-10	2.2E-10	1.5E-10	1.2E-10	1.3E-10
3,5-di-tert-Butyl-4-hydroxybenzaldehyde	1620-98-0	8.2E-08	5.5E-08	4.2E-08	4.7E-08	3.2E-08	2.7E-08	2.7E-08
Fluoranthene	206-44-0	1.0E-07	7.0E-08	5.4E-08	6.0E-08	4.0E-08	3.4E-08	3.5E-08
Fluorene	86-73-7	1.4E-09	9.1E-10	7.0E-10	7.8E-10	5.2E-10	4.4E-10	4.5E-10
Hexadecane	544-76-3	9.8E-09	6.5E-09	5.1E-09	5.7E-09	3.8E-09	3.2E-09	3.3E-09
1-Hydroxypyrene	5315-79-7	5.3E-09	3.5E-09	2.8E-09	3.1E-09	2.0E-09	1.7E-09	1.8E-09
Lead		4.6E-06	3.1E-06	2.4E-06	2.7E-06	1.8E-06	1.5E-06	1.5E-06
Manganese		4.6E-06	3.1E-06	2.4E-06	2.6E-06	1.8E-06	1.5E-06	1.5E-06
2-(Methylthio)benzothiazole	615-22-5	7.0E-08	4.7E-08	3.6E-08	4.0E-08	2.7E-08	2.3E-08	2.3E-08
Molybdenum		8.5E-09	5.6E-09	4.4E-09	4.9E-09	3.3E-09	2.8E-09	2.8E-09
Naphthalene	91-20-3	2.4E-10	1.6E-10	1.3E-10	1.4E-10	9.4E-11	8.0E-11	8.1E-11
Naphthalene, 1-methyl-	90-12-0	6.3E-10	4.2E-10	3.3E-10	3.6E-10	2.4E-10	2.1E-10	2.1E-10

Chemical	CASRN[c]	ADD_{ing}						
		2<6 Years	6<11 Years	11<16 Years	16<30 Years	30<40 Years	40<50 Years	50<70 Years
Naphthalene, 1,2-dimethyl-	573-98-8	1.5E-10	9.8E-11	7.6E-11	8.5E-11	5.7E-11	4.8E-11	4.9E-11
Naphthalene, 1,6-dimethyl-	575-43-9	9.7E-10	6.5E-10	5.0E-10	5.6E-10	3.7E-10	3.2E-10	3.2E-10
Naphthalene, 2-(bromomethyl)-	939-26-4	2.6E-08	1.7E-08	1.3E-08	1.5E-08	9.8E-09	8.3E-09	8.5E-09
Naphthalene, 2,3-dimethyl-	581-40-8	7.5E-09	5.0E-09	3.9E-09	4.3E-09	2.9E-09	2.4E-09	2.5E-09
Naphthalene, 2-methyl	91-57-6	5.7E-10	3.8E-10	3.0E-10	3.3E-10	2.2E-10	1.9E-10	1.9E-10
1-Octadecene	112-88-9	2.2E-08	1.4E-08	1.1E-08	1.2E-08	8.3E-09	7.1E-09	7.2E-09
17-Pentatriacontene	6971-40-0	1.8E-08	1.2E-08	9.5E-09	1.1E-08	7.1E-09	6.0E-09	6.1E-09
Phenanthrene	85-01-8	4.6E-08	3.1E-08	2.4E-08	2.6E-08	1.8E-08	1.5E-08	1.5E-08
Phenanthrene, 1-methyl	832-69-9	1.2E-08	8.1E-09	6.3E-09	7.0E-09	4.7E-09	4.0E-09	4.0E-09
Phenanthrene, 2-methyl-	2531-84-2	1.6E-08	1.0E-08	8.1E-09	9.1E-09	6.0E-09	5.1E-09	5.2E-09
Phenanthrene, 3-methyl	832-71-3	2.6E-08	1.7E-08	1.3E-08	1.5E-08	1.0E-08	8.5E-09	8.6E-09
N-Phenylbenzamide	93-98-1	1.0E-07	6.8E-08	5.3E-08	5.8E-08	3.9E-08	3.3E-08	3.4E-08
Phthalimide	85-41-6	1.8E-08	1.2E-08	9.5E-09	1.1E-08	7.1E-09	6.0E-09	6.1E-09
Pyrene	129-00-0	2.2E-07	1.5E-07	1.1E-07	1.3E-07	8.4E-08	7.2E-08	7.3E-08
Pyridine, 2-(4-methylphenyl)-	4467-06-5	4.7E-10	3.1E-10	2.4E-10	2.7E-10	1.8E-10	1.5E-10	1.6E-10
Selenium		2.8E-08	1.9E-08	1.4E-08	1.6E-08	1.1E-08	9.0E-09	9.2E-09
Strontium		3.9E-06	2.6E-06	2.0E-06	2.3E-06	1.5E-06	1.3E-06	1.3E-06
Thallium		1.1E-09	7.4E-10	5.7E-10	6.4E-10	4.2E-10	3.6E-10	3.7E-10
Tin		4.3E-08	2.9E-08	2.2E-08	2.5E-08	1.7E-08	1.4E-08	1.4E-08
Triethylene glycol monobutyl ether	143-22-6	5.4E-09	3.6E-09	2.8E-09	3.1E-09	2.1E-09	1.7E-09	1.8E-09
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	1.6E-08	1.1E-08	8.2E-09	9.1E-09	6.1E-09	5.2E-09	5.3E-09
Vanadium		2.2E-08	1.5E-08	1.2E-08	1.3E-08	8.6E-09	7.3E-09	7.5E-09
Zinc		9.7E-04	6.5E-04	5.0E-04	5.6E-04	3.7E-04	3.2E-04	3.2E-04

[a] ADD_{ing} was calculated from the mean of 35 individual field average concentrations ($C_{ing\text{-}crumb\ rubber}$) of a chemical detected in artificial gastrointestinal fluids extracts of crumb rubber samples.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-323. Average Ingestion Daily Dose[a] for Chronic Non-Cancer Hazard (ADD_{ing}, milligrams per kilogram BW per day) of **Field-Related General Chemicals**[b]— Combined Gender **Coaches**

Chemical	CASRN[c]	ADD_{ing}			
		16<30 Years	30<40 Years	40<50 Years	50<70 Years
Acenaphthylene	208-96-8	2.1E-10	2.0E-10	2.0E-10	2.0E-10
Aluminum		1.5E-05	1.4E-05	1.4E-05	1.4E-05
Aniline	62-53-3	1.2E-09	1.1E-09	1.1E-09	1.1E-09
Anthracene	120-12-7	5.6E-10	5.3E-10	5.2E-10	5.2E-10
Anthracene, 2-methyl-	613-12-7	2.2E-09	2.1E-09	2.1E-09	2.1E-09
Anthracene, 9,10-dimethyl	781-43-1	1.8E-11	1.7E-11	1.7E-11	1.7E-11
Anthracene, 9,10-diphenyl-	1499-10-1	1.4E-10	1.3E-10	1.3E-10	1.3E-10
Anthracene, 9-phenyl	602-55-1	2.1E-10	2.0E-10	1.9E-10	2.0E-10
Antimony		1.6E-08	1.5E-08	1.5E-08	1.5E-08
Barium		1.0E-06	9.7E-07	9.5E-07	9.5E-07
Benzene, n-butyl-	104-51-8	1.2E-10	1.1E-10	1.1E-10	1.1E-10
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	3.3E-08	3.1E-08	3.0E-08	3.0E-08
Benz[a]anthracene	56-55-3	2.0E-09	1.8E-09	1.8E-09	1.8E-09
Benzo[b]fluoranthene	205-99-2	2.7E-09	2.5E-09	2.5E-09	2.5E-09
7H-Benzo[c]fluorene	205-12-9	5.2E-10	4.9E-10	4.8E-10	4.8E-10
Benzo[k]fluoranthene	207-08-9	8.7E-10	8.2E-10	8.0E-10	8.0E-10
Benzothiazole	95-16-9	3.3E-07	3.1E-07	3.0E-07	3.1E-07
Benzothiazole, 2-phenyl-	883-93-2	3.6E-08	3.3E-08	3.3E-08	3.3E-08
Benzothiazolone	934-34-9	8.5E-07	7.9E-07	7.8E-07	7.8E-07
Benzyl butyl phthalate	85-68-7	1.7E-08	1.6E-08	1.6E-08	1.6E-08
Beryllium		4.3E-10	4.0E-10	3.9E-10	3.9E-10
Butylated Hydroxytoluene	128-37-0	4.5E-10	4.2E-10	4.2E-10	4.2E-10
Cadmium		1.2E-08	1.1E-08	1.1E-08	1.1E-08
Chromium		3.2E-08	3.0E-08	3.0E-08	3.0E-08
Cobalt		7.3E-07	6.9E-07	6.7E-07	6.7E-07
Copper		1.4E-06	1.3E-06	1.3E-06	1.3E-06
Cyclohexyl isothiocyanate	1122-82-3	1.1E-07	9.9E-08	9.7E-08	9.8E-08
Dibenz[a,h]anthracene	53-70-3	1.2E-10	1.1E-10	1.1E-10	1.1E-10
Dibenzothiophene	132-65-0	4.5E-10	4.3E-10	4.2E-10	4.2E-10
Dibutyl phthalate	84-74-2	3.2E-08	3.0E-08	3.0E-08	3.0E-08
Diethyl Phthalate	84-66-2	2.7E-09	2.5E-09	2.5E-09	2.5E-09
Diisobutyl Phthalate	84-69-5	3.2E-09	3.0E-09	3.0E-09	3.0E-09
Diisooctylphthalate	27554-26-3	6.8E-08	6.4E-08	6.3E-08	6.3E-08
Di-n-octyl phthalate	117-84-0	6.7E-09	6.3E-09	6.2E-09	6.2E-09
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	5.6E-11	5.2E-11	5.1E-11	5.1E-11
3,5-di-tert-Butyl-4-hydroxybenzaldehyde	1620-98-0	1.2E-08	1.1E-08	1.1E-08	1.1E-08

Chemical	CASRN[c]	ADD_{ing}			
		16<30 Years	30<40 Years	40<50 Years	50<70 Years
Fluoranthene	206-44-0	1.5E-08	1.4E-08	1.4E-08	1.4E-08
Fluorene	86-73-7	2.0E-10	1.9E-10	1.8E-10	1.8E-10
Hexadecane	544-76-3	1.4E-09	1.3E-09	1.3E-09	1.3E-09
1-Hydroxypyrene	5315-79-7	7.7E-10	7.3E-10	7.1E-10	7.1E-10
Lead		6.7E-07	6.3E-07	6.2E-07	6.2E-07
Manganese		6.7E-07	6.3E-07	6.1E-07	6.1E-07
2-(Methylthio)benzothiazole	615-22-5	1.0E-08	9.5E-09	9.3E-09	9.4E-09
Molybdenum		1.2E-09	1.2E-09	1.1E-09	1.1E-09
Naphthalene	91-20-3	3.6E-11	3.3E-11	3.3E-11	3.3E-11
Naphthalene, 1-methyl-	90-12-0	9.2E-11	8.6E-11	8.4E-11	8.4E-11
Naphthalene, 1,2-dimethyl-	573-98-8	2.1E-11	2.0E-11	2.0E-11	2.0E-11
Naphthalene, 1,6-dimethyl-	575-43-9	1.4E-10	1.3E-10	1.3E-10	1.3E-10
Naphthalene, 2-(bromomethyl)-	939-26-4	3.7E-09	3.5E-09	3.4E-09	3.4E-09
Naphthalene, 2,3-dimethyl-	581-40-8	1.1E-09	1.0E-09	1.0E-09	1.0E-09
Naphthalene, 2-methyl	91-57-6	8.3E-11	7.8E-11	7.6E-11	7.6E-11
1-Octadecene	112-88-9	3.2E-09	3.0E-09	2.9E-09	2.9E-09
17-Pentatriacontene	6971-40-0	2.7E-09	2.5E-09	2.5E-09	2.5E-09
Phenanthrene	85-01-8	6.7E-09	6.3E-09	6.1E-09	6.1E-09
Phenanthrene, 1-methyl	832-69-9	1.8E-09	1.7E-09	1.6E-09	1.6E-09
Phenanthrene, 2-methyl-	2531-84-2	2.3E-09	2.1E-09	2.1E-09	2.1E-09
Phenanthrene, 3-methyl	832-71-3	3.8E-09	3.5E-09	3.5E-09	3.5E-09
N-Phenylbenzamide	93-98-1	1.5E-08	1.4E-08	1.4E-08	1.4E-08
Phthalimide	85-41-6	2.7E-09	2.5E-09	2.5E-09	2.5E-09
Pyrene	129-00-0	3.2E-08	3.0E-08	2.9E-08	2.9E-08
Pyridine, 2-(4-methylphenyl)-	4467-06-5	6.8E-11	6.4E-11	6.3E-11	6.3E-11
Selenium		4.0E-09	3.8E-09	3.7E-09	3.7E-09
Strontium		5.7E-07	5.4E-07	5.3E-07	5.3E-07
Thallium		1.6E-10	1.5E-10	1.5E-10	1.5E-10
Tin		6.3E-09	5.9E-09	5.8E-09	5.8E-09
Triethylene glycol monobutyl ether	143-22-6	7.8E-10	7.3E-10	7.2E-10	7.2E-10
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	2.3E-09	2.2E-09	2.1E-09	2.1E-09
Vanadium		3.3E-09	3.1E-09	3.0E-09	3.0E-09
Zinc		1.4E-04	1.3E-04	1.3E-04	1.3E-04

[a] ADD_{ing} was calculated from the mean of 35 individual field average concentrations ($C_{ing\text{-}crumb\ rubber}$) of a chemical detected in artificial gastrointestinal fluids extracts of crumb rubber samples.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-324. Average Ingestion Daily Dose[a] for Chronic Non-Cancer Hazard (ADD_{ing}, milligrams per kilogram BW per day) of **Field-Related General Chemicals**[b]— Combined Gender **Referees**

Chemical	CASRN[c]	ADD_{ing}			
		16<30 Years	30<40 Years	40<50 Years	50<70 Years
Acenaphthylene	208-96-8	9.4E-11	8.8E-11	8.6E-11	8.6E-11
Aluminum		6.6E-06	6.2E-06	6.1E-06	6.1E-06
Aniline	62-53-3	5.2E-10	4.9E-10	4.8E-10	4.8E-10
Anthracene	120-12-7	2.5E-10	2.3E-10	2.3E-10	2.3E-10
Anthracene, 2-methyl-	613-12-7	9.8E-10	9.2E-10	9.0E-10	9.0E-10
Anthracene, 9,10-dimethyl	781-43-1	7.9E-12	7.5E-12	7.3E-12	7.3E-12
Anthracene, 9,10-diphenyl-	1499-10-1	6.1E-11	5.8E-11	5.6E-11	5.7E-11
Anthracene, 9-phenyl	602-55-1	9.3E-11	8.7E-11	8.5E-11	8.6E-11
Antimony		7.1E-09	6.7E-09	6.6E-09	6.6E-09
Barium		4.5E-07	4.3E-07	4.2E-07	4.2E-07
Benzene, n-butyl-	104-51-8	5.2E-11	4.9E-11	4.8E-11	4.8E-11
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	1.4E-08	1.3E-08	1.3E-08	1.3E-08
Benz[a]anthracene	56-55-3	8.6E-10	8.1E-10	7.9E-10	7.9E-10
Benzo[b]fluoranthene	205-99-2	1.2E-09	1.1E-09	1.1E-09	1.1E-09
7H-Benzo[c]fluorene	205-12-9	2.3E-10	2.1E-10	2.1E-10	2.1E-10
Benzo[k]fluoranthene	207-08-9	3.8E-10	3.6E-10	3.5E-10	3.5E-10
Benzothiazole	95-16-9	1.5E-07	1.4E-07	1.3E-07	1.3E-07
Benzothiazole, 2-phenyl-	883-93-2	1.6E-08	1.5E-08	1.4E-08	1.4E-08
Benzothiazolone	934-34-9	3.7E-07	3.5E-07	3.4E-07	3.4E-07
Benzyl butyl phthalate	85-68-7	7.4E-09	7.0E-09	6.8E-09	6.9E-09
Beryllium		1.9E-10	1.8E-10	1.7E-10	1.7E-10
Butylated Hydroxytoluene	128-37-0	2.0E-10	1.9E-10	1.8E-10	1.8E-10
Cadmium		5.1E-09	4.8E-09	4.7E-09	4.7E-09
Chromium		1.4E-08	1.3E-08	1.3E-08	1.3E-08
Cobalt		3.2E-07	3.0E-07	3.0E-07	3.0E-07
Copper		6.3E-07	5.9E-07	5.8E-07	5.8E-07
Cyclohexyl isothiocyanate	1122-82-3	4.6E-08	4.4E-08	4.3E-08	4.3E-08
Dibenz[a,h]anthracene	53-70-3	5.1E-11	4.8E-11	4.7E-11	4.7E-11
Dibenzothiophene	132-65-0	2.0E-10	1.9E-10	1.8E-10	1.8E-10
Dibutyl phthalate	84-74-2	1.4E-08	1.3E-08	1.3E-08	1.3E-08
Diethyl Phthalate	84-66-2	1.2E-09	1.1E-09	1.1E-09	1.1E-09
Diisobutyl Phthalate	84-69-5	1.4E-09	1.3E-09	1.3E-09	1.3E-09
Diisooctylphthalate	27554-26-3	3.0E-08	2.8E-08	2.8E-08	2.8E-08
Di-n-octyl phthalate	117-84-0	3.0E-09	2.8E-09	2.7E-09	2.7E-09
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	2.4E-11	2.3E-11	2.3E-11	2.3E-11
3,5-di-tert-Butyl-4-hydroxybenzaldehyde	1620-98-0	5.2E-09	4.9E-09	4.8E-09	4.8E-09

Chemical	CASRN[c]	ADD_{ing}			
		16<30 Years	30<40 Years	40<50 Years	50<70 Years
Fluoranthene	206-44-0	6.7E-09	6.2E-09	6.1E-09	6.1E-09
Fluorene	86-73-7	8.7E-11	8.1E-11	8.0E-11	8.0E-11
Hexadecane	544-76-3	6.3E-10	5.9E-10	5.8E-10	5.8E-10
1-Hydroxypyrene	5315-79-7	3.4E-10	3.2E-10	3.1E-10	3.1E-10
Lead		3.0E-07	2.8E-07	2.7E-07	2.7E-07
Manganese		2.9E-07	2.8E-07	2.7E-07	2.7E-07
2-(Methylthio)benzothiazole	615-22-5	4.5E-09	4.2E-09	4.1E-09	4.1E-09
Molybdenum		5.4E-10	5.1E-10	5.0E-10	5.0E-10
Naphthalene	91-20-3	1.6E-11	1.5E-11	1.4E-11	1.4E-11
Naphthalene, 1-methyl-	90-12-0	4.0E-11	3.8E-11	3.7E-11	3.7E-11
Naphthalene, 1,2-dimethyl-	573-98-8	9.4E-12	8.8E-12	8.6E-12	8.7E-12
Naphthalene, 1,6-dimethyl-	575-43-9	6.2E-11	5.8E-11	5.7E-11	5.7E-11
Naphthalene, 2-(bromomethyl)-	939-26-4	1.6E-09	1.5E-09	1.5E-09	1.5E-09
Naphthalene, 2,3-dimethyl-	581-40-8	4.8E-10	4.5E-10	4.4E-10	4.4E-10
Naphthalene, 2-methyl	91-57-6	3.6E-11	3.4E-11	3.4E-11	3.4E-11
1-Octadecene	112-88-9	1.4E-09	1.3E-09	1.3E-09	1.3E-09
17-Pentatriacontene	6971-40-0	1.2E-09	1.1E-09	1.1E-09	1.1E-09
Phenanthrene	85-01-8	2.9E-09	2.7E-09	2.7E-09	2.7E-09
Phenanthrene, 1-methyl	832-69-9	7.8E-10	7.3E-10	7.1E-10	7.2E-10
Phenanthrene, 2-methyl-	2531-84-2	1.0E-09	9.4E-10	9.2E-10	9.3E-10
Phenanthrene, 3-methyl	832-71-3	1.7E-09	1.6E-09	1.5E-09	1.5E-09
N-Phenylbenzamide	93-98-1	6.5E-09	6.1E-09	6.0E-09	6.0E-09
Phthalimide	85-41-6	1.2E-09	1.1E-09	1.1E-09	1.1E-09
Pyrene	129-00-0	1.4E-08	1.3E-08	1.3E-08	1.3E-08
Pyridine, 2-(4-methylphenyl)-	4467-06-5	3.0E-11	2.8E-11	2.8E-11	2.8E-11
Selenium		1.8E-09	1.7E-09	1.6E-09	1.6E-09
Strontium		2.5E-07	2.4E-07	2.3E-07	2.3E-07
Thallium		7.0E-11	6.6E-11	6.5E-11	6.5E-11
Tin		2.8E-09	2.6E-09	2.5E-09	2.5E-09
Triethylene glycol monobutyl ether	143-22-6	3.4E-10	3.2E-10	3.1E-10	3.2E-10
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	1.0E-09	9.5E-10	9.3E-10	9.3E-10
Vanadium		1.4E-09	1.3E-09	1.3E-09	1.3E-09
Zinc		6.2E-05	5.8E-05	5.7E-05	5.7E-05

[a] ADD_{ing} was calculated from the mean of 35 individual field average concentrations ($C_{ing\text{-}crumb\ rubber}$) of a chemical detected in artificial gastrointestinal fluids extracts of crumb rubber samples.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-325. Average Ingestion Daily Dose[a] for Chronic Non-Cancer Hazard (ADD_{ing}, milligrams per kilogram BW per day) of **Field-Related General Chemicals**[b]— Combined Gender **Spectators**

Chemical Name	CASRN	ADD_{ing}								
		Third Trimester Fetus	0<2 Years	2<6 Years	6<11 Years	11<16 Years	16<30 Years	30<40 Years	40<50 Years	50<70 Years
Acenaphthylene	208-96-8	7.4E-11	5.1E-09	2.4E-09	1.7E-09	1.3E-10	7.6E-11	7.2E-11	6.8E-11	6.8E-11
Aluminum		5.2E-06	3.6E-04	1.7E-04	1.2E-04	9.4E-06	5.4E-06	5.1E-06	4.8E-06	4.8E-06
Aniline	62-53-3	4.1E-10	2.9E-08	1.4E-08	9.5E-09	7.5E-10	4.2E-10	4.0E-10	3.8E-10	3.8E-10
Anthracene	120-12-7	1.9E-10	1.4E-08	6.4E-09	4.5E-09	3.5E-10	2.0E-10	1.9E-10	1.8E-10	1.8E-10
Anthracene, 2-methyl-	613-12-7	7.7E-10	5.4E-08	2.5E-08	1.8E-08	1.4E-09	8.0E-10	7.5E-10	7.1E-10	7.2E-10
Anthracene, 9,10-dimethyl	781-43-1	6.3E-12	4.4E-10	2.1E-10	1.4E-10	1.1E-11	6.5E-12	6.1E-12	5.8E-12	5.8E-12
Anthracene, 9,10-diphenyl-	1499-10-1	4.8E-11	3.4E-09	1.6E-09	1.1E-09	8.8E-11	5.0E-11	4.7E-11	4.5E-11	4.5E-11
Anthracene, 9-phenyl	602-55-1	7.3E-11	5.1E-09	2.4E-09	1.7E-09	1.3E-10	7.5E-11	7.1E-11	6.8E-11	6.8E-11
Antimony		5.6E-09	3.9E-07	1.9E-07	1.3E-07	1.0E-08	5.8E-09	5.5E-09	5.2E-09	5.2E-09
Barium		3.6E-07	2.5E-05	1.2E-05	8.3E-06	6.5E-07	3.7E-07	3.5E-07	3.3E-07	3.3E-07
Benzene, n-butyl-	104-51-8	4.1E-11	2.9E-09	1.4E-09	9.6E-10	7.5E-11	4.3E-11	4.0E-11	3.8E-11	3.8E-11
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	1.1E-08	7.8E-07	3.7E-07	2.6E-07	2.0E-08	1.2E-08	1.1E-08	1.0E-08	1.0E-08
Benz[a]anthracene	56-55-3	6.8E-10	4.7E-08	2.2E-08	1.6E-08	1.2E-09	7.0E-10	6.6E-10	6.3E-10	6.3E-10
Benzo[b]fluoranthene	205-99-2	9.3E-10	6.5E-08	3.1E-08	2.2E-08	1.7E-09	9.6E-10	9.1E-10	8.6E-10	8.6E-10
7H-Benzo[c]fluorene	205-12-9	1.8E-10	1.3E-08	5.9E-09	4.2E-09	3.3E-10	1.9E-10	1.8E-10	1.7E-10	1.7E-10
Benzo[k]fluoranthene	207-08-9	3.0E-10	2.1E-08	1.0E-08	7.0E-09	5.5E-10	3.1E-10	2.9E-10	2.8E-10	2.8E-10
Benzothiazole	95-16-9	1.1E-07	8.0E-06	3.8E-06	2.7E-06	2.1E-07	1.2E-07	1.1E-07	1.1E-07	1.1E-07
Benzothiazole, 2-phenyl-	883-93-2	1.2E-08	8.6E-07	4.1E-07	2.8E-07	2.2E-08	1.3E-08	1.2E-08	1.1E-08	1.1E-08
Benzothiazolone	934-34-9	2.9E-07	2.0E-05	9.6E-06	6.8E-06	5.3E-07	3.0E-07	2.9E-07	2.7E-07	2.7E-07
Benzyl butyl phthalate	85-68-7	5.9E-09	4.1E-07	1.9E-07	1.4E-07	1.1E-08	6.0E-09	5.7E-09	5.4E-09	5.4E-09
Beryllium		1.5E-10	1.0E-08	4.9E-09	3.4E-09	2.7E-10	1.5E-10	1.4E-10	1.4E-10	1.4E-10
Butylated Hydroxytoluene	128-37-0	1.6E-10	1.1E-08	5.2E-09	3.6E-09	2.8E-10	1.6E-10	1.5E-10	1.4E-10	1.4E-10
Cadmium		4.0E-09	2.8E-07	1.3E-07	9.2E-08	7.2E-09	4.1E-09	3.9E-09	3.7E-09	3.7E-09
Chromium		1.1E-08	7.7E-07	3.7E-07	2.6E-07	2.0E-08	1.1E-08	1.1E-08	1.0E-08	1.0E-08
Cobalt		2.5E-07	1.8E-05	8.3E-06	5.8E-06	4.6E-07	2.6E-07	2.5E-07	2.3E-07	2.3E-07
Copper		5.0E-07	3.4E-05	1.6E-05	1.1E-05	9.0E-07	5.1E-07	4.8E-07	4.6E-07	4.6E-07
Cyclohexyl isothiocyanate	1122-82-3	3.7E-08	2.5E-06	1.2E-06	8.5E-07	6.6E-08	3.8E-08	3.6E-08	3.4E-08	3.4E-08
Dibenz[a,h]anthracene	53-70-3	4.0E-11	2.8E-09	1.3E-09	9.3E-10	7.3E-11	4.1E-11	3.9E-11	3.7E-11	3.7E-11
Dibenzothiophene	132-65-0	1.6E-10	1.1E-08	5.2E-09	3.6E-09	2.8E-10	1.6E-10	1.5E-10	1.4E-10	1.5E-10
Dibutyl phthalate	84-74-2	1.1E-08	7.8E-07	3.7E-07	2.6E-07	2.0E-08	1.1E-08	1.1E-08	1.0E-08	1.0E-08
Diethyl Phthalate	84-66-2	9.4E-10	6.5E-08	3.1E-08	2.2E-08	1.7E-09	9.7E-10	9.1E-10	8.7E-10	8.7E-10
Diisobutyl Phthalate	84-69-5	1.1E-09	7.8E-08	3.7E-08	2.6E-08	2.0E-09	1.2E-09	1.1E-09	1.0E-09	1.0E-09
Diisooctylphthalate	27554-26-3	2.4E-08	1.6E-06	7.8E-07	5.5E-07	4.3E-08	2.4E-08	2.3E-08	2.2E-08	2.2E-08
Di-n-octyl phthalate	117-84-0	2.3E-09	1.6E-07	7.7E-08	5.4E-08	4.2E-09	2.4E-09	2.3E-09	2.1E-09	2.2E-09
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	1.9E-11	1.3E-09	6.4E-10	4.5E-10	3.5E-11	2.0E-11	1.9E-11	1.8E-11	1.8E-11
3,5-di-tert-Butyl-4-hydroxybenzaldehyde	1620-98-0	4.1E-09	2.9E-07	1.4E-07	9.5E-08	7.5E-09	4.3E-09	4.0E-09	3.8E-09	3.8E-09

Chemical Name	CASRN	ADD_{ing}								
		Third Trimester Fetus	0<2 Years	2<6 Years	6<11 Years	11<16 Years	16<30 Years	30<40 Years	40<50 Years	50<70 Years
Fluoranthene	206-44-0	5.3E-09	3.6E-07	1.7E-07	1.2E-07	9.5E-09	5.4E-09	5.1E-09	4.8E-09	4.9E-09
Fluorene	86-73-7	6.8E-11	4.8E-09	2.3E-09	1.6E-09	1.2E-10	7.0E-11	6.7E-11	6.3E-11	6.3E-11
Hexadecane	544-76-3	4.9E-10	3.4E-08	1.6E-08	1.1E-08	8.9E-10	5.1E-10	4.8E-10	4.6E-10	4.6E-10
1-Hydroxypyrene	5315-79-7	2.7E-10	1.9E-08	8.8E-09	6.2E-09	4.9E-10	2.8E-10	2.6E-10	2.5E-10	2.5E-10
Lead		2.3E-07	1.6E-05	7.7E-06	5.4E-06	4.2E-07	2.4E-07	2.3E-07	2.2E-07	2.2E-07
Manganese		2.3E-07	1.6E-05	7.6E-06	5.3E-06	4.2E-07	2.4E-07	2.3E-07	2.1E-07	2.1E-07
2-(Methylthio)benzothiazole	615-22-5	3.5E-09	2.4E-07	1.2E-07	8.1E-08	6.4E-09	3.6E-09	3.4E-09	3.2E-09	3.3E-09
Molybdenum		4.3E-10	3.0E-08	1.4E-08	9.9E-09	7.7E-10	4.4E-10	4.2E-10	3.9E-10	3.9E-10
Naphthalene	91-20-3	1.2E-11	8.5E-10	4.1E-10	2.8E-10	2.2E-11	1.3E-11	1.2E-11	1.1E-11	1.1E-11
Naphthalene, 1-methyl-	90-12-0	3.2E-11	2.2E-09	1.0E-09	7.3E-10	5.7E-11	3.3E-11	3.1E-11	2.9E-11	2.9E-11
Naphthalene, 1,2-dimethyl-	573-98-8	7.4E-12	5.1E-10	2.4E-10	1.7E-10	1.3E-11	7.6E-12	7.2E-12	6.8E-12	6.8E-12
Naphthalene, 1,6-dimethyl-	575-43-9	4.9E-11	3.4E-09	1.6E-09	1.1E-09	8.8E-11	5.0E-11	4.8E-11	4.5E-11	4.5E-11
Naphthalene, 2-(bromomethyl)-	939-26-4	1.3E-09	8.9E-08	4.2E-08	3.0E-08	2.3E-09	1.3E-09	1.3E-09	1.2E-09	1.2E-09
Naphthalene, 2,3-dimethyl-	581-40-8	3.8E-10	2.6E-08	1.2E-08	8.7E-09	6.9E-10	3.9E-10	3.7E-10	3.5E-10	3.5E-10
Naphthalene, 2-methyl	91-57-6	2.9E-11	2.0E-09	9.5E-10	6.6E-10	5.2E-11	3.0E-11	2.8E-11	2.7E-11	2.7E-11
1-Octadecene	112-88-9	1.1E-09	7.6E-08	3.6E-08	2.5E-08	2.0E-09	1.1E-09	1.1E-09	1.0E-09	1.0E-09
17-Pentatriacontene	6971-40-0	9.3E-10	6.5E-08	3.1E-08	2.1E-08	1.7E-09	9.6E-10	9.0E-10	8.6E-10	8.6E-10
Phenanthrene	85-01-8	2.3E-09	1.6E-07	7.6E-08	5.3E-08	4.2E-09	2.4E-09	2.2E-09	2.1E-09	2.1E-09
Phenanthrene, 1-methyl	832-69-9	6.1E-10	4.3E-08	2.0E-08	1.4E-08	1.1E-09	6.3E-10	6.0E-10	5.6E-10	5.7E-10
Phenanthrene, 2-methyl-	2531-84-2	7.9E-10	5.5E-08	2.6E-08	1.8E-08	1.4E-09	8.2E-10	7.7E-10	7.3E-10	7.3E-10
Phenanthrene, 3-methyl	832-71-3	1.3E-09	9.1E-08	4.3E-08	3.0E-08	2.4E-09	1.3E-09	1.3E-09	1.2E-09	1.2E-09
N-Phenylbenzamide	93-98-1	5.1E-09	3.6E-07	1.7E-07	1.2E-07	9.3E-09	5.3E-09	5.0E-09	4.7E-09	4.7E-09
Phthalimide	85-41-6	9.2E-10	6.4E-08	3.0E-08	2.1E-08	1.7E-09	9.5E-10	9.0E-10	8.5E-10	8.5E-10
Pyrene	129-00-0	1.1E-08	7.7E-07	3.6E-07	2.6E-07	2.0E-08	1.1E-08	1.1E-08	1.0E-08	1.0E-08
Pyridine, 2-(4-methylphenyl)-	4467-06-5	2.4E-11	1.6E-09	7.8E-10	5.5E-10	4.3E-11	2.4E-11	2.3E-11	2.2E-11	2.2E-11
Selenium		1.4E-09	9.7E-08	4.6E-08	3.2E-08	2.5E-09	1.4E-09	1.4E-09	1.3E-09	1.3E-09
Strontium		2.0E-07	1.4E-05	6.5E-06	4.6E-06	3.6E-07	2.0E-07	1.9E-07	1.8E-07	1.8E-07
Thallium		5.6E-11	3.9E-09	1.8E-09	1.3E-09	1.0E-10	5.7E-11	5.4E-11	5.1E-11	5.1E-11
Tin		2.2E-09	1.5E-07	7.2E-08	5.0E-08	3.9E-09	2.2E-09	2.1E-09	2.0E-09	2.0E-09
Triethylene glycol monobutyl ether	143-22-6	2.7E-10	1.9E-08	8.9E-09	6.2E-09	4.9E-10	2.8E-10	2.6E-10	2.5E-10	2.5E-10
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	8.0E-10	5.6E-08	2.6E-08	1.8E-08	1.4E-09	8.2E-10	7.8E-10	7.4E-10	7.4E-10
Vanadium		1.1E-09	7.9E-08	3.7E-08	2.6E-08	2.1E-09	1.2E-09	1.1E-09	1.0E-09	1.0E-09
Zinc		4.9E-05	3.4E-03	1.6E-03	1.1E-03	8.8E-05	5.0E-05	4.7E-05	4.5E-05	4.5E-05

[a] ADD_{ing} was calculated from the mean of 35 individual field average concentrations ($C_{ing\text{-}crumb\ rubber}$) of a chemical detected in artificial gastrointestinal fluids extracts of crumb rubber samples.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
CASRN: Chemical Abstracts Service Registry Number

Values are rounded to two significant figures.

INDIVIDUAL FIELD ASSESSMENT (Table F-326 to Table F-349)

Table F-326. Field-Specific Average Ingestion Daily Dose[a] for Chronic Non-Cancer Hazard ($ADD_{ing\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related General Chemicals**[b]—Combined Gender **Athletes 2<6 Years**

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Acenaphthylene	208-96-8	35	1.9E-10	1.5E-09	1.4E-09	8.9E-10	4.3E-09	5.4E-09
Aluminum		35	3.3E-05	1.0E-04	5.3E-05	9.4E-05	1.9E-04	2.4E-04
Aniline	62-53-3	12	0	8.2E-09	1.9E-08	0	4.6E-08	8.2E-08
Anthracene	120-12-7	28	0	3.9E-09	6.8E-09	1.5E-09	1.5E-08	3.2E-08
Anthracene, 2-methyl-	613-12-7	35	2.2E-09	1.5E-08	1.3E-08	1.1E-08	3.5E-08	6.8E-08
Anthracene, 9,10-dimethyl	781-43-1	2	0	1.2E-10	6.9E-10	0	8.1E-11	4.1E-09
Anthracene, 9,10-diphenyl-	1499-10-1	2	0	9.6E-10	4.4E-09	0	2.7E-09	2.5E-08
Anthracene, 9-phenyl	602-55-1	30	0	1.5E-09	1.5E-09	8.9E-10	4.6E-09	6.5E-09
Antimony		35	6.8E-09	1.1E-07	9.9E-08	9.5E-08	2.6E-07	4.7E-07
Barium		35	1.8E-06	7.1E-06	4.8E-06	6.9E-06	1.3E-05	2.7E-05
Benzene, n-butyl-	104-51-8	29	0	8.2E-10	2.1E-09	4.6E-10	1.3E-09	1.3E-08
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	20	0	2.2E-07	3.1E-07	8.4E-08	8.3E-07	1.1E-06
Benz[a]anthracene	56-55-3	35	8.8E-10	1.3E-08	1.5E-08	6.4E-09	4.2E-08	5.9E-08
Benzo[b]fluoranthene	205-99-2	35	3.8E-09	1.9E-08	1.4E-08	1.2E-08	4.5E-08	5.4E-08
7H-Benzo[c]fluorene	205-12-9	31	0	3.6E-09	5.9E-09	1.2E-09	1.5E-08	2.9E-08
Benzo[k]fluoranthene	207-08-9	35	5.1E-10	6.0E-09	5.7E-09	3.8E-09	1.8E-08	2.3E-08
Benzothiazole	95-16-9	35	5.2E-07	2.3E-06	1.6E-06	1.7E-06	4.7E-06	5.4E-06
Benzothiazole, 2-phenyl-	883-93-2	35	7.0E-08	2.4E-07	2.3E-07	1.8E-07	5.6E-07	1.3E-06
Benzothiazolone	934-34-9	35	3.7E-06	5.8E-06	1.1E-06	5.7E-06	7.4E-06	7.7E-06
Benzyl butyl phthalate	85-68-7	35	6.0E-09	1.2E-07	9.7E-08	1.0E-07	2.6E-07	4.6E-07
Beryllium		11	0	2.9E-09	4.7E-09	0	1.0E-08	1.6E-08
Butylated Hydroxytoluene	128-37-0	19	0	3.1E-09	5.8E-09	1.1E-09	1.6E-08	2.6E-08
Cadmium		34	0	7.9E-08	4.9E-08	7.1E-08	1.7E-07	1.8E-07
Chromium		35	4.1E-08	2.2E-07	2.2E-07	1.5E-07	4.8E-07	1.2E-06
Cobalt		35	9.4E-07	5.0E-06	3.4E-06	4.8E-06	9.6E-06	1.7E-05
Copper		35	3.9E-06	9.8E-06	5.1E-06	9.0E-06	1.6E-05	3.1E-05
Cyclohexyl isothiocyanate	1122-82-3	29	0	7.3E-07	5.3E-07	7.2E-07	1.7E-06	1.9E-06
Dibenz[a,h]anthracene	53-70-3	7	0	8.0E-10	2.0E-09	0	3.6E-09	9.9E-09
Dibenzothiophene	132-65-0	27	0	3.1E-09	4.7E-09	9.1E-10	1.3E-08	1.9E-08
Dibutyl phthalate	84-74-2	31	0	2.2E-07	1.7E-07	1.8E-07	5.4E-07	6.3E-07

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Diethyl Phthalate	84-66-2	23	0	1.9E-08	1.6E-08	2.0E-08	4.4E-08	5.8E-08
Diisobutyl Phthalate	84-69-5	32	0	2.2E-08	5.8E-08	5.0E-09	5.9E-08	3.4E-07
Diisooctylphthalate	27554-26-3	33	0	4.7E-07	3.5E-07	3.5E-07	1.2E-06	1.2E-06
Di-n-octyl phthalate	117-84-0	26	0	4.6E-08	1.1E-07	1.2E-08	2.3E-07	4.9E-07
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	4	0	3.8E-10	1.2E-09	0	3.0E-09	5.4E-09
3,5-di-tert-Butyl-4-hydroxybenzaldehyde	1620-98-0	35	2.3E-10	8.2E-08	1.7E-07	5.1E-09	3.4E-07	8.2E-07
Fluoranthene	206-44-0	35	1.4E-08	1.0E-07	1.0E-07	6.2E-08	2.6E-07	5.0E-07
Fluorene	86-73-7	11	0	1.4E-09	3.2E-09	0	6.7E-09	1.6E-08
Hexadecane	544-76-3	28	0	9.8E-09	8.2E-09	1.0E-08	2.3E-08	3.8E-08
1-Hydroxypyrene	5315-79-7	1	0	5.3E-09	3.1E-08	0	0	1.9E-07
Lead		35	9.0E-07	4.6E-06	4.0E-06	3.5E-06	1.2E-05	2.1E-05
Manganese		35	8.4E-07	4.6E-06	2.7E-06	4.8E-06	7.5E-06	1.5E-05
2-(Methylthio)benzothiazole	615-22-5	5	0	7.0E-08	2.5E-07	0	3.9E-07	1.4E-06
Molybdenum		14	0	8.5E-09	1.2E-08	0	2.6E-08	4.2E-08
Naphthalene	91-20-3	1	0	2.4E-10	1.4E-09	0	0	8.5E-09
Naphthalene, 1-methyl-	90-12-0	31	0	6.3E-10	2.2E-09	1.1E-10	1.3E-09	1.3E-08
Naphthalene, 1,2-dimethyl-	573-98-8	12	0	1.5E-10	3.3E-10	0	7.4E-10	1.7E-09
Naphthalene, 1,6-dimethyl-	575-43-9	35	3.9E-10	9.7E-10	4.6E-10	8.5E-10	2.0E-09	2.7E-09
Naphthalene, 2-(bromomethyl)-	939-26-4	35	9.1E-10	2.6E-08	1.2E-08	2.5E-08	4.5E-08	5.8E-08
Naphthalene, 2,3-dimethyl-	581-40-8	35	1.9E-10	7.5E-09	7.4E-09	5.2E-09	2.2E-08	3.3E-08
Naphthalene, 2-methyl	91-57-6	19	0	5.7E-10	2.4E-09	1.0E-10	1.3E-09	1.4E-08
1-Octadecene	112-88-9	32	0	2.2E-08	1.9E-08	1.7E-08	5.9E-08	6.7E-08
17-Pentatriacontene	6971-40-0	9	0	1.8E-08	4.3E-08	0	1.0E-07	2.0E-07
Phenanthrene	85-01-8	35	7.9E-09	4.6E-08	5.7E-08	2.6E-08	1.3E-07	2.9E-07
Phenanthrene, 1-methyl	832-69-9	35	1.1E-09	1.2E-08	1.2E-08	8.6E-09	3.0E-08	5.3E-08
Phenanthrene, 2-methyl-	2531-84-2	35	3.3E-10	1.6E-08	1.8E-08	9.4E-09	4.4E-08	8.6E-08
Phenanthrene, 3-methyl	832-71-3	35	2.0E-09	2.6E-08	2.8E-08	1.7E-08	7.1E-08	1.3E-07
N-Phenylbenzamide	93-98-1	22	0	1.0E-07	2.0E-07	1.6E-08	6.2E-07	7.2E-07
Phthalimide	85-41-6	16	0	1.8E-08	4.2E-08	0	9.2E-08	1.9E-07
Pyrene	129-00-0	35	4.1E-08	2.2E-07	1.4E-07	1.8E-07	4.6E-07	6.3E-07
Pyridine, 2-(4-methylphenyl)-	4467-06-5	2	0	4.7E-10	2.7E-09	0	1.6E-10	1.6E-08
Selenium		4	0	2.8E-08	8.5E-08	0	1.9E-07	4.1E-07
Strontium		35	3.8E-07	3.9E-06	7.6E-06	2.1E-06	1.2E-05	4.5E-05
Thallium		21	0	1.1E-09	1.9E-09	8.9E-10	3.4E-09	1.0E-08

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Tin		30	0	4.3E-08	4.3E-08	3.2E-08	1.2E-07	1.7E-07
Triethylene glycol monobutyl ether	143-22-6	3	0	5.4E-09	2.2E-08	0	2.8E-08	1.2E-07
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	35	9.1E-09	1.6E-08	5.1E-09	1.5E-08	2.4E-08	3.0E-08
Vanadium		2	0	2.2E-08	9.3E-08	0	1.2E-07	4.0E-07
Zinc		35	2.1E-04	9.7E-04	5.1E-04	9.3E-04	1.7E-03	2.8E-03

[a] 35 field-specific $ADD_{ing\text{-}field}$ are included in the table. $ADD_{ing\text{-}field}$ was calculated from field-specific average concentrations ($C_{ing\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial gastrointestinal fluids extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

Table F-327. Field-Specific Average Ingestion Daily Dose[a] for Chronic Non-Cancer Hazard ($ADD_{ing\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related General Chemicals**[b]—Combined Gender **Athletes 6<11 Years**

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Acenaphthylene	208-96-8	35	1.3E-10	9.8E-10	9.1E-10	5.9E-10	2.9E-09	3.6E-09
Aluminum		35	2.2E-05	6.9E-05	3.5E-05	6.3E-05	1.3E-04	1.6E-04
Aniline	62-53-3	12	0	5.5E-09	1.2E-08	0	3.0E-08	5.5E-08
Anthracene	120-12-7	28	0	2.6E-09	4.5E-09	1.0E-09	9.7E-09	2.1E-08
Anthracene, 2-methyl-	613-12-7	35	1.5E-09	1.0E-08	9.0E-09	7.4E-09	2.4E-08	4.6E-08
Anthracene, 9,10-dimethyl	781-43-1	2	0	8.3E-11	4.6E-10	0	5.4E-11	2.7E-09
Anthracene, 9,10-diphenyl-	1499-10-1	2	0	6.4E-10	2.9E-09	0	1.8E-09	1.6E-08
Anthracene, 9-phenyl	602-55-1	30	0	9.7E-10	1.0E-09	5.9E-10	3.0E-09	4.4E-09
Antimony		35	4.5E-09	7.5E-08	6.6E-08	6.3E-08	1.7E-07	3.1E-07
Barium		35	1.2E-06	4.7E-06	3.2E-06	4.6E-06	9.0E-06	1.8E-05
Benzene, n-butyl-	104-51-8	29	0	5.5E-10	1.4E-09	3.1E-10	8.4E-10	8.5E-09
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	20	0	1.5E-07	2.0E-07	5.6E-08	5.5E-07	7.3E-07
Benz[a]anthracene	56-55-3	35	5.9E-10	9.0E-09	9.9E-09	4.3E-09	2.8E-08	3.9E-08
Benzo[b]fluoranthene	205-99-2	35	2.5E-09	1.2E-08	9.1E-09	8.3E-09	3.0E-08	3.6E-08
7H-Benzo[c]fluorene	205-12-9	31	0	2.4E-09	3.9E-09	7.8E-10	9.7E-09	1.9E-08
Benzo[k]fluoranthene	207-08-9	35	3.4E-10	4.0E-09	3.8E-09	2.5E-09	1.2E-08	1.5E-08
Benzothiazole	95-16-9	35	3.5E-07	1.5E-06	1.0E-06	1.1E-06	3.1E-06	3.6E-06
Benzothiazole, 2-phenyl-	883-93-2	35	4.7E-08	1.6E-07	1.5E-07	1.2E-07	3.8E-07	8.7E-07

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Benzothiazolone	934-34-9	35	2.4E-06	3.9E-06	7.5E-07	3.8E-06	5.0E-06	5.1E-06
Benzyl butyl phthalate	85-68-7	35	4.0E-09	7.8E-08	6.4E-08	6.9E-08	1.7E-07	3.1E-07
Beryllium		11	0	2.0E-09	3.2E-09	0	6.8E-09	1.1E-08
Butylated Hydroxytoluene	128-37-0	19	0	2.1E-09	3.9E-09	7.2E-10	1.0E-08	1.7E-08
Cadmium		34	0	5.3E-08	3.3E-08	4.8E-08	1.1E-07	1.2E-07
Chromium		35	2.7E-08	1.5E-07	1.4E-07	9.7E-08	3.2E-07	8.2E-07
Cobalt		35	6.2E-07	3.4E-06	2.3E-06	3.2E-06	6.4E-06	1.2E-05
Copper		35	2.6E-06	6.6E-06	3.4E-06	6.0E-06	1.1E-05	2.1E-05
Cyclohexyl isothiocyanate	1122-82-3	29	0	4.9E-07	3.6E-07	4.8E-07	1.1E-06	1.3E-06
Dibenz[a,h]anthracene	53-70-3	7	0	5.3E-10	1.3E-09	0	2.4E-09	6.6E-09
Dibenzothiophene	132-65-0	27	0	2.1E-09	3.1E-09	6.1E-10	8.4E-09	1.3E-08
Dibutyl phthalate	84-74-2	31	0	1.5E-07	1.1E-07	1.2E-07	3.6E-07	4.2E-07
Diethyl Phthalate	84-66-2	23	0	1.2E-08	1.1E-08	1.4E-08	2.9E-08	3.9E-08
Diisobutyl Phthalate	84-69-5	32	0	1.5E-08	3.8E-08	3.4E-09	4.0E-08	2.3E-07
Diisooctylphthalate	27554-26-3	33	0	3.1E-07	2.3E-07	2.3E-07	7.9E-07	8.3E-07
Di-n-octyl phthalate	117-84-0	26	0	3.1E-08	7.5E-08	8.1E-09	1.5E-07	3.3E-07
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	4	0	2.6E-10	8.1E-10	0	2.0E-09	3.6E-09
3,5-di-tert-Butyl-4-hydroxybenzaldehyde	1620-98-0	35	1.5E-10	5.5E-08	1.1E-07	3.4E-09	2.3E-07	5.5E-07
Fluoranthene	206-44-0	35	9.5E-09	7.0E-08	6.8E-08	4.2E-08	1.8E-07	3.3E-07
Fluorene	86-73-7	11	0	9.1E-10	2.2E-09	0	4.5E-09	1.1E-08
Hexadecane	544-76-3	28	0	6.5E-09	5.5E-09	6.9E-09	1.6E-08	2.5E-08
1-Hydroxypyrene	5315-79-7	1	0	3.5E-09	2.1E-08	0	0	1.2E-07
Lead		35	6.0E-07	3.1E-06	2.7E-06	2.3E-06	7.8E-06	1.4E-05
Manganese		35	5.6E-07	3.1E-06	1.8E-06	3.2E-06	5.0E-06	9.8E-06
2-(Methylthio)benzothiazole	615-22-5	5	0	4.7E-08	1.7E-07	0	2.6E-07	9.4E-07
Molybdenum		14	0	5.6E-09	7.9E-09	0	1.7E-08	2.8E-08
Naphthalene	91-20-3	1	0	1.6E-10	9.6E-10	0	0	5.7E-09
Naphthalene, 1-methyl-	90-12-0	31	0	4.2E-10	1.5E-09	7.0E-11	8.8E-10	8.7E-09
Naphthalene, 1,2-dimethyl-	573-98-8	12	0	9.8E-11	2.2E-10	0	4.9E-10	1.1E-09
Naphthalene, 1,6-dimethyl-	575-43-9	35	2.6E-10	6.5E-10	3.1E-10	5.7E-10	1.3E-09	1.8E-09
Naphthalene, 2-(bromomethyl)-	939-26-4	35	6.0E-10	1.7E-08	8.0E-09	1.7E-08	3.0E-08	3.9E-08
Naphthalene, 2,3-dimethyl-	581-40-8	35	1.3E-10	5.0E-09	5.0E-09	3.5E-09	1.5E-08	2.2E-08
Naphthalene, 2-methyl	91-57-6	19	0	3.8E-10	1.6E-09	6.8E-11	8.6E-10	9.4E-09
1-Octadecene	112-88-9	32	0	1.4E-08	1.3E-08	1.1E-08	3.9E-08	4.5E-08

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
17-Pentatriacontene	6971-40-0	9	0	1.2E-08	2.9E-08	0	6.7E-08	1.3E-07
Phenanthrene	85-01-8	35	5.3E-09	3.1E-08	3.8E-08	1.7E-08	8.7E-08	1.9E-07
Phenanthrene, 1-methyl	832-69-9	35	7.0E-10	8.1E-09	7.8E-09	5.8E-09	2.0E-08	3.5E-08
Phenanthrene, 2-methyl-	2531-84-2	35	2.2E-10	1.0E-08	1.2E-08	6.2E-09	3.0E-08	5.7E-08
Phenanthrene, 3-methyl	832-71-3	35	1.3E-09	1.7E-08	1.9E-08	1.1E-08	4.8E-08	8.7E-08
N-Phenylbenzamide	93-98-1	22	0	6.8E-08	1.3E-07	1.0E-08	4.1E-07	4.8E-07
Phthalimide	85-41-6	16	0	1.2E-08	2.8E-08	0	6.2E-08	1.3E-07
Pyrene	129-00-0	35	2.7E-08	1.5E-07	9.5E-08	1.2E-07	3.1E-07	4.2E-07
Pyridine, 2-(4-methylphenyl)-	4467-06-5	2	0	3.1E-10	1.8E-09	0	1.1E-10	1.1E-08
Selenium		4	0	1.9E-08	5.7E-08	0	1.3E-07	2.7E-07
Strontium		35	2.5E-07	2.6E-06	5.1E-06	1.4E-06	7.8E-06	3.0E-05
Thallium		21	0	7.4E-10	1.3E-09	5.9E-10	2.3E-09	6.7E-09
Tin		30	0	2.9E-08	2.9E-08	2.1E-08	7.7E-08	1.1E-07
Triethylene glycol monobutyl ether	143-22-6	3	0	3.6E-09	1.5E-08	0	1.9E-08	8.0E-08
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	35	6.1E-09	1.1E-08	3.4E-09	9.8E-09	1.6E-08	2.0E-08
Vanadium		2	0	1.5E-08	6.2E-08	0	7.8E-08	2.6E-07
Zinc		35	1.4E-04	6.5E-04	3.4E-04	6.2E-04	1.2E-03	1.9E-03

[a] 35 field-specific $ADD_{ing\text{-}field}$ are included in the table. $ADD_{ing\text{-}field}$ was calculated from field-specific average concentrations ($C_{ing\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial gastrointestinal fluids extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

Table F-328. Field-Specific Average Ingestion Daily Dose[a] for Chronic Non-Cancer Hazard ($ADD_{ing\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related General Chemicals**[b]—Combined Gender **Athletes 11<16 Years**

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Acenaphthylene	208-96-8	35	9.9E-11	7.6E-10	7.1E-10	4.6E-10	2.2E-09	2.8E-09
Aluminum		35	1.7E-05	5.3E-05	2.7E-05	4.9E-05	9.7E-05	1.3E-04
Aniline	62-53-3	12	0	4.2E-09	9.7E-09	0	2.4E-08	4.3E-08
Anthracene	120-12-7	28	0	2.0E-09	3.5E-09	7.7E-10	7.5E-09	1.6E-08
Anthracene, 2-methyl-	613-12-7	35	1.2E-09	8.0E-09	7.0E-09	5.7E-09	1.8E-08	3.5E-08
Anthracene, 9,10-dimethyl	781-43-1	2	0	6.4E-11	3.6E-10	0	4.2E-11	2.1E-09
Anthracene, 9,10-diphenyl-	1499-10-1	2	0	5.0E-10	2.3E-09	0	1.4E-09	1.3E-08

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Anthracene, 9-phenyl	602-55-1	30	0	7.5E-10	7.9E-10	4.6E-10	2.4E-09	3.4E-09
Antimony		35	3.5E-09	5.8E-08	5.1E-08	4.9E-08	1.3E-07	2.4E-07
Barium		35	9.6E-07	3.7E-06	2.5E-06	3.6E-06	7.0E-06	1.4E-05
Benzene, n-butyl-	104-51-8	29	0	4.2E-10	1.1E-09	2.4E-10	6.5E-10	6.6E-09
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	20	0	1.2E-07	1.6E-07	4.4E-08	4.3E-07	5.6E-07
Benz[a]anthracene	56-55-3	35	4.5E-10	7.0E-09	7.6E-09	3.3E-09	2.2E-08	3.0E-08
Benzo[b]fluoranthene	205-99-2	35	2.0E-09	9.6E-09	7.1E-09	6.4E-09	2.3E-08	2.8E-08
7H-Benzo[c]fluorene	205-12-9	31	0	1.8E-09	3.0E-09	6.1E-10	7.5E-09	1.5E-08
Benzo[k]fluoranthene	207-08-9	35	2.6E-10	3.1E-09	2.9E-09	2.0E-09	9.1E-09	1.2E-08
Benzothiazole	95-16-9	35	2.7E-07	1.2E-06	8.1E-07	8.8E-07	2.4E-06	2.8E-06
Benzothiazole, 2-phenyl-	883-93-2	35	3.6E-08	1.3E-07	1.2E-07	9.2E-08	2.9E-07	6.8E-07
Benzothiazolone	934-34-9	35	1.9E-06	3.0E-06	5.8E-07	3.0E-06	3.9E-06	4.0E-06
Benzyl butyl phthalate	85-68-7	35	3.1E-09	6.0E-08	5.0E-08	5.3E-08	1.3E-07	2.4E-07
Beryllium		11	0	1.5E-09	2.4E-09	0	5.3E-09	8.4E-09
Butylated Hydroxytoluene	128-37-0	19	0	1.6E-09	3.0E-09	5.6E-10	8.1E-09	1.4E-08
Cadmium		34	0	4.1E-08	2.5E-08	3.7E-08	8.7E-08	9.5E-08
Chromium		35	2.1E-08	1.1E-07	1.1E-07	7.5E-08	2.5E-07	6.3E-07
Cobalt		35	4.8E-07	2.6E-06	1.8E-06	2.5E-06	5.0E-06	9.0E-06
Copper		35	2.0E-06	5.1E-06	2.6E-06	4.7E-06	8.4E-06	1.6E-05
Cyclohexyl isothiocyanate	1122-82-3	29	0	3.8E-07	2.8E-07	3.7E-07	8.8E-07	9.8E-07
Dibenz[a,h]anthracene	53-70-3	7	0	4.1E-10	1.0E-09	0	1.9E-09	5.1E-09
Dibenzothiophene	132-65-0	27	0	1.6E-09	2.4E-09	4.7E-10	6.5E-09	9.8E-09
Dibutyl phthalate	84-74-2	31	0	1.1E-07	8.7E-08	9.2E-08	2.8E-07	3.3E-07
Diethyl Phthalate	84-66-2	23	0	9.6E-09	8.5E-09	1.0E-08	2.3E-08	3.0E-08
Diisobutyl Phthalate	84-69-5	32	0	1.1E-08	3.0E-08	2.6E-09	3.1E-08	1.8E-07
Diisooctylphthalate	27554-26-3	33	0	2.4E-07	1.8E-07	1.8E-07	6.1E-07	6.4E-07
Di-n-octyl phthalate	117-84-0	26	0	2.4E-08	5.8E-08	6.3E-09	1.2E-07	2.5E-07
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	4	0	2.0E-10	6.3E-10	0	1.5E-09	2.8E-09
3,5-di-tert-Butyl-4-hydroxybenzaldehyde	1620-98-0	35	1.2E-10	4.2E-08	8.5E-08	2.6E-09	1.7E-07	4.2E-07
Fluoranthene	206-44-0	35	7.3E-09	5.4E-08	5.2E-08	3.2E-08	1.4E-07	2.6E-07
Fluorene	86-73-7	11	0	7.0E-10	1.7E-09	0	3.5E-09	8.4E-09
Hexadecane	544-76-3	28	0	5.1E-09	4.3E-09	5.4E-09	1.2E-08	2.0E-08
1-Hydroxypyrene	5315-79-7	1	0	2.8E-09	1.6E-08	0	0	9.6E-08
Lead		35	4.6E-07	2.4E-06	2.1E-06	1.8E-06	6.0E-06	1.1E-05
Manganese		35	4.3E-07	2.4E-06	1.4E-06	2.5E-06	3.9E-06	7.6E-06

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
2-(Methylthio)benzothiazole	615-22-5	5	0	3.6E-08	1.3E-07	0	2.0E-07	7.3E-07
Molybdenum		14	0	4.4E-09	6.1E-09	0	1.4E-08	2.2E-08
Naphthalene	91-20-3	1	0	1.3E-10	7.5E-10	0	0	4.4E-09
Naphthalene, 1-methyl-	90-12-0	31	0	3.3E-10	1.1E-09	5.4E-11	6.8E-10	6.7E-09
Naphthalene, 1,2-dimethyl-	573-98-8	12	0	7.6E-11	1.7E-10	0	3.8E-10	8.7E-10
Naphthalene, 1,6-dimethyl-	575-43-9	35	2.0E-10	5.0E-10	2.4E-10	4.4E-10	1.0E-09	1.4E-09
Naphthalene, 2-(bromomethyl)-	939-26-4	35	4.7E-10	1.3E-08	6.2E-09	1.3E-08	2.3E-08	3.0E-08
Naphthalene, 2,3-dimethyl-	581-40-8	35	9.9E-11	3.9E-09	3.8E-09	2.7E-09	1.2E-08	1.7E-08
Naphthalene, 2-methyl	91-57-6	19	0	3.0E-10	1.2E-09	5.3E-11	6.6E-10	7.3E-09
1-Octadecene	112-88-9	32	0	1.1E-08	9.8E-09	8.8E-09	3.0E-08	3.5E-08
17-Pentatriacontene	6971-40-0	9	0	9.5E-09	2.2E-08	0	5.2E-08	1.0E-07
Phenanthrene	85-01-8	35	4.1E-09	2.4E-08	2.9E-08	1.3E-08	6.8E-08	1.5E-07
Phenanthrene, 1-methyl	832-69-9	35	5.4E-10	6.3E-09	6.0E-09	4.5E-09	1.6E-08	2.7E-08
Phenanthrene, 2-methyl-	2531-84-2	35	1.7E-10	8.1E-09	9.4E-09	4.8E-09	2.3E-08	4.5E-08
Phenanthrene, 3-methyl	832-71-3	35	1.0E-09	1.3E-08	1.4E-08	8.6E-09	3.7E-08	6.8E-08
N-Phenylbenzamide	93-98-1	22	0	5.3E-08	1.0E-07	8.1E-09	3.2E-07	3.7E-07
Phthalimide	85-41-6	16	0	9.5E-09	2.2E-08	0	4.8E-08	1.0E-07
Pyrene	129-00-0	35	2.1E-08	1.1E-07	7.4E-08	9.3E-08	2.4E-07	3.3E-07
Pyridine, 2-(4-methylphenyl)-	4467-06-5	2	0	2.4E-10	1.4E-09	0	8.3E-11	8.2E-09
Selenium		4	0	1.4E-08	4.4E-08	0	1.0E-07	2.1E-07
Strontium		35	1.9E-07	2.0E-06	3.9E-06	1.1E-06	6.1E-06	2.3E-05
Thallium		21	0	5.7E-10	9.7E-10	4.6E-10	1.8E-09	5.2E-09
Tin		30	0	2.2E-08	2.2E-08	1.7E-08	6.0E-08	8.8E-08
Triethylene glycol monobutyl ether	143-22-6	3	0	2.8E-09	1.1E-08	0	1.4E-08	6.2E-08
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	35	4.7E-09	8.2E-09	2.6E-09	7.6E-09	1.3E-08	1.6E-08
Vanadium		2	0	1.2E-08	4.8E-08	0	6.1E-08	2.1E-07
Zinc		35	1.1E-04	5.0E-04	2.7E-04	4.8E-04	8.9E-04	1.4E-03

[a] 35 field-specific $ADD_{ing\text{-}field}$ are included in the table. $ADD_{ing\text{-}field}$ was calculated from field-specific average concentrations ($C_{ing\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial gastrointestinal fluids extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

Table F-329. Field-Specific Average Ingestion Daily Dose[a] for Chronic Non-Cancer Hazard ($ADD_{ing\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related General Chemicals**[b]—Combined Gender **Athletes 16<30 Years**

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Acenaphthylene	208-96-8	35	1.1E-10	8.5E-10	7.9E-10	5.1E-10	2.5E-09	3.1E-09
Aluminum		35	1.9E-05	5.9E-05	3.0E-05	5.4E-05	1.1E-04	1.4E-04
Aniline	62-53-3	12	0	4.7E-09	1.1E-08	0	2.6E-08	4.7E-08
Anthracene	120-12-7	28	0	2.2E-09	3.9E-09	8.6E-10	8.4E-09	1.8E-08
Anthracene, 2-methyl-	613-12-7	35	1.3E-09	8.9E-09	7.8E-09	6.4E-09	2.0E-08	3.9E-08
Anthracene, 9,10-dimethyl	781-43-1	2	0	7.2E-11	4.0E-10	0	4.6E-11	2.4E-09
Anthracene, 9,10-diphenyl-	1499-10-1	2	0	5.5E-10	2.5E-09	0	1.6E-09	1.4E-08
Anthracene, 9-phenyl	602-55-1	30	0	8.4E-10	8.8E-10	5.1E-10	2.6E-09	3.8E-09
Antimony		35	3.9E-09	6.4E-08	5.7E-08	5.4E-08	1.5E-07	2.7E-07
Barium		35	1.1E-06	4.1E-06	2.8E-06	4.0E-06	7.7E-06	1.5E-05
Benzene, n-butyl-	104-51-8	29	0	4.7E-10	1.2E-09	2.7E-10	7.3E-10	7.3E-09
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	20	0	1.3E-07	1.8E-07	4.8E-08	4.8E-07	6.3E-07
Benz[a]anthracene	56-55-3	35	5.1E-10	7.8E-09	8.5E-09	3.7E-09	2.4E-08	3.4E-08
Benzo[b]fluoranthene	205-99-2	35	2.2E-09	1.1E-08	7.9E-09	7.2E-09	2.6E-08	3.1E-08
7H-Benzo[c]fluorene	205-12-9	31	0	2.1E-09	3.4E-09	6.7E-10	8.4E-09	1.7E-08
Benzo[k]fluoranthene	207-08-9	35	2.9E-10	3.5E-09	3.3E-09	2.2E-09	1.0E-08	1.3E-08
Benzothiazole	95-16-9	35	3.0E-07	1.3E-06	9.0E-07	9.8E-07	2.7E-06	3.1E-06
Benzothiazole, 2-phenyl-	883-93-2	35	4.0E-08	1.4E-07	1.3E-07	1.0E-07	3.2E-07	7.5E-07
Benzothiazolone	934-34-9	35	2.1E-06	3.3E-06	6.5E-07	3.3E-06	4.3E-06	4.4E-06
Benzyl butyl phthalate	85-68-7	35	3.4E-09	6.7E-08	5.6E-08	5.9E-08	1.5E-07	2.7E-07
Beryllium		11	0	1.7E-09	2.7E-09	0	5.9E-09	9.3E-09
Butylated Hydroxytoluene	128-37-0	19	0	1.8E-09	3.3E-09	6.2E-10	9.0E-09	1.5E-08
Cadmium		34	0	4.6E-08	2.8E-08	4.1E-08	9.6E-08	1.1E-07
Chromium		35	2.3E-08	1.3E-07	1.2E-07	8.4E-08	2.8E-07	7.0E-07
Cobalt		35	5.4E-07	2.9E-06	2.0E-06	2.8E-06	5.5E-06	1.0E-05
Copper		35	2.2E-06	5.7E-06	2.9E-06	5.2E-06	9.3E-06	1.8E-05
Cyclohexyl isothiocyanate	1122-82-3	29	0	4.2E-07	3.1E-07	4.2E-07	9.8E-07	1.1E-06
Dibenz[a,h]anthracene	53-70-3	7	0	4.6E-10	1.1E-09	0	2.1E-09	5.7E-09
Dibenzothiophene	132-65-0	27	0	1.8E-09	2.7E-09	5.2E-10	7.2E-09	1.1E-08
Dibutyl phthalate	84-74-2	31	0	1.3E-07	9.7E-08	1.0E-07	3.1E-07	3.7E-07
Diethyl Phthalate	84-66-2	23	0	1.1E-08	9.4E-09	1.2E-08	2.5E-08	3.3E-08
Diisobutyl Phthalate	84-69-5	32	0	1.3E-08	3.3E-08	2.9E-09	3.4E-08	2.0E-07

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Diisooctylphthalate	27554-26-3	33	0	2.7E-07	2.0E-07	2.0E-07	6.8E-07	7.1E-07
Di-n-octyl phthalate	117-84-0	26	0	2.7E-08	6.4E-08	7.0E-09	1.3E-07	2.8E-07
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	4	0	2.2E-10	7.0E-10	0	1.7E-09	3.1E-09
3,5-di-tert-Butyl-4-hydroxybenzaldehyde	1620-98-0	35	1.3E-10	4.7E-08	9.5E-08	2.9E-09	1.9E-07	4.7E-07
Fluoranthene	206-44-0	35	8.2E-09	6.0E-08	5.8E-08	3.6E-08	1.5E-07	2.9E-07
Fluorene	86-73-7	11	0	7.8E-10	1.9E-09	0	3.9E-09	9.3E-09
Hexadecane	544-76-3	28	0	5.7E-09	4.7E-09	6.0E-09	1.3E-08	2.2E-08
1-Hydroxypyrene	5315-79-7	1	0	3.1E-09	1.8E-08	0	0	1.1E-07
Lead		35	5.2E-07	2.7E-06	2.3E-06	2.0E-06	6.7E-06	1.2E-05
Manganese		35	4.8E-07	2.6E-06	1.6E-06	2.7E-06	4.3E-06	8.4E-06
2-(Methylthio)benzothiazole	615-22-5	5	0	4.0E-08	1.5E-07	0	2.3E-07	8.1E-07
Molybdenum		14	0	4.9E-09	6.8E-09	0	1.5E-08	2.4E-08
Naphthalene	91-20-3	1	0	1.4E-10	8.3E-10	0	0	4.9E-09
Naphthalene, 1-methyl-	90-12-0	31	0	3.6E-10	1.3E-09	6.0E-11	7.6E-10	7.5E-09
Naphthalene, 1,2-dimethyl-	573-98-8	12	0	8.5E-11	1.9E-10	0	4.2E-10	9.7E-10
Naphthalene, 1,6-dimethyl-	575-43-9	35	2.2E-10	5.6E-10	2.7E-10	4.9E-10	1.1E-09	1.6E-09
Naphthalene, 2-(bromomethyl)-	939-26-4	35	5.2E-10	1.5E-08	6.9E-09	1.4E-08	2.6E-08	3.3E-08
Naphthalene, 2,3-dimethyl-	581-40-8	35	1.1E-10	4.3E-09	4.3E-09	3.0E-09	1.3E-08	1.9E-08
Naphthalene, 2-methyl	91-57-6	19	0	3.3E-10	1.4E-09	5.9E-11	7.4E-10	8.2E-09
1-Octadecene	112-88-9	32	0	1.2E-08	1.1E-08	9.8E-09	3.4E-08	3.9E-08
17-Pentatriacontene	6971-40-0	9	0	1.1E-08	2.5E-08	0	5.8E-08	1.1E-07
Phenanthrene	85-01-8	35	4.6E-09	2.6E-08	3.3E-08	1.5E-08	7.5E-08	1.7E-07
Phenanthrene, 1-methyl	832-69-9	35	6.0E-10	7.0E-09	6.7E-09	5.0E-09	1.7E-08	3.1E-08
Phenanthrene, 2-methyl-	2531-84-2	35	1.9E-10	9.1E-09	1.0E-08	5.4E-09	2.6E-08	5.0E-08
Phenanthrene, 3-methyl	832-71-3	35	1.1E-09	1.5E-08	1.6E-08	9.5E-09	4.1E-08	7.5E-08
N-Phenylbenzamide	93-98-1	22	0	5.8E-08	1.1E-07	9.0E-09	3.6E-07	4.1E-07
Phthalimide	85-41-6	16	0	1.1E-08	2.4E-08	0	5.3E-08	1.1E-07
Pyrene	129-00-0	35	2.3E-08	1.3E-07	8.2E-08	1.0E-07	2.7E-07	3.6E-07
Pyridine, 2-(4-methylphenyl)-	4467-06-5	2	0	2.7E-10	1.5E-09	0	9.2E-11	9.2E-09
Selenium		4	0	1.6E-08	4.9E-08	0	1.1E-07	2.4E-07
Strontium		35	2.2E-07	2.3E-06	4.4E-06	1.2E-06	6.7E-06	2.6E-05
Thallium		21	0	6.4E-10	1.1E-09	5.1E-10	2.0E-09	5.8E-09
Tin		30	0	2.5E-08	2.5E-08	1.9E-08	6.6E-08	9.8E-08

Chemical	CASRN[c]	Detection	$ADD_{ing-field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Triethylene glycol monobutyl ether	143-22-6	3	0	3.1E-09	1.3E-08	0	1.6E-08	6.9E-08
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	35	5.3E-09	9.1E-09	2.9E-09	8.5E-09	1.4E-08	1.7E-08
Vanadium		2	0	1.3E-08	5.3E-08	0	6.7E-08	2.3E-07
Zinc		35	1.2E-04	5.6E-04	3.0E-04	5.3E-04	1.0E-03	1.6E-03

[a] 35 field-specific $ADD_{ing-field}$ are included in the table. $ADD_{ing-field}$ was calculated from field-specific average concentrations ($C_{ing-crumb\ rubber-field}$) of a chemical detected in artificial gastrointestinal fluids extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

Table F-330. Field-Specific Average Ingestion Daily Dose[a] for Chronic Non-Cancer Hazard ($ADD_{ing-field}$, milligrams per kilogram BW per day) of **Field-Related General Chemicals**[b]—Combined Gender **Athletes 30<40 Years**

Chemical	CASRN[c]	Detection	$ADD_{ing-field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Acenaphthylene	208-96-8	35	7.3E-11	5.6E-10	5.3E-10	3.4E-10	1.7E-09	2.1E-09
Aluminum		35	1.3E-05	4.0E-05	2.0E-05	3.6E-05	7.2E-05	9.3E-05
Aniline	62-53-3	12	0	3.1E-09	7.2E-09	0	1.8E-08	3.2E-08
Anthracene	120-12-7	28	0	1.5E-09	2.6E-09	5.7E-10	5.6E-09	1.2E-08
Anthracene, 2-methyl-	613-12-7	35	8.6E-10	5.9E-09	5.2E-09	4.3E-09	1.4E-08	2.6E-08
Anthracene, 9,10-dimethyl	781-43-1	2	0	4.8E-11	2.7E-10	0	3.1E-11	1.6E-09
Anthracene, 9,10-diphenyl-	1499-10-1	2	0	3.7E-10	1.7E-09	0	1.0E-09	9.4E-09
Anthracene, 9-phenyl	602-55-1	30	0	5.6E-10	5.9E-10	3.4E-10	1.8E-09	2.5E-09
Antimony		35	2.6E-09	4.3E-08	3.8E-08	3.6E-08	9.9E-08	1.8E-07
Barium		35	7.1E-07	2.7E-06	1.9E-06	2.7E-06	5.2E-06	1.0E-05
Benzene, n-butyl-	104-51-8	29	0	3.2E-10	8.1E-10	1.8E-10	4.9E-10	4.9E-09
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	20	0	8.6E-08	1.2E-07	3.2E-08	3.2E-07	4.2E-07
Benz[a]anthracene	56-55-3	35	3.4E-10	5.2E-09	5.7E-09	2.5E-09	1.6E-08	2.3E-08
Benzo[b]fluoranthene	205-99-2	35	1.5E-09	7.1E-09	5.3E-09	4.8E-09	1.7E-08	2.1E-08
7H-Benzo[c]fluorene	205-12-9	31	0	1.4E-09	2.2E-09	4.5E-10	5.6E-09	1.1E-08
Benzo[k]fluoranthene	207-08-9	35	1.9E-10	2.3E-09	2.2E-09	1.5E-09	6.8E-09	8.7E-09
Benzothiazole	95-16-9	35	2.0E-07	8.8E-07	6.0E-07	6.5E-07	1.8E-06	2.1E-06
Benzothiazole, 2-phenyl-	883-93-2	35	2.7E-08	9.4E-08	8.8E-08	6.8E-08	2.2E-07	5.0E-07
Benzothiazolone	934-34-9	35	1.4E-06	2.2E-06	4.3E-07	2.2E-06	2.9E-06	3.0E-06

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Benzyl butyl phthalate	85-68-7	35	2.3E-09	4.5E-08	3.7E-08	4.0E-08	1.0E-07	1.8E-07
Beryllium		11	0	1.1E-09	1.8E-09	0	3.9E-09	6.2E-09
Butylated Hydroxytoluene	128-37-0	19	0	1.2E-09	2.2E-09	4.2E-10	6.0E-09	1.0E-08
Cadmium		34	0	3.0E-08	1.9E-08	2.7E-08	6.4E-08	7.1E-08
Chromium		35	1.6E-08	8.5E-08	8.3E-08	5.6E-08	1.9E-07	4.7E-07
Cobalt		35	3.6E-07	1.9E-06	1.3E-06	1.8E-06	3.7E-06	6.7E-06
Copper		35	1.5E-06	3.8E-06	2.0E-06	3.5E-06	6.2E-06	1.2E-05
Cyclohexyl isothiocyanate	1122-82-3	29	0	2.8E-07	2.1E-07	2.8E-07	6.6E-07	7.3E-07
Dibenz[a,h]anthracene	53-70-3	7	0	3.1E-10	7.7E-10	0	1.4E-09	3.8E-09
Dibenzothiophene	132-65-0	27	0	1.2E-09	1.8E-09	3.5E-10	4.8E-09	7.3E-09
Dibutyl phthalate	84-74-2	31	0	8.5E-08	6.4E-08	6.8E-08	2.1E-07	2.4E-07
Diethyl Phthalate	84-66-2	23	0	7.2E-09	6.3E-09	7.8E-09	1.7E-08	2.2E-08
Diisobutyl Phthalate	84-69-5	32	0	8.5E-09	2.2E-08	1.9E-09	2.3E-08	1.3E-07
Diisooctylphthalate	27554-26-3	33	0	1.8E-07	1.3E-07	1.3E-07	4.6E-07	4.8E-07
Di-n-octyl phthalate	117-84-0	26	0	1.8E-08	4.3E-08	4.7E-09	8.7E-08	1.9E-07
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	4	0	1.5E-10	4.7E-10	0	1.1E-09	2.1E-09
3,5-di-tert-Butyl-4-hydroxybenzaldehyde	1620-98-0	35	8.7E-11	3.2E-08	6.4E-08	2.0E-09	1.3E-07	3.2E-07
Fluoranthene	206-44-0	35	5.5E-09	4.0E-08	3.9E-08	2.4E-08	1.0E-07	1.9E-07
Fluorene	86-73-7	11	0	5.2E-10	1.2E-09	0	2.6E-09	6.2E-09
Hexadecane	544-76-3	28	0	3.8E-09	3.2E-09	4.0E-09	9.0E-09	1.5E-08
1-Hydroxypyrene	5315-79-7	1	0	2.0E-09	1.2E-08	0	0	7.2E-08
Lead		35	3.4E-07	1.8E-06	1.5E-06	1.3E-06	4.5E-06	8.1E-06
Manganese		35	3.2E-07	1.8E-06	1.0E-06	1.8E-06	2.9E-06	5.6E-06
2-(Methylthio)benzothiazole	615-22-5	5	0	2.7E-08	9.7E-08	0	1.5E-07	5.4E-07
Molybdenum		14	0	3.3E-09	4.5E-09	0	1.0E-08	1.6E-08
Naphthalene	91-20-3	1	0	9.4E-11	5.6E-10	0	0	3.3E-09
Naphthalene, 1-methyl-	90-12-0	31	0	2.4E-10	8.4E-10	4.0E-11	5.1E-10	5.0E-09
Naphthalene, 1,2-dimethyl-	573-98-8	12	0	5.7E-11	1.3E-10	0	2.8E-10	6.5E-10
Naphthalene, 1,6-dimethyl-	575-43-9	35	1.5E-10	3.7E-10	1.8E-10	3.3E-10	7.6E-10	1.1E-09
Naphthalene, 2-(bromomethyl)-	939-26-4	35	3.5E-10	9.8E-09	4.6E-09	9.6E-09	1.7E-08	2.2E-08
Naphthalene, 2,3-dimethyl-	581-40-8	35	7.3E-11	2.9E-09	2.9E-09	2.0E-09	8.6E-09	1.3E-08
Naphthalene, 2-methyl	91-57-6	19	0	2.2E-10	9.2E-10	3.9E-11	4.9E-10	5.4E-09
1-Octadecene	112-88-9	32	0	8.3E-09	7.3E-09	6.5E-09	2.3E-08	2.6E-08
17-Pentatriacontene	6971-40-0	9	0	7.1E-09	1.7E-08	0	3.9E-08	7.5E-08

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Phenanthrene	85-01-8	35	3.0E-09	1.8E-08	2.2E-08	9.9E-09	5.0E-08	1.1E-07
Phenanthrene, 1-methyl	832-69-9	35	4.0E-10	4.7E-09	4.5E-09	3.3E-09	1.2E-08	2.0E-08
Phenanthrene, 2-methyl-	2531-84-2	35	1.3E-10	6.0E-09	7.0E-09	3.6E-09	1.7E-08	3.3E-08
Phenanthrene, 3-methyl	832-71-3	35	7.7E-10	1.0E-08	1.1E-08	6.4E-09	2.7E-08	5.0E-08
N-Phenylbenzamide	93-98-1	22	0	3.9E-08	7.6E-08	6.0E-09	2.4E-07	2.8E-07
Phthalimide	85-41-6	16	0	7.1E-09	1.6E-08	0	3.6E-08	7.5E-08
Pyrene	129-00-0	35	1.6E-08	8.4E-08	5.5E-08	6.9E-08	1.8E-07	2.4E-07
Pyridine, 2-(4-methylphenyl)-	4467-06-5	2	0	1.8E-10	1.0E-09	0	6.1E-11	6.1E-09
Selenium		4	0	1.1E-08	3.3E-08	0	7.4E-08	1.6E-07
Strontium		35	1.4E-07	1.5E-06	2.9E-06	8.0E-07	4.5E-06	1.7E-05
Thallium		21	0	4.2E-10	7.2E-10	3.4E-10	1.3E-09	3.9E-09
Tin		30	0	1.7E-08	1.7E-08	1.2E-08	4.4E-08	6.5E-08
Triethylene glycol monobutyl ether	143-22-6	3	0	2.1E-09	8.4E-09	0	1.1E-08	4.6E-08
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	35	3.5E-09	6.1E-09	1.9E-09	5.6E-09	9.4E-09	1.2E-08
Vanadium		2	0	8.6E-09	3.6E-08	0	4.5E-08	1.5E-07
Zinc		35	8.2E-05	3.7E-04	2.0E-04	3.6E-04	6.6E-04	1.1E-03

[a] 35 field-specific $ADD_{ing\text{-}field}$ are included in the table. $ADD_{ing\text{-}field}$ was calculated from field-specific average concentrations ($C_{ing\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial gastrointestinal fluids extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

Table F-331. Field-Specific Average Ingestion Daily Dose[a] for Chronic Non-Cancer Hazard ($ADD_{ing\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related General Chemicals**[b]—Combined Gender **Athletes 40<50 Years**

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Acenaphthylene	208-96-8	35	6.2E-11	4.8E-10	4.5E-10	2.9E-10	1.4E-09	1.8E-09
Aluminum		35	1.1E-05	3.4E-05	1.7E-05	3.1E-05	6.1E-05	7.9E-05
Aniline	62-53-3	12	0	2.7E-09	6.1E-09	0	1.5E-08	2.7E-08
Anthracene	120-12-7	28	0	1.3E-09	2.2E-09	4.9E-10	4.7E-09	1.0E-08
Anthracene, 2-methyl-	613-12-7	35	7.3E-10	5.0E-09	4.4E-09	3.6E-09	1.2E-08	2.2E-08
Anthracene, 9,10-dimethyl	781-43-1	2	0	4.1E-11	2.3E-10	0	2.6E-11	1.3E-09
Anthracene, 9,10-diphenyl-	1499-10-1	2	0	3.1E-10	1.4E-09	0	8.9E-10	8.0E-09
Anthracene, 9-phenyl	602-55-1	30	0	4.7E-10	5.0E-10	2.9E-10	1.5E-09	2.1E-09

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Antimony		35	2.2E-09	3.6E-08	3.2E-08	3.1E-08	8.4E-08	1.5E-07
Barium		35	6.0E-07	2.3E-06	1.6E-06	2.3E-06	4.4E-06	8.7E-06
Benzene, n-butyl-	104-51-8	29	0	2.7E-10	6.9E-10	1.5E-10	4.1E-10	4.2E-09
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	20	0	7.3E-08	1.0E-07	2.7E-08	2.7E-07	3.6E-07
Benz[a]anthracene	56-55-3	35	2.9E-10	4.4E-09	4.8E-09	2.1E-09	1.4E-08	1.9E-08
Benzo[b]fluoranthene	205-99-2	35	1.2E-09	6.0E-09	4.5E-09	4.1E-09	1.5E-08	1.8E-08
7H-Benzo[c]fluorene	205-12-9	31	0	1.2E-09	1.9E-09	3.8E-10	4.7E-09	9.4E-09
Benzo[k]fluoranthene	207-08-9	35	1.6E-10	2.0E-09	1.8E-09	1.2E-09	5.7E-09	7.3E-09
Benzothiazole	95-16-9	35	1.7E-07	7.4E-07	5.1E-07	5.5E-07	1.5E-06	1.8E-06
Benzothiazole, 2-phenyl-	883-93-2	35	2.3E-08	8.0E-08	7.5E-08	5.8E-08	1.8E-07	4.3E-07
Benzothiazolone	934-34-9	35	1.2E-06	1.9E-06	3.7E-07	1.9E-06	2.4E-06	2.5E-06
Benzyl butyl phthalate	85-68-7	35	1.9E-09	3.8E-08	3.1E-08	3.4E-08	8.5E-08	1.5E-07
Beryllium		11	0	9.5E-10	1.5E-09	0	3.3E-09	5.3E-09
Butylated Hydroxytoluene	128-37-0	19	0	1.0E-09	1.9E-09	3.5E-10	5.1E-09	8.5E-09
Cadmium		34	0	2.6E-08	1.6E-08	2.3E-08	5.5E-08	6.0E-08
Chromium		35	1.3E-08	7.2E-08	7.0E-08	4.8E-08	1.6E-07	4.0E-07
Cobalt		35	3.0E-07	1.6E-06	1.1E-06	1.6E-06	3.1E-06	5.7E-06
Copper		35	1.3E-06	3.2E-06	1.7E-06	2.9E-06	5.3E-06	1.0E-05
Cyclohexyl isothiocyanate	1122-82-3	29	0	2.4E-07	1.7E-07	2.4E-07	5.6E-07	6.2E-07
Dibenz[a,h]anthracene	53-70-3	7	0	2.6E-10	6.5E-10	0	1.2E-09	3.2E-09
Dibenzothiophene	132-65-0	27	0	1.0E-09	1.5E-09	3.0E-10	4.1E-09	6.2E-09
Dibutyl phthalate	84-74-2	31	0	7.2E-08	5.5E-08	5.8E-08	1.8E-07	2.1E-07
Diethyl Phthalate	84-66-2	23	0	6.1E-09	5.3E-09	6.6E-09	1.4E-08	1.9E-08
Diisobutyl Phthalate	84-69-5	32	0	7.2E-09	1.9E-08	1.6E-09	1.9E-08	1.1E-07
Diisooctylphthalate	27554-26-3	33	0	1.5E-07	1.1E-07	1.1E-07	3.9E-07	4.0E-07
Di-n-octyl phthalate	117-84-0	26	0	1.5E-08	3.6E-08	4.0E-09	7.3E-08	1.6E-07
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	4	0	1.2E-10	4.0E-10	0	9.6E-10	1.7E-09
3,5-di-tert-Butyl-4-hydroxybenzaldehyde	1620-98-0	35	7.4E-11	2.7E-08	5.4E-08	1.7E-09	1.1E-07	2.7E-07
Fluoranthene	206-44-0	35	4.6E-09	3.4E-08	3.3E-08	2.0E-08	8.6E-08	1.6E-07
Fluorene	86-73-7	11	0	4.4E-10	1.1E-09	0	2.2E-09	5.3E-09
Hexadecane	544-76-3	28	0	3.2E-09	2.7E-09	3.4E-09	7.6E-09	1.2E-08
1-Hydroxypyrene	5315-79-7	1	0	1.7E-09	1.0E-08	0	0	6.1E-08
Lead		35	2.9E-07	1.5E-06	1.3E-06	1.1E-06	3.8E-06	6.8E-06
Manganese		35	2.7E-07	1.5E-06	8.8E-07	1.6E-06	2.5E-06	4.8E-06

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
2-(Methylthio)benzothiazole	615-22-5	5	0	2.3E-08	8.2E-08	0	1.3E-07	4.6E-07
Molybdenum		14	0	2.8E-09	3.8E-09	0	8.5E-09	1.4E-08
Naphthalene	91-20-3	1	0	8.0E-11	4.7E-10	0	0	2.8E-09
Naphthalene, 1-methyl-	90-12-0	31	0	2.1E-10	7.1E-10	3.4E-11	4.3E-10	4.2E-09
Naphthalene, 1,2-dimethyl-	573-98-8	12	0	4.8E-11	1.1E-10	0	2.4E-10	5.5E-10
Naphthalene, 1,6-dimethyl-	575-43-9	35	1.3E-10	3.2E-10	1.5E-10	2.8E-10	6.4E-10	8.9E-10
Naphthalene, 2-(bromomethyl)-	939-26-4	35	2.9E-10	8.3E-09	3.9E-09	8.1E-09	1.5E-08	1.9E-08
Naphthalene, 2,3-dimethyl-	581-40-8	35	6.2E-11	2.4E-09	2.4E-09	1.7E-09	7.3E-09	1.1E-08
Naphthalene, 2-methyl	91-57-6	19	0	1.9E-10	7.8E-10	3.3E-11	4.2E-10	4.6E-09
1-Octadecene	112-88-9	32	0	7.1E-09	6.2E-09	5.5E-09	1.9E-08	2.2E-08
17-Pentatriacontene	6971-40-0	9	0	6.0E-09	1.4E-08	0	3.3E-08	6.4E-08
Phenanthrene	85-01-8	35	2.6E-09	1.5E-08	1.8E-08	8.4E-09	4.3E-08	9.5E-08
Phenanthrene, 1-methyl	832-69-9	35	3.4E-10	4.0E-09	3.8E-09	2.8E-09	9.9E-09	1.7E-08
Phenanthrene, 2-methyl-	2531-84-2	35	1.1E-10	5.1E-09	5.9E-09	3.0E-09	1.4E-08	2.8E-08
Phenanthrene, 3-methyl	832-71-3	35	6.5E-10	8.5E-09	9.1E-09	5.4E-09	2.3E-08	4.3E-08
N-Phenylbenzamide	93-98-1	22	0	3.3E-08	6.4E-08	5.1E-09	2.0E-07	2.3E-07
Phthalimide	85-41-6	16	0	6.0E-09	1.4E-08	0	3.0E-08	6.3E-08
Pyrene	129-00-0	35	1.3E-08	7.2E-08	4.6E-08	5.9E-08	1.5E-07	2.1E-07
Pyridine, 2-(4-methylphenyl)-	4467-06-5	2	0	1.5E-10	8.8E-10	0	5.2E-11	5.2E-09
Selenium		4	0	9.0E-09	2.8E-08	0	6.3E-08	1.3E-07
Strontium		35	1.2E-07	1.3E-06	2.5E-06	6.8E-07	3.8E-06	1.4E-05
Thallium		21	0	3.6E-10	6.1E-10	2.9E-10	1.1E-09	3.3E-09
Tin		30	0	1.4E-08	1.4E-08	1.0E-08	3.8E-08	5.5E-08
Triethylene glycol monobutyl ether	143-22-6	3	0	1.7E-09	7.1E-09	0	9.1E-09	3.9E-08
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	35	3.0E-09	5.2E-09	1.6E-09	4.8E-09	8.0E-09	9.9E-09
Vanadium		2	0	7.3E-09	3.0E-08	0	3.8E-08	1.3E-07
Zinc		35	7.0E-05	3.2E-04	1.7E-04	3.0E-04	5.6E-04	9.0E-04

[a] 35 field-specific $ADD_{ing\text{-}field}$ are included in the table. $ADD_{ing\text{-}field}$ was calculated from field-specific average concentrations ($C_{ing\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial gastrointestinal fluids extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

Table F-332. Field-Specific Average Ingestion Daily Dose[a] for Chronic Non-Cancer Hazard ($ADD_{ing\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related General Chemicals**[b]—Combined Gender **Athletes 50<70 Years**

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Acenaphthylene	208-96-8	35	6.3E-11	4.9E-10	4.6E-10	3.0E-10	1.4E-09	1.8E-09
Aluminum		35	1.1E-05	3.4E-05	1.8E-05	3.1E-05	6.3E-05	8.1E-05
Aniline	62-53-3	12	0	2.7E-09	6.2E-09	0	1.5E-08	2.7E-08
Anthracene	120-12-7	28	0	1.3E-09	2.3E-09	5.0E-10	4.8E-09	1.1E-08
Anthracene, 2-methyl-	613-12-7	35	7.5E-10	5.1E-09	4.5E-09	3.7E-09	1.2E-08	2.3E-08
Anthracene, 9,10-dimethyl	781-43-1	2	0	4.1E-11	2.3E-10	0	2.7E-11	1.4E-09
Anthracene, 9,10-diphenyl-	1499-10-1	2	0	3.2E-10	1.5E-09	0	9.1E-10	8.2E-09
Anthracene, 9-phenyl	602-55-1	30	0	4.8E-10	5.1E-10	2.9E-10	1.5E-09	2.2E-09
Antimony		35	2.3E-09	3.7E-08	3.3E-08	3.1E-08	8.6E-08	1.6E-07
Barium		35	6.1E-07	2.4E-06	1.6E-06	2.3E-06	4.5E-06	8.9E-06
Benzene, n-butyl-	104-51-8	29	0	2.7E-10	7.0E-10	1.5E-10	4.2E-10	4.2E-09
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	20	0	7.5E-08	1.0E-07	2.8E-08	2.7E-07	3.6E-07
Benz[a]anthracene	56-55-3	35	2.9E-10	4.5E-09	4.9E-09	2.1E-09	1.4E-08	2.0E-08
Benzo[b]fluoranthene	205-99-2	35	1.3E-09	6.2E-09	4.6E-09	4.1E-09	1.5E-08	1.8E-08
7H-Benzo[c]fluorene	205-12-9	31	0	1.2E-09	1.9E-09	3.9E-10	4.8E-09	9.6E-09
Benzo[k]fluoranthene	207-08-9	35	1.7E-10	2.0E-09	1.9E-09	1.3E-09	5.8E-09	7.5E-09
Benzothiazole	95-16-9	35	1.7E-07	7.6E-07	5.2E-07	5.6E-07	1.6E-06	1.8E-06
Benzothiazole, 2-phenyl-	883-93-2	35	2.3E-08	8.1E-08	7.6E-08	5.9E-08	1.9E-07	4.4E-07
Benzothiazolone	934-34-9	35	1.2E-06	1.9E-06	3.8E-07	1.9E-06	2.5E-06	2.6E-06
Benzyl butyl phthalate	85-68-7	35	2.0E-09	3.9E-08	3.2E-08	3.4E-08	8.7E-08	1.5E-07
Beryllium		11	0	9.7E-10	1.6E-09	0	3.4E-09	5.4E-09
Butylated Hydroxytoluene	128-37-0	19	0	1.0E-09	1.9E-09	3.6E-10	5.2E-09	8.7E-09
Cadmium		34	0	2.6E-08	1.6E-08	2.4E-08	5.6E-08	6.1E-08
Chromium		35	1.4E-08	7.3E-08	7.2E-08	4.9E-08	1.6E-07	4.1E-07
Cobalt		35	3.1E-07	1.7E-06	1.1E-06	1.6E-06	3.2E-06	5.8E-06
Copper		35	1.3E-06	3.3E-06	1.7E-06	3.0E-06	5.4E-06	1.0E-05
Cyclohexyl isothiocyanate	1122-82-3	29	0	2.4E-07	1.8E-07	2.4E-07	5.7E-07	6.3E-07
Dibenz[a,h]anthracene	53-70-3	7	0	2.7E-10	6.6E-10	0	1.2E-09	3.3E-09
Dibenzothiophene	132-65-0	27	0	1.0E-09	1.6E-09	3.0E-10	4.2E-09	6.3E-09
Dibutyl phthalate	84-74-2	31	0	7.4E-08	5.6E-08	5.9E-08	1.8E-07	2.1E-07
Diethyl Phthalate	84-66-2	23	0	6.2E-09	5.4E-09	6.7E-09	1.5E-08	1.9E-08
Diisobutyl Phthalate	84-69-5	32	0	7.4E-09	1.9E-08	1.7E-09	2.0E-08	1.1E-07

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Diisooctylphthalate	27554-26-3	33	0	1.6E-07	1.2E-07	1.2E-07	3.9E-07	4.1E-07
Di-n-octyl phthalate	117-84-0	26	0	1.5E-08	3.7E-08	4.1E-09	7.5E-08	1.6E-07
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	4	0	1.3E-10	4.1E-10	0	9.8E-10	1.8E-09
3,5-di-tert-Butyl-4-hydroxybenzaldehyde	1620-98-0	35	7.6E-11	2.7E-08	5.5E-08	1.7E-09	1.1E-07	2.7E-07
Fluoranthene	206-44-0	35	4.7E-09	3.5E-08	3.4E-08	2.1E-08	8.8E-08	1.6E-07
Fluorene	86-73-7	11	0	4.5E-10	1.1E-09	0	2.2E-09	5.4E-09
Hexadecane	544-76-3	28	0	3.3E-09	2.7E-09	3.5E-09	7.7E-09	1.3E-08
1-Hydroxypyrene	5315-79-7	1	0	1.8E-09	1.0E-08	0	0	6.2E-08
Lead		35	3.0E-07	1.5E-06	1.3E-06	1.2E-06	3.9E-06	7.0E-06
Manganese		35	2.8E-07	1.5E-06	9.0E-07	1.6E-06	2.5E-06	4.9E-06
2-(Methylthio)benzothiazole	615-22-5	5	0	2.3E-08	8.4E-08	0	1.3E-07	4.7E-07
Molybdenum		14	0	2.8E-09	3.9E-09	0	8.7E-09	1.4E-08
Naphthalene	91-20-3	1	0	8.1E-11	4.8E-10	0	0	2.8E-09
Naphthalene, 1-methyl-	90-12-0	31	0	2.1E-10	7.3E-10	3.5E-11	4.4E-10	4.3E-09
Naphthalene, 1,2-dimethyl-	573-98-8	12	0	4.9E-11	1.1E-10	0	2.5E-10	5.6E-10
Naphthalene, 1,6-dimethyl-	575-43-9	35	1.3E-10	3.2E-10	1.5E-10	2.8E-10	6.6E-10	9.1E-10
Naphthalene, 2-(bromomethyl)-	939-26-4	35	3.0E-10	8.5E-09	4.0E-09	8.3E-09	1.5E-08	1.9E-08
Naphthalene, 2,3-dimethyl-	581-40-8	35	6.3E-11	2.5E-09	2.5E-09	1.7E-09	7.5E-09	1.1E-08
Naphthalene, 2-methyl	91-57-6	19	0	1.9E-10	7.9E-10	3.4E-11	4.3E-10	4.7E-09
1-Octadecene	112-88-9	32	0	7.2E-09	6.3E-09	5.6E-09	1.9E-08	2.2E-08
17-Pentatriacontene	6971-40-0	9	0	6.1E-09	1.4E-08	0	3.4E-08	6.5E-08
Phenanthrene	85-01-8	35	2.6E-09	1.5E-08	1.9E-08	8.5E-09	4.3E-08	9.7E-08
Phenanthrene, 1-methyl	832-69-9	35	3.5E-10	4.0E-09	3.9E-09	2.9E-09	1.0E-08	1.8E-08
Phenanthrene, 2-methyl-	2531-84-2	35	1.1E-10	5.2E-09	6.0E-09	3.1E-09	1.5E-08	2.9E-08
Phenanthrene, 3-methyl	832-71-3	35	6.6E-10	8.6E-09	9.3E-09	5.5E-09	2.4E-08	4.4E-08
N-Phenylbenzamide	93-98-1	22	0	3.4E-08	6.6E-08	5.2E-09	2.1E-07	2.4E-07
Phthalimide	85-41-6	16	0	6.1E-09	1.4E-08	0	3.1E-08	6.5E-08
Pyrene	129-00-0	35	1.4E-08	7.3E-08	4.7E-08	6.0E-08	1.5E-07	2.1E-07
Pyridine, 2-(4-methylphenyl)-	4467-06-5	2	0	1.6E-10	9.0E-10	0	5.3E-11	5.3E-09
Selenium		4	0	9.2E-09	2.8E-08	0	6.4E-08	1.4E-07
Strontium		35	1.3E-07	1.3E-06	2.5E-06	6.9E-07	3.9E-06	1.5E-05
Thallium		21	0	3.7E-10	6.2E-10	2.9E-10	1.1E-09	3.4E-09
Tin		30	0	1.4E-08	1.4E-08	1.1E-08	3.8E-08	5.7E-08

Chemical	CASRN[c]	Detection	$ADD_{ing-field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Triethylene glycol monobutyl ether	143-22-6	3	0	1.8E-09	7.3E-09	0	9.3E-09	4.0E-08
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	35	3.0E-09	5.3E-09	1.7E-09	4.9E-09	8.1E-09	1.0E-08
Vanadium		2	0	7.5E-09	3.1E-08	0	3.9E-08	1.3E-07
Zinc		35	7.1E-05	3.2E-04	1.7E-04	3.1E-04	5.7E-04	9.2E-04

[a] 35 field-specific $ADD_{ing-field}$ are included in the table. $ADD_{ing-field}$ was calculated from field-specific average concentrations ($C_{ing-crumb\ rubber-field}$) of a chemical detected in artificial gastrointestinal fluids extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

Table F-333. Field-Specific Average Ingestion Daily Dose[a] for Chronic Non-Cancer Hazard ($ADD_{ing-field}$, milligrams per kilogram BW per day) of **Field-Related General Chemicals**[b]—Combined Gender **Coaches 16<30 Years**

Chemical	CASRN[c]	Detection	$ADD_{ing-field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Acenaphthylene	208-96-8	35	2.8E-11	2.1E-10	2.0E-10	1.3E-10	6.2E-10	7.9E-10
Aluminum		35	4.7E-06	1.5E-05	7.7E-06	1.4E-05	2.7E-05	3.5E-05
Aniline	62-53-3	12	0	1.2E-09	2.7E-09	0	6.6E-09	1.2E-08
Anthracene	120-12-7	28	0	5.6E-10	9.8E-10	2.2E-10	2.1E-09	4.6E-09
Anthracene, 2-methyl-	613-12-7	35	3.3E-10	2.2E-09	2.0E-09	1.6E-09	5.1E-09	9.9E-09
Anthracene, 9,10-dimethyl	781-43-1	2	0	1.8E-11	1.0E-10	0	1.2E-11	5.9E-10
Anthracene, 9,10-diphenyl-	1499-10-1	2	0	1.4E-10	6.4E-10	0	4.0E-10	3.6E-09
Anthracene, 9-phenyl	602-55-1	30	0	2.1E-10	2.2E-10	1.3E-10	6.6E-10	9.5E-10
Antimony		35	9.9E-10	1.6E-08	1.4E-08	1.4E-08	3.7E-08	6.8E-08
Barium		35	2.7E-07	1.0E-06	7.0E-07	1.0E-06	2.0E-06	3.9E-06
Benzene, n-butyl-	104-51-8	29	0	1.2E-10	3.1E-10	6.7E-11	1.8E-10	1.9E-09
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	20	0	3.3E-08	4.5E-08	1.2E-08	1.2E-07	1.6E-07
Benz[a]anthracene	56-55-3	35	1.3E-10	2.0E-09	2.1E-09	9.4E-10	6.1E-09	8.5E-09
Benzo[b]fluoranthene	205-99-2	35	5.5E-10	2.7E-09	2.0E-09	1.8E-09	6.5E-09	7.9E-09
7H-Benzo[c]fluorene	205-12-9	31	0	5.2E-10	8.5E-10	1.7E-10	2.1E-09	4.2E-09
Benzo[k]fluoranthene	207-08-9	35	7.3E-11	8.7E-10	8.2E-10	5.5E-10	2.6E-09	3.3E-09
Benzothiazole	95-16-9	35	7.6E-08	3.3E-07	2.3E-07	2.5E-07	6.9E-07	7.9E-07
Benzothiazole, 2-phenyl-	883-93-2	35	1.0E-08	3.6E-08	3.3E-08	2.6E-08	8.2E-08	1.9E-07
Benzothiazolone	934-34-9	35	5.3E-07	8.5E-07	1.6E-07	8.3E-07	1.1E-06	1.1E-06

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Benzyl butyl phthalate	85-68-7	35	8.6E-10	1.7E-08	1.4E-08	1.5E-08	3.8E-08	6.7E-08
Beryllium		11	0	4.3E-10	6.9E-10	0	1.5E-09	2.4E-09
Butylated Hydroxytoluene	128-37-0	19	0	4.5E-10	8.4E-10	1.6E-10	2.3E-09	3.8E-09
Cadmium		34	0	1.2E-08	7.1E-09	1.0E-08	2.4E-08	2.7E-08
Chromium		35	5.9E-09	3.2E-08	3.1E-08	2.1E-08	7.0E-08	1.8E-07
Cobalt		35	1.4E-07	7.3E-07	5.0E-07	7.0E-07	1.4E-06	2.5E-06
Copper		35	5.7E-07	1.4E-06	7.4E-07	1.3E-06	2.4E-06	4.5E-06
Cyclohexyl isothiocyanate	1122-82-3	29	0	1.1E-07	7.8E-08	1.0E-07	2.5E-07	2.8E-07
Dibenz[a,h]anthracene	53-70-3	7	0	1.2E-10	2.9E-10	0	5.2E-10	1.4E-09
Dibenzothiophene	132-65-0	27	0	4.5E-10	6.8E-10	1.3E-10	1.8E-09	2.8E-09
Dibutyl phthalate	84-74-2	31	0	3.2E-08	2.4E-08	2.6E-08	7.8E-08	9.2E-08
Diethyl Phthalate	84-66-2	23	0	2.7E-09	2.4E-09	2.9E-09	6.4E-09	8.4E-09
Diisobutyl Phthalate	84-69-5	32	0	3.2E-09	8.4E-09	7.3E-10	8.6E-09	4.9E-08
Diisooctylphthalate	27554-26-3	33	0	6.8E-08	5.1E-08	5.0E-08	1.7E-07	1.8E-07
Di-n-octyl phthalate	117-84-0	26	0	6.7E-09	1.6E-08	1.8E-09	3.3E-08	7.1E-08
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	4	0	5.6E-11	1.8E-10	0	4.3E-10	7.8E-10
3,5-di-tert-Butyl-4-hydroxybenzaldehyde	1620-98-0	35	3.3E-11	1.2E-08	2.4E-08	7.4E-10	4.9E-08	1.2E-07
Fluoranthene	206-44-0	35	2.1E-09	1.5E-08	1.5E-08	9.0E-09	3.8E-08	7.2E-08
Fluorene	86-73-7	11	0	2.0E-10	4.7E-10	0	9.8E-10	2.3E-09
Hexadecane	544-76-3	28	0	1.4E-09	1.2E-09	1.5E-09	3.4E-09	5.5E-09
1-Hydroxypyrene	5315-79-7	1	0	7.7E-10	4.6E-09	0	0	2.7E-08
Lead		35	1.3E-07	6.7E-07	5.8E-07	5.1E-07	1.7E-06	3.0E-06
Manganese		35	1.2E-07	6.7E-07	3.9E-07	6.9E-07	1.1E-06	2.1E-06
2-(Methylthio)benzothiazole	615-22-5	5	0	1.0E-08	3.7E-08	0	5.7E-08	2.0E-07
Molybdenum		14	0	1.2E-09	1.7E-09	0	3.8E-09	6.1E-09
Naphthalene	91-20-3	1	0	3.6E-11	2.1E-10	0	0	1.2E-09
Naphthalene, 1-methyl-	90-12-0	31	0	9.2E-11	3.2E-10	1.5E-11	1.9E-10	1.9E-09
Naphthalene, 1,2-dimethyl-	573-98-8	12	0	2.1E-11	4.8E-11	0	1.1E-10	2.5E-10
Naphthalene, 1,6-dimethyl-	575-43-9	35	5.6E-11	1.4E-10	6.7E-11	1.2E-10	2.9E-10	4.0E-10
Naphthalene, 2-(bromomethyl)-	939-26-4	35	1.3E-10	3.7E-09	1.8E-09	3.6E-09	6.5E-09	8.4E-09
Naphthalene, 2,3-dimethyl-	581-40-8	35	2.8E-11	1.1E-09	1.1E-09	7.5E-10	3.3E-09	4.7E-09
Naphthalene, 2-methyl	91-57-6	19	0	8.3E-11	3.5E-10	1.5E-11	1.9E-10	2.1E-09
1-Octadecene	112-88-9	32	0	3.2E-09	2.8E-09	2.5E-09	8.5E-09	9.8E-09
17-Pentatriacontene	6971-40-0	9	0	2.7E-09	6.3E-09	0	1.5E-08	2.8E-08

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Phenanthrene	85-01-8	35	1.1E-09	6.7E-09	8.2E-09	3.7E-09	1.9E-08	4.2E-08
Phenanthrene, 1-methyl	832-69-9	35	1.5E-10	1.8E-09	1.7E-09	1.3E-09	4.4E-09	7.7E-09
Phenanthrene, 2-methyl-	2531-84-2	35	4.8E-11	2.3E-09	2.6E-09	1.4E-09	6.5E-09	1.3E-08
Phenanthrene, 3-methyl	832-71-3	35	2.9E-10	3.8E-09	4.1E-09	2.4E-09	1.0E-08	1.9E-08
N-Phenylbenzamide	93-98-1	22	0	1.5E-08	2.9E-08	2.3E-09	9.0E-08	1.0E-07
Phthalimide	85-41-6	16	0	2.7E-09	6.1E-09	0	1.3E-08	2.8E-08
Pyrene	129-00-0	35	5.9E-09	3.2E-08	2.1E-08	2.6E-08	6.7E-08	9.2E-08
Pyridine, 2-(4-methylphenyl)-	4467-06-5	2	0	6.8E-11	3.9E-10	0	2.3E-11	2.3E-09
Selenium		4	0	4.0E-09	1.2E-08	0	2.8E-08	6.0E-08
Strontium		35	5.5E-08	5.7E-07	1.1E-06	3.0E-07	1.7E-06	6.5E-06
Thallium		21	0	1.6E-10	2.7E-10	1.3E-10	5.0E-10	1.5E-09
Tin		30	0	6.3E-09	6.3E-09	4.7E-09	1.7E-08	2.5E-08
Triethylene glycol monobutyl ether	143-22-6	3	0	7.8E-10	3.2E-09	0	4.1E-09	1.8E-08
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	35	1.3E-09	2.3E-09	7.3E-10	2.1E-09	3.6E-09	4.4E-09
Vanadium		2	0	3.3E-09	1.3E-08	0	1.7E-08	5.8E-08
Zinc		35	3.1E-05	1.4E-04	7.5E-05	1.4E-04	2.5E-04	4.0E-04

[a] 35 field-specific $ADD_{ing\text{-}field}$ are included in the table. $ADD_{ing\text{-}field}$ was calculated from field-specific average concentrations ($C_{ing\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial gastrointestinal fluids extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

Table F-334. Field-Specific Average Ingestion Daily Dose[a] for Chronic Non-Cancer Hazard ($ADD_{ing\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related General Chemicals**[b]—Combined Gender **Coaches 30<40 Years**

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Acenaphthylene	208-96-8	35	2.6E-11	2.0E-10	1.9E-10	1.2E-10	5.9E-10	7.4E-10
Aluminum		35	4.5E-06	1.4E-05	7.2E-06	1.3E-05	2.6E-05	3.3E-05
Aniline	62-53-3	12	0	1.1E-09	2.6E-09	0	6.2E-09	1.1E-08
Anthracene	120-12-7	28	0	5.3E-10	9.2E-10	2.0E-10	2.0E-09	4.3E-09
Anthracene, 2-methyl-	613-12-7	35	3.1E-10	2.1E-09	1.8E-09	1.5E-09	4.8E-09	9.3E-09
Anthracene, 9,10-dimethyl	781-43-1	2	0	1.7E-11	9.4E-11	0	1.1E-11	5.6E-10
Anthracene, 9,10-diphenyl-	1499-10-1	2	0	1.3E-10	6.0E-10	0	3.7E-10	3.4E-09
Anthracene, 9-phenyl	602-55-1	30	0	2.0E-10	2.1E-10	1.2E-10	6.2E-10	8.9E-10

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Antimony		35	9.3E-10	1.5E-08	1.3E-08	1.3E-08	3.5E-08	6.4E-08
Barium		35	2.5E-07	9.7E-07	6.6E-07	9.5E-07	1.8E-06	3.6E-06
Benzene, n-butyl-	104-51-8	29	0	1.1E-10	2.9E-10	6.3E-11	1.7E-10	1.7E-09
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	20	0	3.1E-08	4.2E-08	1.1E-08	1.1E-07	1.5E-07
Benz[a]anthracene	56-55-3	35	1.2E-10	1.8E-09	2.0E-09	8.8E-10	5.7E-09	8.0E-09
Benzo[b]fluoranthene	205-99-2	35	5.2E-10	2.5E-09	1.9E-09	1.7E-09	6.1E-09	7.4E-09
7H-Benzo[c]fluorene	205-12-9	31	0	4.9E-10	8.0E-10	1.6E-10	2.0E-09	4.0E-09
Benzo[k]fluoranthene	207-08-9	35	6.9E-11	8.2E-10	7.7E-10	5.2E-10	2.4E-09	3.1E-09
Benzothiazole	95-16-9	35	7.1E-08	3.1E-07	2.1E-07	2.3E-07	6.4E-07	7.4E-07
Benzothiazole, 2-phenyl-	883-93-2	35	9.5E-09	3.3E-08	3.1E-08	2.4E-08	7.7E-08	1.8E-07
Benzothiazolone	934-34-9	35	5.0E-07	7.9E-07	1.5E-07	7.8E-07	1.0E-06	1.0E-06
Benzyl butyl phthalate	85-68-7	35	8.1E-10	1.6E-08	1.3E-08	1.4E-08	3.6E-08	6.3E-08
Beryllium		11	0	4.0E-10	6.5E-10	0	1.4E-09	2.2E-09
Butylated Hydroxytoluene	128-37-0	19	0	4.2E-10	7.9E-10	1.5E-10	2.1E-09	3.6E-09
Cadmium		34	0	1.1E-08	6.7E-09	9.7E-09	2.3E-08	2.5E-08
Chromium		35	5.6E-09	3.0E-08	2.9E-08	2.0E-08	6.6E-08	1.7E-07
Cobalt		35	1.3E-07	6.9E-07	4.7E-07	6.5E-07	1.3E-06	2.4E-06
Copper		35	5.3E-07	1.3E-06	7.0E-07	1.2E-06	2.2E-06	4.3E-06
Cyclohexyl isothiocyanate	1122-82-3	29	0	9.9E-08	7.3E-08	9.9E-08	2.3E-07	2.6E-07
Dibenz[a,h]anthracene	53-70-3	7	0	1.1E-10	2.7E-10	0	4.9E-10	1.4E-09
Dibenzothiophene	132-65-0	27	0	4.3E-10	6.4E-10	1.2E-10	1.7E-09	2.6E-09
Dibutyl phthalate	84-74-2	31	0	3.0E-08	2.3E-08	2.4E-08	7.4E-08	8.7E-08
Diethyl Phthalate	84-66-2	23	0	2.5E-09	2.2E-09	2.8E-09	6.0E-09	7.9E-09
Diisobutyl Phthalate	84-69-5	32	0	3.0E-09	7.9E-09	6.9E-10	8.1E-09	4.6E-08
Diisooctylphthalate	27554-26-3	33	0	6.4E-08	4.8E-08	4.7E-08	1.6E-07	1.7E-07
Di-n-octyl phthalate	117-84-0	26	0	6.3E-09	1.5E-08	1.7E-09	3.1E-08	6.7E-08
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	4	0	5.2E-11	1.7E-10	0	4.0E-10	7.3E-10
3,5-di-tert-Butyl-4-hydroxybenzaldehyde	1620-98-0	35	3.1E-11	1.1E-08	2.3E-08	6.9E-10	4.6E-08	1.1E-07
Fluoranthene	206-44-0	35	1.9E-09	1.4E-08	1.4E-08	8.5E-09	3.6E-08	6.8E-08
Fluorene	86-73-7	11	0	1.9E-10	4.4E-10	0	9.2E-10	2.2E-09
Hexadecane	544-76-3	28	0	1.3E-09	1.1E-09	1.4E-09	3.2E-09	5.2E-09
1-Hydroxypyrene	5315-79-7	1	0	7.3E-10	4.3E-09	0	0	2.5E-08
Lead		35	1.2E-07	6.3E-07	5.5E-07	4.8E-07	1.6E-06	2.9E-06
Manganese		35	1.1E-07	6.3E-07	3.7E-07	6.5E-07	1.0E-06	2.0E-06

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
2-(Methylthio)benzothiazole	615-22-5	5	0	9.5E-09	3.4E-08	0	5.3E-08	1.9E-07
Molybdenum		14	0	1.2E-09	1.6E-09	0	3.6E-09	5.7E-09
Naphthalene	91-20-3	1	0	3.3E-11	2.0E-10	0	0	1.2E-09
Naphthalene, 1-methyl-	90-12-0	31	0	8.6E-11	3.0E-10	1.4E-11	1.8E-10	1.8E-09
Naphthalene, 1,2-dimethyl-	573-98-8	12	0	2.0E-11	4.5E-11	0	1.0E-10	2.3E-10
Naphthalene, 1,6-dimethyl-	575-43-9	35	5.3E-11	1.3E-10	6.3E-11	1.2E-10	2.7E-10	3.7E-10
Naphthalene, 2-(bromomethyl)-	939-26-4	35	1.2E-10	3.5E-09	1.6E-09	3.4E-09	6.1E-09	7.9E-09
Naphthalene, 2,3-dimethyl-	581-40-8	35	2.6E-11	1.0E-09	1.0E-09	7.1E-10	3.1E-09	4.5E-09
Naphthalene, 2-methyl	91-57-6	19	0	7.8E-11	3.3E-10	1.4E-11	1.7E-10	1.9E-09
1-Octadecene	112-88-9	32	0	3.0E-09	2.6E-09	2.3E-09	8.0E-09	9.2E-09
17-Pentatriacontene	6971-40-0	9	0	2.5E-09	5.9E-09	0	1.4E-08	2.7E-08
Phenanthrene	85-01-8	35	1.1E-09	6.3E-09	7.7E-09	3.5E-09	1.8E-08	4.0E-08
Phenanthrene, 1-methyl	832-69-9	35	1.4E-10	1.7E-09	1.6E-09	1.2E-09	4.1E-09	7.2E-09
Phenanthrene, 2-methyl-	2531-84-2	35	4.5E-11	2.1E-09	2.5E-09	1.3E-09	6.1E-09	1.2E-08
Phenanthrene, 3-methyl	832-71-3	35	2.7E-10	3.5E-09	3.8E-09	2.3E-09	9.7E-09	1.8E-08
N-Phenylbenzamide	93-98-1	22	0	1.4E-08	2.7E-08	2.1E-09	8.5E-08	9.8E-08
Phthalimide	85-41-6	16	0	2.5E-09	5.8E-09	0	1.3E-08	2.7E-08
Pyrene	129-00-0	35	5.6E-09	3.0E-08	1.9E-08	2.5E-08	6.3E-08	8.6E-08
Pyridine, 2-(4-methylphenyl)-	4467-06-5	2	0	6.4E-11	3.7E-10	0	2.2E-11	2.2E-09
Selenium		4	0	3.8E-09	1.2E-08	0	2.6E-08	5.6E-08
Strontium		35	5.1E-08	5.4E-07	1.0E-06	2.9E-07	1.6E-06	6.1E-06
Thallium		21	0	1.5E-10	2.6E-10	1.2E-10	4.7E-10	1.4E-09
Tin		30	0	5.9E-09	5.9E-09	4.4E-09	1.6E-08	2.3E-08
Triethylene glycol monobutyl ether	143-22-6	3	0	7.3E-10	3.0E-09	0	3.8E-09	1.6E-08
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	35	1.2E-09	2.2E-09	6.9E-10	2.0E-09	3.3E-09	4.1E-09
Vanadium		2	0	3.1E-09	1.3E-08	0	1.6E-08	5.4E-08
Zinc		35	2.9E-05	1.3E-04	7.0E-05	1.3E-04	2.4E-04	3.8E-04

[a] 35 field-specific $ADD_{ing\text{-}field}$ are included in the table. $ADD_{ing\text{-}field}$ was calculated from field-specific average concentrations ($C_{ing\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial gastrointestinal fluids extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

Table F-335. Field-Specific Average Ingestion Daily Dose[a] for Chronic Non-Cancer Hazard ($ADD_{ing\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related General Chemicals**[b]—Combined Gender **Coaches 40<50 Years**

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Acenaphthylene	208-96-8	35	2.5E-11	2.0E-10	1.8E-10	1.2E-10	5.7E-10	7.3E-10
Aluminum		35	4.4E-06	1.4E-05	7.0E-06	1.3E-05	2.5E-05	3.2E-05
Aniline	62-53-3	12	0	1.1E-09	2.5E-09	0	6.1E-09	1.1E-08
Anthracene	120-12-7	28	0	5.2E-10	9.0E-10	2.0E-10	1.9E-09	4.2E-09
Anthracene, 2-methyl-	613-12-7	35	3.0E-10	2.1E-09	1.8E-09	1.5E-09	4.7E-09	9.1E-09
Anthracene, 9,10-dimethyl	781-43-1	2	0	1.7E-11	9.2E-11	0	1.1E-11	5.5E-10
Anthracene, 9,10-diphenyl-	1499-10-1	2	0	1.3E-10	5.9E-10	0	3.6E-10	3.3E-09
Anthracene, 9-phenyl	602-55-1	30	0	1.9E-10	2.1E-10	1.2E-10	6.1E-10	8.7E-10
Antimony		35	9.1E-10	1.5E-08	1.3E-08	1.3E-08	3.4E-08	6.2E-08
Barium		35	2.5E-07	9.5E-07	6.5E-07	9.3E-07	1.8E-06	3.6E-06
Benzene, n-butyl-	104-51-8	29	0	1.1E-10	2.8E-10	6.2E-11	1.7E-10	1.7E-09
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	20	0	3.0E-08	4.1E-08	1.1E-08	1.1E-07	1.5E-07
Benz[a]anthracene	56-55-3	35	1.2E-10	1.8E-09	2.0E-09	8.6E-10	5.6E-09	7.8E-09
Benzo[b]fluoranthene	205-99-2	35	5.0E-10	2.5E-09	1.8E-09	1.7E-09	6.0E-09	7.3E-09
7H-Benzo[c]fluorene	205-12-9	31	0	4.8E-10	7.8E-10	1.6E-10	1.9E-09	3.9E-09
Benzo[k]fluoranthene	207-08-9	35	6.7E-11	8.0E-10	7.6E-10	5.1E-10	2.4E-09	3.0E-09
Benzothiazole	95-16-9	35	7.0E-08	3.0E-07	2.1E-07	2.3E-07	6.3E-07	7.2E-07
Benzothiazole, 2-phenyl-	883-93-2	35	9.3E-09	3.3E-08	3.1E-08	2.4E-08	7.5E-08	1.8E-07
Benzothiazolone	934-34-9	35	4.9E-07	7.8E-07	1.5E-07	7.6E-07	1.0E-06	1.0E-06
Benzyl butyl phthalate	85-68-7	35	7.9E-10	1.6E-08	1.3E-08	1.4E-08	3.5E-08	6.2E-08
Beryllium		11	0	3.9E-10	6.3E-10	0	1.4E-09	2.2E-09
Butylated Hydroxytoluene	128-37-0	19	0	4.2E-10	7.8E-10	1.4E-10	2.1E-09	3.5E-09
Cadmium		34	0	1.1E-08	6.5E-09	9.5E-09	2.2E-08	2.5E-08
Chromium		35	5.5E-09	3.0E-08	2.9E-08	1.9E-08	6.4E-08	1.6E-07
Cobalt		35	1.2E-07	6.7E-07	4.6E-07	6.4E-07	1.3E-06	2.3E-06
Copper		35	5.2E-07	1.3E-06	6.8E-07	1.2E-06	2.2E-06	4.2E-06
Cyclohexyl isothiocyanate	1122-82-3	29	0	9.7E-08	7.1E-08	9.6E-08	2.3E-07	2.5E-07
Dibenz[a,h]anthracene	53-70-3	7	0	1.1E-10	2.7E-10	0	4.8E-10	1.3E-09
Dibenzothiophene	132-65-0	27	0	4.2E-10	6.3E-10	1.2E-10	1.7E-09	2.5E-09
Dibutyl phthalate	84-74-2	31	0	3.0E-08	2.2E-08	2.4E-08	7.2E-08	8.5E-08
Diethyl Phthalate	84-66-2	23	0	2.5E-09	2.2E-09	2.7E-09	5.9E-09	7.7E-09
Diisobutyl Phthalate	84-69-5	32	0	3.0E-09	7.7E-09	6.7E-10	7.9E-09	4.5E-08

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Diisooctylphthalate	27554-26-3	33	0	6.3E-08	4.7E-08	4.6E-08	1.6E-07	1.7E-07
Di-n-octyl phthalate	117-84-0	26	0	6.2E-09	1.5E-08	1.6E-09	3.0E-08	6.5E-08
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	4	0	5.1E-11	1.6E-10	0	3.9E-10	7.2E-10
3,5-di-tert-Butyl-4-hydroxybenzaldehyde	1620-98-0	35	3.0E-11	1.1E-08	2.2E-08	6.8E-10	4.5E-08	1.1E-07
Fluoranthene	206-44-0	35	1.9E-09	1.4E-08	1.4E-08	8.3E-09	3.5E-08	6.6E-08
Fluorene	86-73-7	11	0	1.8E-10	4.3E-10	0	9.0E-10	2.2E-09
Hexadecane	544-76-3	28	0	1.3E-09	1.1E-09	1.4E-09	3.1E-09	5.1E-09
1-Hydroxypyrene	5315-79-7	1	0	7.1E-10	4.2E-09	0	0	2.5E-08
Lead		35	1.2E-07	6.2E-07	5.3E-07	4.7E-07	1.6E-06	2.8E-06
Manganese		35	1.1E-07	6.1E-07	3.6E-07	6.4E-07	1.0E-06	2.0E-06
2-(Methylthio)benzothiazole	615-22-5	5	0	9.3E-09	3.4E-08	0	5.2E-08	1.9E-07
Molybdenum		14	0	1.1E-09	1.6E-09	0	3.5E-09	5.6E-09
Naphthalene	91-20-3	1	0	3.3E-11	1.9E-10	0	0	1.1E-09
Naphthalene, 1-methyl-	90-12-0	31	0	8.4E-11	2.9E-10	1.4E-11	1.8E-10	1.7E-09
Naphthalene, 1,2-dimethyl-	573-98-8	12	0	2.0E-11	4.4E-11	0	9.8E-11	2.3E-10
Naphthalene, 1,6-dimethyl-	575-43-9	35	5.2E-11	1.3E-10	6.2E-11	1.1E-10	2.6E-10	3.7E-10
Naphthalene, 2-(bromomethyl)-	939-26-4	35	1.2E-10	3.4E-09	1.6E-09	3.3E-09	6.0E-09	7.7E-09
Naphthalene, 2,3-dimethyl-	581-40-8	35	2.5E-11	1.0E-09	9.9E-10	6.9E-10	3.0E-09	4.4E-09
Naphthalene, 2-methyl	91-57-6	19	0	7.6E-11	3.2E-10	1.4E-11	1.7E-10	1.9E-09
1-Octadecene	112-88-9	32	0	2.9E-09	2.5E-09	2.3E-09	7.8E-09	9.0E-09
17-Pentatriacontene	6971-40-0	9	0	2.5E-09	5.8E-09	0	1.3E-08	2.6E-08
Phenanthrene	85-01-8	35	1.1E-09	6.1E-09	7.6E-09	3.4E-09	1.7E-08	3.9E-08
Phenanthrene, 1-methyl	832-69-9	35	1.4E-10	1.6E-09	1.6E-09	1.2E-09	4.0E-09	7.1E-09
Phenanthrene, 2-methyl-	2531-84-2	35	4.4E-11	2.1E-09	2.4E-09	1.2E-09	5.9E-09	1.1E-08
Phenanthrene, 3-methyl	832-71-3	35	2.7E-10	3.5E-09	3.7E-09	2.2E-09	9.5E-09	1.8E-08
N-Phenylbenzamide	93-98-1	22	0	1.4E-08	2.6E-08	2.1E-09	8.3E-08	9.6E-08
Phthalimide	85-41-6	16	0	2.5E-09	5.6E-09	0	1.2E-08	2.6E-08
Pyrene	129-00-0	35	5.4E-09	2.9E-08	1.9E-08	2.4E-08	6.2E-08	8.4E-08
Pyridine, 2-(4-methylphenyl)-	4467-06-5	2	0	6.3E-11	3.6E-10	0	2.1E-11	2.1E-09
Selenium		4	0	3.7E-09	1.1E-08	0	2.6E-08	5.5E-08
Strontium		35	5.0E-08	5.3E-07	1.0E-06	2.8E-07	1.6E-06	5.9E-06
Thallium		21	0	1.5E-10	2.5E-10	1.2E-10	4.6E-10	1.4E-09
Tin		30	0	5.8E-09	5.8E-09	4.3E-09	1.5E-08	2.3E-08

Chemical	CASRN[c]	Detection	$ADD_{ing-field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Triethylene glycol monobutyl ether	143-22-6	3	0	7.2E-10	2.9E-09	0	3.7E-09	1.6E-08
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	35	1.2E-09	2.1E-09	6.7E-10	2.0E-09	3.3E-09	4.0E-09
Vanadium		2	0	3.0E-09	1.2E-08	0	1.6E-08	5.3E-08
Zinc		35	2.9E-05	1.3E-04	6.9E-05	1.2E-04	2.3E-04	3.7E-04

[a] 35 field-specific $ADD_{ing-field}$ are included in the table. $ADD_{ing-field}$ was calculated from field-specific average concentrations ($C_{ing-crumb\ rubber-field}$) of a chemical detected in artificial gastrointestinal fluids extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

Table F-336. Field-Specific Average Ingestion Daily Dose[a] for Chronic Non-Cancer Hazard ($ADD_{ing-field}$, milligrams per kilogram BW per day) of **Field-Related General Chemicals**[b]—Combined Gender **Coaches 50<70 Years**

Chemical	CASRN[c]	Detection	$ADD_{ing-field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Acenaphthylene	208-96-8	35	2.6E-11	2.0E-10	1.8E-10	1.2E-10	5.8E-10	7.3E-10
Aluminum		35	4.4E-06	1.4E-05	7.1E-06	1.3E-05	2.5E-05	3.3E-05
Aniline	62-53-3	12	0	1.1E-09	2.5E-09	0	6.1E-09	1.1E-08
Anthracene	120-12-7	28	0	5.2E-10	9.1E-10	2.0E-10	1.9E-09	4.2E-09
Anthracene, 2-methyl-	613-12-7	35	3.0E-10	2.1E-09	1.8E-09	1.5E-09	4.7E-09	9.2E-09
Anthracene, 9,10-dimethyl	781-43-1	2	0	1.7E-11	9.3E-11	0	1.1E-11	5.5E-10
Anthracene, 9,10-diphenyl-	1499-10-1	2	0	1.3E-10	5.9E-10	0	3.7E-10	3.3E-09
Anthracene, 9-phenyl	602-55-1	30	0	2.0E-10	2.1E-10	1.2E-10	6.1E-10	8.7E-10
Antimony		35	9.1E-10	1.5E-08	1.3E-08	1.3E-08	3.4E-08	6.3E-08
Barium		35	2.5E-07	9.5E-07	6.5E-07	9.3E-07	1.8E-06	3.6E-06
Benzene, n-butyl-	104-51-8	29	0	1.1E-10	2.8E-10	6.2E-11	1.7E-10	1.7E-09
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	20	0	3.0E-08	4.1E-08	1.1E-08	1.1E-07	1.5E-07
Benz[a]anthracene	56-55-3	35	1.2E-10	1.8E-09	2.0E-09	8.6E-10	5.6E-09	7.9E-09
Benzo[b]fluoranthene	205-99-2	35	5.1E-10	2.5E-09	1.8E-09	1.7E-09	6.0E-09	7.3E-09
7H-Benzo[c]fluorene	205-12-9	31	0	4.8E-10	7.8E-10	1.6E-10	1.9E-09	3.9E-09
Benzo[k]fluoranthene	207-08-9	35	6.8E-11	8.0E-10	7.6E-10	5.1E-10	2.4E-09	3.0E-09
Benzothiazole	95-16-9	35	7.0E-08	3.1E-07	2.1E-07	2.3E-07	6.3E-07	7.2E-07
Benzothiazole, 2-phenyl-	883-93-2	35	9.3E-09	3.3E-08	3.1E-08	2.4E-08	7.5E-08	1.8E-07
Benzothiazolone	934-34-9	35	4.9E-07	7.8E-07	1.5E-07	7.7E-07	1.0E-06	1.0E-06

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Benzyl butyl phthalate	85-68-7	35	8.0E-10	1.6E-08	1.3E-08	1.4E-08	3.5E-08	6.2E-08
Beryllium		11	0	3.9E-10	6.3E-10	0	1.4E-09	2.2E-09
Butylated Hydroxytoluene	128-37-0	19	0	4.2E-10	7.8E-10	1.4E-10	2.1E-09	3.5E-09
Cadmium		34	0	1.1E-08	6.5E-09	9.6E-09	2.2E-08	2.5E-08
Chromium		35	5.5E-09	3.0E-08	2.9E-08	2.0E-08	6.5E-08	1.6E-07
Cobalt		35	1.3E-07	6.7E-07	4.6E-07	6.4E-07	1.3E-06	2.3E-06
Copper		35	5.2E-07	1.3E-06	6.8E-07	1.2E-06	2.2E-06	4.2E-06
Cyclohexyl isothiocyanate	1122-82-3	29	0	9.8E-08	7.2E-08	9.7E-08	2.3E-07	2.5E-07
Dibenz[a,h]anthracene	53-70-3	7	0	1.1E-10	2.7E-10	0	4.8E-10	1.3E-09
Dibenzothiophene	132-65-0	27	0	4.2E-10	6.3E-10	1.2E-10	1.7E-09	2.5E-09
Dibutyl phthalate	84-74-2	31	0	3.0E-08	2.2E-08	2.4E-08	7.2E-08	8.5E-08
Diethyl Phthalate	84-66-2	23	0	2.5E-09	2.2E-09	2.7E-09	5.9E-09	7.8E-09
Diisobutyl Phthalate	84-69-5	32	0	3.0E-09	7.7E-09	6.7E-10	7.9E-09	4.5E-08
Diisooctylphthalate	27554-26-3	33	0	6.3E-08	4.7E-08	4.6E-08	1.6E-07	1.7E-07
Di-n-octyl phthalate	117-84-0	26	0	6.2E-09	1.5E-08	1.6E-09	3.0E-08	6.6E-08
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	4	0	5.1E-11	1.6E-10	0	4.0E-10	7.2E-10
3,5-di-tert-Butyl-4-hydroxybenzaldehyde	1620-98-0	35	3.0E-11	1.1E-08	2.2E-08	6.8E-10	4.5E-08	1.1E-07
Fluoranthene	206-44-0	35	1.9E-09	1.4E-08	1.4E-08	8.3E-09	3.5E-08	6.6E-08
Fluorene	86-73-7	11	0	1.8E-10	4.3E-10	0	9.0E-10	2.2E-09
Hexadecane	544-76-3	28	0	1.3E-09	1.1E-09	1.4E-09	3.1E-09	5.1E-09
1-Hydroxypyrene	5315-79-7	1	0	7.1E-10	4.2E-09	0	0	2.5E-08
Lead		35	1.2E-07	6.2E-07	5.4E-07	4.7E-07	1.6E-06	2.8E-06
Manganese		35	1.1E-07	6.1E-07	3.6E-07	6.4E-07	1.0E-06	2.0E-06
2-(Methylthio)benzothiazole	615-22-5	5	0	9.4E-09	3.4E-08	0	5.2E-08	1.9E-07
Molybdenum		14	0	1.1E-09	1.6E-09	0	3.5E-09	5.6E-09
Naphthalene	91-20-3	1	0	3.3E-11	1.9E-10	0	0	1.1E-09
Naphthalene, 1-methyl-	90-12-0	31	0	8.4E-11	2.9E-10	1.4E-11	1.8E-10	1.7E-09
Naphthalene, 1,2-dimethyl-	573-98-8	12	0	2.0E-11	4.4E-11	0	9.9E-11	2.3E-10
Naphthalene, 1,6-dimethyl-	575-43-9	35	5.2E-11	1.3E-10	6.2E-11	1.1E-10	2.6E-10	3.7E-10
Naphthalene, 2-(bromomethyl)-	939-26-4	35	1.2E-10	3.4E-09	1.6E-09	3.3E-09	6.0E-09	7.8E-09
Naphthalene, 2,3-dimethyl-	581-40-8	35	2.6E-11	1.0E-09	1.0E-09	6.9E-10	3.0E-09	4.4E-09
Naphthalene, 2-methyl	91-57-6	19	0	7.6E-11	3.2E-10	1.4E-11	1.7E-10	1.9E-09
1-Octadecene	112-88-9	32	0	2.9E-09	2.5E-09	2.3E-09	7.8E-09	9.0E-09
17-Pentatriacontene	6971-40-0	9	0	2.5E-09	5.8E-09	0	1.4E-08	2.6E-08

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Phenanthrene	85-01-8	35	1.1E-09	6.1E-09	7.6E-09	3.4E-09	1.8E-08	3.9E-08
Phenanthrene, 1-methyl	832-69-9	35	1.4E-10	1.6E-09	1.6E-09	1.2E-09	4.1E-09	7.1E-09
Phenanthrene, 2-methyl-	2531-84-2	35	4.4E-11	2.1E-09	2.4E-09	1.3E-09	5.9E-09	1.2E-08
Phenanthrene, 3-methyl	832-71-3	35	2.7E-10	3.5E-09	3.7E-09	2.2E-09	9.6E-09	1.8E-08
N-Phenylbenzamide	93-98-1	22	0	1.4E-08	2.6E-08	2.1E-09	8.3E-08	9.6E-08
Phthalimide	85-41-6	16	0	2.5E-09	5.7E-09	0	1.2E-08	2.6E-08
Pyrene	129-00-0	35	5.5E-09	2.9E-08	1.9E-08	2.4E-08	6.2E-08	8.5E-08
Pyridine, 2-(4-methylphenyl)-	4467-06-5	2	0	6.3E-11	3.6E-10	0	2.1E-11	2.1E-09
Selenium		4	0	3.7E-09	1.1E-08	0	2.6E-08	5.5E-08
Strontium		35	5.0E-08	5.3E-07	1.0E-06	2.8E-07	1.6E-06	6.0E-06
Thallium		21	0	1.5E-10	2.5E-10	1.2E-10	4.6E-10	1.4E-09
Tin		30	0	5.8E-09	5.8E-09	4.3E-09	1.5E-08	2.3E-08
Triethylene glycol monobutyl ether	143-22-6	3	0	7.2E-10	2.9E-09	0	3.7E-09	1.6E-08
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	35	1.2E-09	2.1E-09	6.8E-10	2.0E-09	3.3E-09	4.1E-09
Vanadium		2	0	3.0E-09	1.2E-08	0	1.6E-08	5.3E-08
Zinc		35	2.9E-05	1.3E-04	6.9E-05	1.2E-04	2.3E-04	3.7E-04

[a] 35 field-specific $ADD_{ing\text{-}field}$ are included in the table. $ADD_{ing\text{-}field}$ was calculated from field-specific average concentrations ($C_{ing\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial gastrointestinal fluids extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

Table F-337. Field-Specific Average Ingestion Daily Dose[a] for Chronic Non-Cancer Hazard ($ADD_{ing\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related General Chemicals**[b]—Combined Gender **Referees 16<30 Years**

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Acenaphthylene	208-96-8	35	1.2E-11	9.4E-11	8.7E-11	5.7E-11	2.7E-10	3.5E-10
Aluminum		35	2.1E-06	6.6E-06	3.4E-06	6.0E-06	1.2E-05	1.6E-05
Aniline	62-53-3	12	0	5.2E-10	1.2E-09	0	2.9E-09	5.3E-09
Anthracene	120-12-7	28	0	2.5E-10	4.3E-10	9.5E-11	9.3E-10	2.0E-09
Anthracene, 2-methyl-	613-12-7	35	1.4E-10	9.8E-10	8.6E-10	7.1E-10	2.3E-09	4.4E-09
Anthracene, 9,10-dimethyl	781-43-1	2	0	7.9E-12	4.4E-11	0	5.2E-12	2.6E-10
Anthracene, 9,10-diphenyl-	1499-10-1	2	0	6.1E-11	2.8E-10	0	1.7E-10	1.6E-09
Anthracene, 9-phenyl	602-55-1	30	0	9.3E-11	9.8E-11	5.7E-11	2.9E-10	4.2E-10

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Antimony		35	4.3E-10	7.1E-09	6.3E-09	6.0E-09	1.6E-08	3.0E-08
Barium		35	1.2E-07	4.5E-07	3.1E-07	4.4E-07	8.6E-07	1.7E-06
Benzene, n-butyl-	104-51-8	29	0	5.2E-11	1.3E-10	2.9E-11	8.1E-11	8.1E-10
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	20	0	1.4E-08	2.0E-08	5.4E-09	5.3E-08	7.0E-08
Benz[a]anthracene	56-55-3	35	5.6E-11	8.6E-10	9.4E-10	4.1E-10	2.7E-09	3.7E-09
Benzo[b]fluoranthene	205-99-2	35	2.4E-10	1.2E-09	8.8E-10	7.9E-10	2.9E-09	3.5E-09
7H-Benzo[c]fluorene	205-12-9	31	0	2.3E-10	3.7E-10	7.5E-11	9.3E-10	1.9E-09
Benzo[k]fluoranthene	207-08-9	35	3.2E-11	3.8E-10	3.6E-10	2.4E-10	1.1E-09	1.4E-09
Benzothiazole	95-16-9	35	3.3E-08	1.5E-07	1.0E-07	1.1E-07	3.0E-07	3.5E-07
Benzothiazole, 2-phenyl-	883-93-2	35	4.5E-09	1.6E-08	1.5E-08	1.1E-08	3.6E-08	8.4E-08
Benzothiazolone	934-34-9	35	2.3E-07	3.7E-07	7.2E-08	3.6E-07	4.8E-07	4.9E-07
Benzyl butyl phthalate	85-68-7	35	3.8E-10	7.4E-09	6.2E-09	6.6E-09	1.7E-08	3.0E-08
Beryllium		11	0	1.9E-10	3.0E-10	0	6.5E-10	1.0E-09
Butylated Hydroxytoluene	128-37-0	19	0	2.0E-10	3.7E-10	6.9E-11	1.0E-09	1.7E-09
Cadmium		34	0	5.1E-09	3.1E-09	4.6E-09	1.1E-08	1.2E-08
Chromium		35	2.6E-09	1.4E-08	1.4E-08	9.3E-09	3.1E-08	7.8E-08
Cobalt		35	6.0E-08	3.2E-07	2.2E-07	3.1E-07	6.1E-07	1.1E-06
Copper		35	2.5E-07	6.3E-07	3.3E-07	5.8E-07	1.0E-06	2.0E-06
Cyclohexyl isothiocyanate	1122-82-3	29	0	4.6E-08	3.4E-08	4.6E-08	1.1E-07	1.2E-07
Dibenz[a,h]anthracene	53-70-3	7	0	5.1E-11	1.3E-10	0	2.3E-10	6.3E-10
Dibenzothiophene	132-65-0	27	0	2.0E-10	3.0E-10	5.8E-11	8.0E-10	1.2E-09
Dibutyl phthalate	84-74-2	31	0	1.4E-08	1.1E-08	1.1E-08	3.4E-08	4.1E-08
Diethyl Phthalate	84-66-2	23	0	1.2E-09	1.0E-09	1.3E-09	2.8E-09	3.7E-09
Diisobutyl Phthalate	84-69-5	32	0	1.4E-09	3.7E-09	3.2E-10	3.8E-09	2.2E-08
Diisooctylphthalate	27554-26-3	33	0	3.0E-08	2.2E-08	2.2E-08	7.6E-08	7.9E-08
Di-n-octyl phthalate	117-84-0	26	0	3.0E-09	7.1E-09	7.8E-10	1.4E-08	3.1E-08
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	4	0	2.4E-11	7.8E-11	0	1.9E-10	3.4E-10
3,5-di-tert-Butyl-4-hydroxybenzaldehyde	1620-98-0	35	1.5E-11	5.2E-09	1.1E-08	3.2E-10	2.2E-08	5.2E-08
Fluoranthene	206-44-0	35	9.1E-10	6.7E-09	6.5E-09	4.0E-09	1.7E-08	3.2E-08
Fluorene	86-73-7	11	0	8.7E-11	2.1E-10	0	4.3E-10	1.0E-09
Hexadecane	544-76-3	28	0	6.3E-10	5.3E-10	6.6E-10	1.5E-09	2.4E-09
1-Hydroxypyrene	5315-79-7	1	0	3.4E-10	2.0E-09	0	0	1.2E-08
Lead		35	5.7E-08	3.0E-07	2.6E-07	2.2E-07	7.4E-07	1.3E-06
Manganese		35	5.3E-08	2.9E-07	1.7E-07	3.0E-07	4.8E-07	9.3E-07

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
2-(Methylthio)benzothiazole	615-22-5	5	0	4.5E-09	1.6E-08	0	2.5E-08	9.0E-08
Molybdenum		14	0	5.4E-10	7.5E-10	0	1.7E-09	2.7E-09
Naphthalene	91-20-3	1	0	1.6E-11	9.2E-11	0	0	5.5E-10
Naphthalene, 1-methyl-	90-12-0	31	0	4.0E-11	1.4E-10	6.7E-12	8.4E-11	8.3E-10
Naphthalene, 1,2-dimethyl-	573-98-8	12	0	9.4E-12	2.1E-11	0	4.7E-11	1.1E-10
Naphthalene, 1,6-dimethyl-	575-43-9	35	2.5E-11	6.2E-11	3.0E-11	5.4E-11	1.3E-10	1.7E-10
Naphthalene, 2-(bromomethyl)-	939-26-4	35	5.8E-11	1.6E-09	7.7E-10	1.6E-09	2.9E-09	3.7E-09
Naphthalene, 2,3-dimethyl-	581-40-8	35	1.2E-11	4.8E-10	4.7E-10	3.3E-10	1.4E-09	2.1E-09
Naphthalene, 2-methyl	91-57-6	19	0	3.6E-11	1.5E-10	6.5E-12	8.2E-11	9.0E-10
1-Octadecene	112-88-9	32	0	1.4E-09	1.2E-09	1.1E-09	3.7E-09	4.3E-09
17-Pentatriacontene	6971-40-0	9	0	1.2E-09	2.8E-09	0	6.4E-09	1.2E-08
Phenanthrene	85-01-8	35	5.0E-10	2.9E-09	3.6E-09	1.6E-09	8.3E-09	1.9E-08
Phenanthrene, 1-methyl	832-69-9	35	6.7E-11	7.8E-10	7.5E-10	5.5E-10	1.9E-09	3.4E-09
Phenanthrene, 2-methyl-	2531-84-2	35	2.1E-11	1.0E-09	1.2E-09	6.0E-10	2.8E-09	5.5E-09
Phenanthrene, 3-methyl	832-71-3	35	1.3E-10	1.7E-09	1.8E-09	1.1E-09	4.6E-09	8.4E-09
N-Phenylbenzamide	93-98-1	22	0	6.5E-09	1.3E-08	1.0E-09	4.0E-08	4.6E-08
Phthalimide	85-41-6	16	0	1.2E-09	2.7E-09	0	5.9E-09	1.2E-08
Pyrene	129-00-0	35	2.6E-09	1.4E-08	9.1E-09	1.2E-08	2.9E-08	4.0E-08
Pyridine, 2-(4-methylphenyl)-	4467-06-5	2	0	3.0E-11	1.7E-10	0	1.0E-11	1.0E-09
Selenium		4	0	1.8E-09	5.4E-09	0	1.2E-08	2.6E-08
Strontium		35	2.4E-08	2.5E-07	4.9E-07	1.3E-07	7.5E-07	2.8E-06
Thallium		21	0	7.0E-11	1.2E-10	5.7E-11	2.2E-10	6.5E-10
Tin		30	0	2.8E-09	2.8E-09	2.1E-09	7.4E-09	1.1E-08
Triethylene glycol monobutyl ether	143-22-6	3	0	3.4E-10	1.4E-09	0	1.8E-09	7.7E-09
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	35	5.8E-10	1.0E-09	3.2E-10	9.4E-10	1.6E-09	1.9E-09
Vanadium		2	0	1.4E-09	5.9E-09	0	7.5E-09	2.5E-08
Zinc		35	1.4E-05	6.2E-05	3.3E-05	5.9E-05	1.1E-04	1.8E-04

[a] 35 field-specific $ADD_{ing\text{-}field}$ are included in the table. $ADD_{ing\text{-}field}$ was calculated from field-specific average concentrations ($C_{ing\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial gastrointestinal fluids extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

Table F-338. Field-Specific Average Ingestion Daily Dose[a] for Chronic Non-Cancer Hazard ($ADD_{ing\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related General Chemicals**[b]—Combined Gender **Referees 30<40 Years**

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Acenaphthylene	208-96-8	35	1.1E-11	8.8E-11	8.2E-11	5.3E-11	2.6E-10	3.3E-10
Aluminum		35	2.0E-06	6.2E-06	3.2E-06	5.6E-06	1.1E-05	1.5E-05
Aniline	62-53-3	12	0	4.9E-10	1.1E-09	0	2.7E-09	4.9E-09
Anthracene	120-12-7	28	0	2.3E-10	4.1E-10	8.9E-11	8.7E-10	1.9E-09
Anthracene, 2-methyl-	613-12-7	35	1.3E-10	9.2E-10	8.1E-10	6.6E-10	2.1E-09	4.1E-09
Anthracene, 9,10-dimethyl	781-43-1	2	0	7.5E-12	4.1E-11	0	4.8E-12	2.4E-10
Anthracene, 9,10-diphenyl-	1499-10-1	2	0	5.8E-11	2.6E-10	0	1.6E-10	1.5E-09
Anthracene, 9-phenyl	602-55-1	30	0	8.7E-11	9.2E-11	5.3E-11	2.7E-10	3.9E-10
Antimony		35	4.1E-10	6.7E-09	5.9E-09	5.7E-09	1.5E-08	2.8E-08
Barium		35	1.1E-07	4.3E-07	2.9E-07	4.2E-07	8.1E-07	1.6E-06
Benzene, n-butyl-	104-51-8	29	0	4.9E-11	1.3E-10	2.8E-11	7.6E-11	7.6E-10
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	20	0	1.3E-08	1.8E-08	5.0E-09	5.0E-08	6.5E-08
Benz[a]anthracene	56-55-3	35	5.3E-11	8.1E-10	8.9E-10	3.9E-10	2.5E-09	3.5E-09
Benzo[b]fluoranthene	205-99-2	35	2.3E-10	1.1E-09	8.2E-10	7.5E-10	2.7E-09	3.3E-09
7H-Benzo[c]fluorene	205-12-9	31	0	2.1E-10	3.5E-10	7.0E-11	8.7E-10	1.7E-09
Benzo[k]fluoranthene	207-08-9	35	3.0E-11	3.6E-10	3.4E-10	2.3E-10	1.1E-09	1.4E-09
Benzothiazole	95-16-9	35	3.1E-08	1.4E-07	9.4E-08	1.0E-07	2.8E-07	3.2E-07
Benzothiazole, 2-phenyl-	883-93-2	35	4.2E-09	1.5E-08	1.4E-08	1.1E-08	3.4E-08	7.9E-08
Benzothiazolone	934-34-9	35	2.2E-07	3.5E-07	6.8E-08	3.4E-07	4.5E-07	4.6E-07
Benzyl butyl phthalate	85-68-7	35	3.6E-10	7.0E-09	5.8E-09	6.2E-09	1.6E-08	2.8E-08
Beryllium		11	0	1.8E-10	2.8E-10	0	6.1E-10	9.7E-10
Butylated Hydroxytoluene	128-37-0	19	0	1.9E-10	3.5E-10	6.5E-11	9.4E-10	1.6E-09
Cadmium		34	0	4.8E-09	2.9E-09	4.3E-09	1.0E-08	1.1E-08
Chromium		35	2.4E-09	1.3E-08	1.3E-08	8.7E-09	2.9E-08	7.3E-08
Cobalt		35	5.6E-08	3.0E-07	2.1E-07	2.9E-07	5.8E-07	1.0E-06
Copper		35	2.3E-07	5.9E-07	3.1E-07	5.4E-07	9.7E-07	1.9E-06
Cyclohexyl isothiocyanate	1122-82-3	29	0	4.4E-08	3.2E-08	4.3E-08	1.0E-07	1.1E-07
Dibenz[a,h]anthracene	53-70-3	7	0	4.8E-11	1.2E-10	0	2.2E-10	6.0E-10
Dibenzothiophene	132-65-0	27	0	1.9E-10	2.8E-10	5.5E-11	7.5E-10	1.1E-09
Dibutyl phthalate	84-74-2	31	0	1.3E-08	1.0E-08	1.1E-08	3.2E-08	3.8E-08
Diethyl Phthalate	84-66-2	23	0	1.1E-09	9.8E-10	1.2E-09	2.6E-09	3.5E-09
Diisobutyl Phthalate	84-69-5	32	0	1.3E-09	3.4E-09	3.0E-10	3.6E-09	2.0E-08

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Diisooctylphthalate	27554-26-3	33	0	2.8E-08	2.1E-08	2.1E-08	7.1E-08	7.4E-08
Di-n-octyl phthalate	117-84-0	26	0	2.8E-09	6.7E-09	7.3E-10	1.3E-08	2.9E-08
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	4	0	2.3E-11	7.3E-11	0	1.8E-10	3.2E-10
3,5-di-tert-Butyl-4-hydroxybenzaldehyde	1620-98-0	35	1.4E-11	4.9E-09	9.9E-09	3.0E-10	2.0E-08	4.9E-08
Fluoranthene	206-44-0	35	8.5E-10	6.2E-09	6.1E-09	3.7E-09	1.6E-08	3.0E-08
Fluorene	86-73-7	11	0	8.1E-11	1.9E-10	0	4.0E-10	9.7E-10
Hexadecane	544-76-3	28	0	5.9E-10	4.9E-10	6.2E-10	1.4E-09	2.3E-09
1-Hydroxypyrene	5315-79-7	1	0	3.2E-10	1.9E-09	0	0	1.1E-08
Lead		35	5.4E-08	2.8E-07	2.4E-07	2.1E-07	7.0E-07	1.3E-06
Manganese		35	5.0E-08	2.8E-07	1.6E-07	2.9E-07	4.5E-07	8.8E-07
2-(Methylthio)benzothiazole	615-22-5	5	0	4.2E-09	1.5E-08	0	2.3E-08	8.4E-08
Molybdenum		14	0	5.1E-10	7.1E-10	0	1.6E-09	2.5E-09
Naphthalene	91-20-3	1	0	1.5E-11	8.7E-11	0	0	5.1E-10
Naphthalene, 1-methyl-	90-12-0	31	0	3.8E-11	1.3E-10	6.3E-12	7.9E-11	7.8E-10
Naphthalene, 1,2-dimethyl-	573-98-8	12	0	8.8E-12	2.0E-11	0	4.4E-11	1.0E-10
Naphthalene, 1,6-dimethyl-	575-43-9	35	2.3E-11	5.8E-11	2.8E-11	5.1E-11	1.2E-10	1.6E-10
Naphthalene, 2-(bromomethyl)-	939-26-4	35	5.4E-11	1.5E-09	7.2E-10	1.5E-09	2.7E-09	3.5E-09
Naphthalene, 2,3-dimethyl-	581-40-8	35	1.1E-11	4.5E-10	4.5E-10	3.1E-10	1.3E-09	2.0E-09
Naphthalene, 2-methyl	91-57-6	19	0	3.4E-11	1.4E-10	6.1E-12	7.7E-11	8.5E-10
1-Octadecene	112-88-9	32	0	1.3E-09	1.1E-09	1.0E-09	3.5E-09	4.0E-09
17-Pentatriacontene	6971-40-0	9	0	1.1E-09	2.6E-09	0	6.1E-09	1.2E-08
Phenanthrene	85-01-8	35	4.7E-10	2.7E-09	3.4E-09	1.5E-09	7.8E-09	1.8E-08
Phenanthrene, 1-methyl	832-69-9	35	6.3E-11	7.3E-10	7.0E-10	5.2E-10	1.8E-09	3.2E-09
Phenanthrene, 2-methyl-	2531-84-2	35	2.0E-11	9.4E-10	1.1E-09	5.6E-10	2.7E-09	5.2E-09
Phenanthrene, 3-methyl	832-71-3	35	1.2E-10	1.6E-09	1.7E-09	9.9E-10	4.3E-09	7.9E-09
N-Phenylbenzamide	93-98-1	22	0	6.1E-09	1.2E-08	9.4E-10	3.7E-08	4.3E-08
Phthalimide	85-41-6	16	0	1.1E-09	2.5E-09	0	5.5E-09	1.2E-08
Pyrene	129-00-0	35	2.4E-09	1.3E-08	8.5E-09	1.1E-08	2.8E-08	3.8E-08
Pyridine, 2-(4-methylphenyl)-	4467-06-5	2	0	2.8E-11	1.6E-10	0	9.6E-12	9.5E-10
Selenium		4	0	1.7E-09	5.1E-09	0	1.2E-08	2.5E-08
Strontium		35	2.3E-08	2.4E-07	4.6E-07	1.3E-07	7.0E-07	2.7E-06
Thallium		21	0	6.6E-11	1.1E-10	5.3E-11	2.0E-10	6.1E-10
Tin		30	0	2.6E-09	2.6E-09	1.9E-09	6.9E-09	1.0E-08

Chemical	CASRN[c]	Detection	$ADD_{ing-field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Triethylene glycol monobutyl ether	143-22-6	3	0	3.2E-10	1.3E-09	0	1.7E-09	7.2E-09
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	35	5.5E-10	9.5E-10	3.0E-10	8.8E-10	1.5E-09	1.8E-09
Vanadium		2	0	1.3E-09	5.6E-09	0	7.0E-09	2.4E-08
Zinc		35	1.3E-05	5.8E-05	3.1E-05	5.6E-05	1.0E-04	1.7E-04

[a] 35 field-specific $ADD_{ing-field}$ are included in the table. $ADD_{ing-field}$ was calculated from field-specific average concentrations ($C_{ing-crumb\ rubber-field}$) of a chemical detected in artificial gastrointestinal fluids extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

Table F-339. Field-Specific Average Ingestion Daily Dose[a] for Chronic Non-Cancer Hazard ($ADD_{ing-field}$, milligrams per kilogram BW per day) of **Field-Related General Chemicals**[b]—Combined Gender **Referees 40<50 Years**

Chemical	CASRN[c]	Detection	$ADD_{ing-field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Acenaphthylene	208-96-8	35	1.1E-11	8.6E-11	8.0E-11	5.2E-11	2.5E-10	3.2E-10
Aluminum		35	1.9E-06	6.1E-06	3.1E-06	5.5E-06	1.1E-05	1.4E-05
Aniline	62-53-3	12	0	4.8E-10	1.1E-09	0	2.7E-09	4.8E-09
Anthracene	120-12-7	28	0	2.3E-10	4.0E-10	8.8E-11	8.5E-10	1.9E-09
Anthracene, 2-methyl-	613-12-7	35	1.3E-10	9.0E-10	7.9E-10	6.5E-10	2.1E-09	4.0E-09
Anthracene, 9,10-dimethyl	781-43-1	2	0	7.3E-12	4.1E-11	0	4.7E-12	2.4E-10
Anthracene, 9,10-diphenyl-	1499-10-1	2	0	5.6E-11	2.6E-10	0	1.6E-10	1.4E-09
Anthracene, 9-phenyl	602-55-1	30	0	8.5E-11	9.0E-11	5.2E-11	2.7E-10	3.8E-10
Antimony		35	4.0E-10	6.6E-09	5.8E-09	5.6E-09	1.5E-08	2.7E-08
Barium		35	1.1E-07	4.2E-07	2.8E-07	4.1E-07	7.9E-07	1.6E-06
Benzene, n-butyl-	104-51-8	29	0	4.8E-11	1.2E-10	2.7E-11	7.4E-11	7.5E-10
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	20	0	1.3E-08	1.8E-08	4.9E-09	4.9E-08	6.4E-08
Benz[a]anthracene	56-55-3	35	5.2E-11	7.9E-10	8.7E-10	3.8E-10	2.5E-09	3.4E-09
Benzo[b]fluoranthene	205-99-2	35	2.2E-10	1.1E-09	8.0E-10	7.3E-10	2.6E-09	3.2E-09
7H-Benzo[c]fluorene	205-12-9	31	0	2.1E-10	3.4E-10	6.9E-11	8.5E-10	1.7E-09
Benzo[k]fluoranthene	207-08-9	35	3.0E-11	3.5E-10	3.3E-10	2.2E-10	1.0E-09	1.3E-09
Benzothiazole	95-16-9	35	3.1E-08	1.3E-07	9.2E-08	1.0E-07	2.8E-07	3.2E-07
Benzothiazole, 2-phenyl-	883-93-2	35	4.1E-09	1.4E-08	1.3E-08	1.0E-08	3.3E-08	7.7E-08
Benzothiazolone	934-34-9	35	2.1E-07	3.4E-07	6.6E-08	3.4E-07	4.4E-07	4.5E-07

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Benzyl butyl phthalate	85-68-7	35	3.5E-10	6.8E-09	5.7E-09	6.0E-09	1.5E-08	2.7E-08
Beryllium		11	0	1.7E-10	2.8E-10	0	6.0E-10	9.5E-10
Butylated Hydroxytoluene	128-37-0	19	0	1.8E-10	3.4E-10	6.3E-11	9.2E-10	1.5E-09
Cadmium		34	0	4.7E-09	2.9E-09	4.2E-09	9.8E-09	1.1E-08
Chromium		35	2.4E-09	1.3E-08	1.3E-08	8.6E-09	2.8E-08	7.2E-08
Cobalt		35	5.5E-08	3.0E-07	2.0E-07	2.8E-07	5.6E-07	1.0E-06
Copper		35	2.3E-07	5.8E-07	3.0E-07	5.3E-07	9.5E-07	1.8E-06
Cyclohexyl isothiocyanate	1122-82-3	29	0	4.3E-08	3.1E-08	4.2E-08	1.0E-07	1.1E-07
Dibenz[a,h]anthracene	53-70-3	7	0	4.7E-11	1.2E-10	0	2.1E-10	5.8E-10
Dibenzothiophene	132-65-0	27	0	1.8E-10	2.8E-10	5.3E-11	7.4E-10	1.1E-09
Dibutyl phthalate	84-74-2	31	0	1.3E-08	9.8E-09	1.0E-08	3.2E-08	3.7E-08
Diethyl Phthalate	84-66-2	23	0	1.1E-09	9.6E-10	1.2E-09	2.6E-09	3.4E-09
Diisobutyl Phthalate	84-69-5	32	0	1.3E-09	3.4E-09	3.0E-10	3.5E-09	2.0E-08
Diisooctylphthalate	27554-26-3	33	0	2.8E-08	2.1E-08	2.0E-08	7.0E-08	7.3E-08
Di-n-octyl phthalate	117-84-0	26	0	2.7E-09	6.6E-09	7.2E-10	1.3E-08	2.9E-08
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	4	0	2.3E-11	7.2E-11	0	1.7E-10	3.1E-10
3,5-di-tert-Butyl-4-hydroxybenzaldehyde	1620-98-0	35	1.3E-11	4.8E-09	9.7E-09	3.0E-10	2.0E-08	4.8E-08
Fluoranthene	206-44-0	35	8.3E-10	6.1E-09	5.9E-09	3.7E-09	1.5E-08	2.9E-08
Fluorene	86-73-7	11	0	8.0E-11	1.9E-10	0	4.0E-10	9.5E-10
Hexadecane	544-76-3	28	0	5.8E-10	4.8E-10	6.1E-10	1.4E-09	2.2E-09
1-Hydroxypyrene	5315-79-7	1	0	3.1E-10	1.8E-09	0	0	1.1E-08
Lead		35	5.3E-08	2.7E-07	2.3E-07	2.1E-07	6.8E-07	1.2E-06
Manganese		35	4.9E-08	2.7E-07	1.6E-07	2.8E-07	4.4E-07	8.6E-07
2-(Methylthio)benzothiazole	615-22-5	5	0	4.1E-09	1.5E-08	0	2.3E-08	8.3E-08
Molybdenum		14	0	5.0E-10	6.9E-10	0	1.5E-09	2.5E-09
Naphthalene	91-20-3	1	0	1.4E-11	8.5E-11	0	0	5.0E-10
Naphthalene, 1-methyl-	90-12-0	31	0	3.7E-11	1.3E-10	6.2E-12	7.8E-11	7.6E-10
Naphthalene, 1,2-dimethyl-	573-98-8	12	0	8.6E-12	1.9E-11	0	4.3E-11	9.9E-11
Naphthalene, 1,6-dimethyl-	575-43-9	35	2.3E-11	5.7E-11	2.7E-11	5.0E-11	1.2E-10	1.6E-10
Naphthalene, 2-(bromomethyl)-	939-26-4	35	5.3E-11	1.5E-09	7.1E-10	1.5E-09	2.6E-09	3.4E-09
Naphthalene, 2,3-dimethyl-	581-40-8	35	1.1E-11	4.4E-10	4.4E-10	3.0E-10	1.3E-09	1.9E-09
Naphthalene, 2-methyl	91-57-6	19	0	3.4E-11	1.4E-10	6.0E-12	7.5E-11	8.3E-10
1-Octadecene	112-88-9	32	0	1.3E-09	1.1E-09	9.9E-10	3.4E-09	3.9E-09
17-Pentatriacontene	6971-40-0	9	0	1.1E-09	2.5E-09	0	5.9E-09	1.1E-08

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Phenanthrene	85-01-8	35	4.6E-10	2.7E-09	3.3E-09	1.5E-09	7.7E-09	1.7E-08
Phenanthrene, 1-methyl	832-69-9	35	6.2E-11	7.1E-10	6.9E-10	5.1E-10	1.8E-09	3.1E-09
Phenanthrene, 2-methyl-	2531-84-2	35	1.9E-11	9.2E-10	1.1E-09	5.5E-10	2.6E-09	5.0E-09
Phenanthrene, 3-methyl	832-71-3	35	1.2E-10	1.5E-09	1.6E-09	9.7E-10	4.2E-09	7.7E-09
N-Phenylbenzamide	93-98-1	22	0	6.0E-09	1.2E-08	9.2E-10	3.6E-08	4.2E-08
Phthalimide	85-41-6	16	0	1.1E-09	2.5E-09	0	5.4E-09	1.1E-08
Pyrene	129-00-0	35	2.4E-09	1.3E-08	8.4E-09	1.1E-08	2.7E-08	3.7E-08
Pyridine, 2-(4-methylphenyl)-	4467-06-5	2	0	2.8E-11	1.6E-10	0	9.4E-12	9.3E-10
Selenium		4	0	1.6E-09	5.0E-09	0	1.1E-08	2.4E-08
Strontium		35	2.2E-08	2.3E-07	4.5E-07	1.2E-07	6.9E-07	2.6E-06
Thallium		21	0	6.5E-11	1.1E-10	5.2E-11	2.0E-10	5.9E-10
Tin		30	0	2.5E-09	2.5E-09	1.9E-09	6.8E-09	1.0E-08
Triethylene glycol monobutyl ether	143-22-6	3	0	3.1E-10	1.3E-09	0	1.6E-09	7.1E-09
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	35	5.4E-10	9.3E-10	3.0E-10	8.6E-10	1.4E-09	1.8E-09
Vanadium		2	0	1.3E-09	5.4E-09	0	6.9E-09	2.3E-08
Zinc		35	1.3E-05	5.7E-05	3.0E-05	5.5E-05	1.0E-04	1.6E-04

[a] 35 field-specific $ADD_{ing\text{-}field}$ are included in the table. $ADD_{ing\text{-}field}$ was calculated from field-specific average concentrations ($C_{ing\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial gastrointestinal fluids extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

Table F-340. Field-Specific Average Ingestion Daily Dose[a] for Chronic Non-Cancer Hazard ($ADD_{ing\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related General Chemicals**[b]—Combined Gender **Referees 50<70 Years**

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Acenaphthylene	208-96-8	35	1.1E-11	8.6E-11	8.1E-11	5.2E-11	2.5E-10	3.2E-10
Aluminum		35	1.9E-06	6.1E-06	3.1E-06	5.5E-06	1.1E-05	1.4E-05
Aniline	62-53-3	12	0	4.8E-10	1.1E-09	0	2.7E-09	4.8E-09
Anthracene	120-12-7	28	0	2.3E-10	4.0E-10	8.8E-11	8.6E-10	1.9E-09
Anthracene, 2-methyl-	613-12-7	35	1.3E-10	9.0E-10	7.9E-10	6.5E-10	2.1E-09	4.0E-09
Anthracene, 9,10-dimethyl	781-43-1	2	0	7.3E-12	4.1E-11	0	4.8E-12	2.4E-10
Anthracene, 9,10-diphenyl-	1499-10-1	2	0	5.7E-11	2.6E-10	0	1.6E-10	1.4E-09
Anthracene, 9-phenyl	602-55-1	30	0	8.6E-11	9.0E-11	5.2E-11	2.7E-10	3.8E-10

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Antimony		35	4.0E-10	6.6E-09	5.8E-09	5.6E-09	1.5E-08	2.7E-08
Barium		35	1.1E-07	4.2E-07	2.9E-07	4.1E-07	7.9E-07	1.6E-06
Benzene, n-butyl-	104-51-8	29	0	4.8E-11	1.2E-10	2.7E-11	7.4E-11	7.5E-10
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	20	0	1.3E-08	1.8E-08	5.0E-09	4.9E-08	6.4E-08
Benz[a]anthracene	56-55-3	35	5.2E-11	7.9E-10	8.7E-10	3.8E-10	2.5E-09	3.5E-09
Benzo[b]fluoranthene	205-99-2	35	2.2E-10	1.1E-09	8.1E-10	7.3E-10	2.6E-09	3.2E-09
7H-Benzo[c]fluorene	205-12-9	31	0	2.1E-10	3.4E-10	6.9E-11	8.6E-10	1.7E-09
Benzo[k]fluoranthene	207-08-9	35	3.0E-11	3.5E-10	3.3E-10	2.2E-10	1.0E-09	1.3E-09
Benzothiazole	95-16-9	35	3.1E-08	1.3E-07	9.2E-08	1.0E-07	2.8E-07	3.2E-07
Benzothiazole, 2-phenyl-	883-93-2	35	4.1E-09	1.4E-08	1.3E-08	1.0E-08	3.3E-08	7.7E-08
Benzothiazolone	934-34-9	35	2.2E-07	3.4E-07	6.6E-08	3.4E-07	4.4E-07	4.5E-07
Benzyl butyl phthalate	85-68-7	35	3.5E-10	6.9E-09	5.7E-09	6.1E-09	1.5E-08	2.7E-08
Beryllium		11	0	1.7E-10	2.8E-10	0	6.0E-10	9.5E-10
Butylated Hydroxytoluene	128-37-0	19	0	1.8E-10	3.4E-10	6.4E-11	9.2E-10	1.5E-09
Cadmium		34	0	4.7E-09	2.9E-09	4.2E-09	9.9E-09	1.1E-08
Chromium		35	2.4E-09	1.3E-08	1.3E-08	8.6E-09	2.8E-08	7.2E-08
Cobalt		35	5.5E-08	3.0E-07	2.0E-07	2.8E-07	5.7E-07	1.0E-06
Copper		35	2.3E-07	5.8E-07	3.0E-07	5.3E-07	9.5E-07	1.8E-06
Cyclohexyl isothiocyanate	1122-82-3	29	0	4.3E-08	3.1E-08	4.2E-08	1.0E-07	1.1E-07
Dibenz[a,h]anthracene	53-70-3	7	0	4.7E-11	1.2E-10	0	2.1E-10	5.8E-10
Dibenzothiophene	132-65-0	27	0	1.8E-10	2.8E-10	5.4E-11	7.4E-10	1.1E-09
Dibutyl phthalate	84-74-2	31	0	1.3E-08	9.9E-09	1.0E-08	3.2E-08	3.7E-08
Diethyl Phthalate	84-66-2	23	0	1.1E-09	9.6E-10	1.2E-09	2.6E-09	3.4E-09
Diisobutyl Phthalate	84-69-5	32	0	1.3E-09	3.4E-09	3.0E-10	3.5E-09	2.0E-08
Diisooctylphthalate	27554-26-3	33	0	2.8E-08	2.1E-08	2.0E-08	7.0E-08	7.3E-08
Di-n-octyl phthalate	117-84-0	26	0	2.7E-09	6.6E-09	7.2E-10	1.3E-08	2.9E-08
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	4	0	2.3E-11	7.2E-11	0	1.7E-10	3.1E-10
3,5-di-tert-Butyl-4-hydroxybenzaldehyde	1620-98-0	35	1.3E-11	4.8E-09	9.7E-09	3.0E-10	2.0E-08	4.8E-08
Fluoranthene	206-44-0	35	8.4E-10	6.1E-09	6.0E-09	3.7E-09	1.6E-08	2.9E-08
Fluorene	86-73-7	11	0	8.0E-11	1.9E-10	0	4.0E-10	9.5E-10
Hexadecane	544-76-3	28	0	5.8E-10	4.8E-10	6.1E-10	1.4E-09	2.2E-09
1-Hydroxypyrene	5315-79-7	1	0	3.1E-10	1.9E-09	0	0	1.1E-08
Lead		35	5.3E-08	2.7E-07	2.4E-07	2.1E-07	6.9E-07	1.2E-06
Manganese		35	4.9E-08	2.7E-07	1.6E-07	2.8E-07	4.4E-07	8.6E-07

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
2-(Methylthio)benzothiazole	615-22-5	5	0	4.1E-09	1.5E-08	0	2.3E-08	8.3E-08
Molybdenum		14	0	5.0E-10	6.9E-10	0	1.5E-09	2.5E-09
Naphthalene	91-20-3	1	0	1.4E-11	8.5E-11	0	0	5.0E-10
Naphthalene, 1-methyl-	90-12-0	31	0	3.7E-11	1.3E-10	6.2E-12	7.8E-11	7.7E-10
Naphthalene, 1,2-dimethyl-	573-98-8	12	0	8.7E-12	1.9E-11	0	4.3E-11	9.9E-11
Naphthalene, 1,6-dimethyl-	575-43-9	35	2.3E-11	5.7E-11	2.7E-11	5.0E-11	1.2E-10	1.6E-10
Naphthalene, 2-(bromomethyl)-	939-26-4	35	5.3E-11	1.5E-09	7.1E-10	1.5E-09	2.6E-09	3.4E-09
Naphthalene, 2,3-dimethyl-	581-40-8	35	1.1E-11	4.4E-10	4.4E-10	3.0E-10	1.3E-09	1.9E-09
Naphthalene, 2-methyl	91-57-6	19	0	3.4E-11	1.4E-10	6.0E-12	7.5E-11	8.3E-10
1-Octadecene	112-88-9	32	0	1.3E-09	1.1E-09	1.0E-09	3.4E-09	4.0E-09
17-Pentatriacontene	6971-40-0	9	0	1.1E-09	2.6E-09	0	5.9E-09	1.1E-08
Phenanthrene	85-01-8	35	4.7E-10	2.7E-09	3.3E-09	1.5E-09	7.7E-09	1.7E-08
Phenanthrene, 1-methyl	832-69-9	35	6.2E-11	7.2E-10	6.9E-10	5.1E-10	1.8E-09	3.1E-09
Phenanthrene, 2-methyl-	2531-84-2	35	1.9E-11	9.3E-10	1.1E-09	5.5E-10	2.6E-09	5.1E-09
Phenanthrene, 3-methyl	832-71-3	35	1.2E-10	1.5E-09	1.6E-09	9.7E-10	4.2E-09	7.7E-09
N-Phenylbenzamide	93-98-1	22	0	6.0E-09	1.2E-08	9.2E-10	3.6E-08	4.2E-08
Phthalimide	85-41-6	16	0	1.1E-09	2.5E-09	0	5.4E-09	1.1E-08
Pyrene	129-00-0	35	2.4E-09	1.3E-08	8.4E-09	1.1E-08	2.7E-08	3.7E-08
Pyridine, 2-(4-methylphenyl)-	4467-06-5	2	0	2.8E-11	1.6E-10	0	9.4E-12	9.4E-10
Selenium		4	0	1.6E-09	5.0E-09	0	1.1E-08	2.4E-08
Strontium		35	2.2E-08	2.3E-07	4.5E-07	1.2E-07	6.9E-07	2.6E-06
Thallium		21	0	6.5E-11	1.1E-10	5.2E-11	2.0E-10	5.9E-10
Tin		30	0	2.5E-09	2.5E-09	1.9E-09	6.8E-09	1.0E-08
Triethylene glycol monobutyl ether	143-22-6	3	0	3.2E-10	1.3E-09	0	1.6E-09	7.1E-09
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	35	5.4E-10	9.3E-10	3.0E-10	8.6E-10	1.4E-09	1.8E-09
Vanadium		2	0	1.3E-09	5.5E-09	0	6.9E-09	2.3E-08
Zinc		35	1.3E-05	5.7E-05	3.0E-05	5.5E-05	1.0E-04	1.6E-04

[a] 35 field-specific $ADD_{ing\text{-}field}$ are included in the table. $ADD_{ing\text{-}field}$ was calculated from field-specific average concentrations ($C_{ing\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial gastrointestinal fluids extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

Table F-341. Field-Specific Average Ingestion Daily Dose[a] for Chronic Non-Cancer Hazard ($ADD_{ing\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related General Chemicals**[b]—Combined Gender **Spectators Third Trimester Fetus<0 Years**

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Acenaphthylene	208-96-8	35	9.6E-12	7.4E-11	6.9E-11	4.5E-11	2.2E-10	2.7E-10
Aluminum		35	1.6E-06	5.2E-06	2.7E-06	4.7E-06	9.5E-06	1.2E-05
Aniline	62-53-3	12	0	4.1E-10	9.4E-10	0	2.3E-09	4.2E-09
Anthracene	120-12-7	28	0	1.9E-10	3.4E-10	7.5E-11	7.3E-10	1.6E-09
Anthracene, 2-methyl-	613-12-7	35	1.1E-10	7.7E-10	6.8E-10	5.6E-10	1.8E-09	3.4E-09
Anthracene, 9,10-dimethyl	781-43-1	2	0	6.3E-12	3.5E-11	0	4.1E-12	2.1E-10
Anthracene, 9,10-diphenyl-	1499-10-1	2	0	4.8E-11	2.2E-10	0	1.4E-10	1.2E-09
Anthracene, 9-phenyl	602-55-1	30	0	7.3E-11	7.7E-11	4.5E-11	2.3E-10	3.3E-10
Antimony		35	3.4E-10	5.6E-09	5.0E-09	4.8E-09	1.3E-08	2.4E-08
Barium		35	9.3E-08	3.6E-07	2.4E-07	3.5E-07	6.8E-07	1.3E-06
Benzene, n-butyl-	104-51-8	29	0	4.1E-11	1.1E-10	2.3E-11	6.4E-11	6.4E-10
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	20	0	1.1E-08	1.5E-08	4.2E-09	4.2E-08	5.5E-08
Benz[a]anthracene	56-55-3	35	4.4E-11	6.8E-10	7.4E-10	3.2E-10	2.1E-09	3.0E-09
Benzo[b]fluoranthene	205-99-2	35	1.9E-10	9.3E-10	6.9E-10	6.3E-10	2.3E-09	2.7E-09
7H-Benzo[c]fluorene	205-12-9	31	0	1.8E-10	2.9E-10	5.9E-11	7.3E-10	1.5E-09
Benzo[k]fluoranthene	207-08-9	35	2.5E-11	3.0E-10	2.9E-10	1.9E-10	8.9E-10	1.1E-09
Benzothiazole	95-16-9	35	2.6E-08	1.1E-07	7.9E-08	8.6E-08	2.4E-07	2.7E-07
Benzothiazole, 2-phenyl-	883-93-2	35	3.5E-09	1.2E-08	1.2E-08	8.9E-09	2.8E-08	6.6E-08
Benzothiazolone	934-34-9	35	1.8E-07	2.9E-07	5.7E-08	2.9E-07	3.8E-07	3.9E-07
Benzyl butyl phthalate	85-68-7	35	3.0E-10	5.9E-09	4.9E-09	5.2E-09	1.3E-08	2.3E-08
Beryllium		11	0	1.5E-10	2.4E-10	0	5.2E-10	8.2E-10
Butylated Hydroxytoluene	128-37-0	19	0	1.6E-10	2.9E-10	5.4E-11	7.9E-10	1.3E-09
Cadmium		34	0	4.0E-09	2.5E-09	3.6E-09	8.4E-09	9.3E-09
Chromium		35	2.1E-09	1.1E-08	1.1E-08	7.4E-09	2.4E-08	6.2E-08
Cobalt		35	4.7E-08	2.5E-07	1.7E-07	2.4E-07	4.8E-07	8.8E-07
Copper		35	2.0E-07	5.0E-07	2.6E-07	4.5E-07	8.1E-07	1.6E-06
Cyclohexyl isothiocyanate	1122-82-3	29	0	3.7E-08	2.7E-08	3.6E-08	8.6E-08	9.6E-08
Dibenz[a,h]anthracene	53-70-3	7	0	4.0E-11	1.0E-10	0	1.8E-10	5.0E-10
Dibenzothiophene	132-65-0	27	0	1.6E-10	2.4E-10	4.6E-11	6.3E-10	9.5E-10
Dibutyl phthalate	84-74-2	31	0	1.1E-08	8.4E-09	8.9E-09	2.7E-08	3.2E-08
Diethyl Phthalate	84-66-2	23	0	9.4E-10	8.3E-10	1.0E-09	2.2E-09	2.9E-09
Diisobutyl Phthalate	84-69-5	32	0	1.1E-09	2.9E-09	2.5E-10	3.0E-09	1.7E-08

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Diisooctylphthalate	27554-26-3	33	0	2.4E-08	1.8E-08	1.7E-08	6.0E-08	6.3E-08
Di-n-octyl phthalate	117-84-0	26	0	2.3E-09	5.6E-09	6.1E-10	1.1E-08	2.5E-08
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	4	0	1.9E-11	6.1E-11	0	1.5E-10	2.7E-10
3,5-di-tert-Butyl-4-hydroxybenzaldehyde	1620-98-0	35	1.1E-11	4.1E-09	8.3E-09	2.6E-10	1.7E-08	4.1E-08
Fluoranthene	206-44-0	35	7.2E-10	5.3E-09	5.1E-09	3.1E-09	1.3E-08	2.5E-08
Fluorene	86-73-7	11	0	6.8E-11	1.6E-10	0	3.4E-10	8.1E-10
Hexadecane	544-76-3	28	0	4.9E-10	4.2E-10	5.2E-10	1.2E-09	1.9E-09
1-Hydroxypyrene	5315-79-7	1	0	2.7E-10	1.6E-09	0	0	9.4E-09
Lead		35	4.5E-08	2.3E-07	2.0E-07	1.8E-07	5.9E-07	1.1E-06
Manganese		35	4.2E-08	2.3E-07	1.4E-07	2.4E-07	3.8E-07	7.4E-07
2-(Methylthio)benzothiazole	615-22-5	5	0	3.5E-09	1.3E-08	0	2.0E-08	7.1E-08
Molybdenum		14	0	4.3E-10	5.9E-10	0	1.3E-09	2.1E-09
Naphthalene	91-20-3	1	0	1.2E-11	7.3E-11	0	0	4.3E-10
Naphthalene, 1-methyl-	90-12-0	31	0	3.2E-11	1.1E-10	5.3E-12	6.7E-11	6.6E-10
Naphthalene, 1,2-dimethyl-	573-98-8	12	0	7.4E-12	1.7E-11	0	3.7E-11	8.5E-11
Naphthalene, 1,6-dimethyl-	575-43-9	35	1.9E-11	4.9E-11	2.3E-11	4.3E-11	9.9E-11	1.4E-10
Naphthalene, 2-(bromomethyl)-	939-26-4	35	4.6E-11	1.3E-09	6.1E-10	1.3E-09	2.3E-09	2.9E-09
Naphthalene, 2,3-dimethyl-	581-40-8	35	9.6E-12	3.8E-10	3.7E-10	2.6E-10	1.1E-09	1.6E-09
Naphthalene, 2-methyl	91-57-6	19	0	2.9E-11	1.2E-10	5.2E-12	6.5E-11	7.1E-10
1-Octadecene	112-88-9	32	0	1.1E-09	9.6E-10	8.5E-10	3.0E-09	3.4E-09
17-Pentatriacontene	6971-40-0	9	0	9.3E-10	2.2E-09	0	5.1E-09	9.8E-09
Phenanthrene	85-01-8	35	4.0E-10	2.3E-09	2.8E-09	1.3E-09	6.6E-09	1.5E-08
Phenanthrene, 1-methyl	832-69-9	35	5.3E-11	6.1E-10	5.9E-10	4.4E-10	1.5E-09	2.7E-09
Phenanthrene, 2-methyl-	2531-84-2	35	1.7E-11	7.9E-10	9.1E-10	4.7E-10	2.2E-09	4.3E-09
Phenanthrene, 3-methyl	832-71-3	35	1.0E-10	1.3E-09	1.4E-09	8.3E-10	3.6E-09	6.6E-09
N-Phenylbenzamide	93-98-1	22	0	5.1E-09	9.9E-09	7.9E-10	3.1E-08	3.6E-08
Phthalimide	85-41-6	16	0	9.2E-10	2.1E-09	0	4.7E-09	9.8E-09
Pyrene	129-00-0	35	2.1E-09	1.1E-08	7.2E-09	9.1E-09	2.3E-08	3.2E-08
Pyridine, 2-(4-methylphenyl)-	4467-06-5	2	0	2.4E-11	1.4E-10	0	8.0E-12	8.0E-10
Selenium		4	0	1.4E-09	4.3E-09	0	9.7E-09	2.1E-08
Strontium		35	1.9E-08	2.0E-07	3.8E-07	1.1E-07	5.9E-07	2.2E-06
Thallium		21	0	5.6E-11	9.5E-11	4.5E-11	1.7E-10	5.1E-10
Tin		30	0	2.2E-09	2.2E-09	1.6E-09	5.8E-09	8.6E-09

Chemical	CASRN[c]	Detection	$ADD_{ing-field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Triethylene glycol monobutyl ether	143-22-6	3	0	2.7E-10	1.1E-09	0	1.4E-09	6.1E-09
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	35	4.6E-10	8.0E-10	2.5E-10	7.4E-10	1.2E-09	1.5E-09
Vanadium		2	0	1.1E-09	4.7E-09	0	5.9E-09	2.0E-08
Zinc		35	1.1E-05	4.9E-05	2.6E-05	4.7E-05	8.7E-05	1.4E-04

[a] 35 field-specific $ADD_{ing-field}$ are included in the table. $ADD_{ing-field}$ was calculated from field-specific average concentrations ($C_{ing-crumb\ rubber-field}$) of a chemical detected in artificial gastrointestinal fluids extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

Table F-342. Field-Specific Average Ingestion Daily Dose[a] for Chronic Non-Cancer Hazard ($ADD_{ing-field}$, milligrams per kilogram BW per day) of **Field-Related General Chemicals**[b]—Combined Gender **Spectators 0<2 Years**

Chemical	CASRN[c]	Detection	$ADD_{ing-field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Acenaphthylene	208-96-8	35	6.7E-10	5.1E-09	4.8E-09	3.1E-09	1.5E-08	1.9E-08
Aluminum		35	1.1E-04	3.6E-04	1.8E-04	3.3E-04	6.6E-04	8.5E-04
Aniline	62-53-3	12	0	2.9E-08	6.6E-08	0	1.6E-07	2.9E-07
Anthracene	120-12-7	28	0	1.4E-08	2.4E-08	5.2E-09	5.1E-08	1.1E-07
Anthracene, 2-methyl-	613-12-7	35	7.9E-09	5.4E-08	4.7E-08	3.9E-08	1.2E-07	2.4E-07
Anthracene, 9,10-dimethyl	781-43-1	2	0	4.4E-10	2.4E-09	0	2.8E-10	1.4E-08
Anthracene, 9,10-diphenyl-	1499-10-1	2	0	3.4E-09	1.5E-08	0	9.6E-09	8.6E-08
Anthracene, 9-phenyl	602-55-1	30	0	5.1E-09	5.4E-09	3.1E-09	1.6E-08	2.3E-08
Antimony		35	2.4E-08	3.9E-07	3.5E-07	3.3E-07	9.0E-07	1.6E-06
Barium		35	6.5E-06	2.5E-05	1.7E-05	2.4E-05	4.7E-05	9.3E-05
Benzene, n-butyl-	104-51-8	29	0	2.9E-09	7.4E-09	1.6E-09	4.4E-09	4.5E-08
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	20	0	7.8E-07	1.1E-06	2.9E-07	2.9E-06	3.8E-06
Benz[a]anthracene	56-55-3	35	3.1E-09	4.7E-08	5.2E-08	2.3E-08	1.5E-07	2.1E-07
Benzo[b]fluoranthene	205-99-2	35	1.3E-08	6.5E-08	4.8E-08	4.4E-08	1.6E-07	1.9E-07
7H-Benzo[c]fluorene	205-12-9	31	0	1.3E-08	2.0E-08	4.1E-09	5.1E-08	1.0E-07
Benzo[k]fluoranthene	207-08-9	35	1.8E-09	2.1E-08	2.0E-08	1.3E-08	6.2E-08	7.9E-08
Benzothiazole	95-16-9	35	1.8E-06	8.0E-06	5.5E-06	5.9E-06	1.7E-05	1.9E-05
Benzothiazole, 2-phenyl-	883-93-2	35	2.4E-07	8.6E-07	8.0E-07	6.2E-07	2.0E-06	4.6E-06
Benzothiazolone	934-34-9	35	1.3E-05	2.0E-05	4.0E-06	2.0E-05	2.6E-05	2.7E-05

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Benzyl butyl phthalate	85-68-7	35	2.1E-08	4.1E-07	3.4E-07	3.6E-07	9.1E-07	1.6E-06
Beryllium		11	0	1.0E-08	1.7E-08	0	3.6E-08	5.7E-08
Butylated Hydroxytoluene	128-37-0	19	0	1.1E-08	2.0E-08	3.8E-09	5.5E-08	9.2E-08
Cadmium		34	0	2.8E-07	1.7E-07	2.5E-07	5.9E-07	6.4E-07
Chromium		35	1.4E-07	7.7E-07	7.6E-07	5.1E-07	1.7E-06	4.3E-06
Cobalt		35	3.3E-06	1.8E-05	1.2E-05	1.7E-05	3.4E-05	6.1E-05
Copper		35	1.4E-05	3.4E-05	1.8E-05	3.2E-05	5.7E-05	1.1E-04
Cyclohexyl isothiocyanate	1122-82-3	29	0	2.5E-06	1.9E-06	2.5E-06	6.0E-06	6.6E-06
Dibenz[a,h]anthracene	53-70-3	7	0	2.8E-09	7.0E-09	0	1.3E-08	3.5E-08
Dibenzothiophene	132-65-0	27	0	1.1E-08	1.6E-08	3.2E-09	4.4E-08	6.6E-08
Dibutyl phthalate	84-74-2	31	0	7.8E-07	5.9E-07	6.2E-07	1.9E-06	2.2E-06
Diethyl Phthalate	84-66-2	23	0	6.5E-08	5.7E-08	7.1E-08	1.5E-07	2.0E-07
Diisobutyl Phthalate	84-69-5	32	0	7.8E-08	2.0E-07	1.8E-08	2.1E-07	1.2E-06
Diisooctylphthalate	27554-26-3	33	0	1.6E-06	1.2E-06	1.2E-06	4.2E-06	4.3E-06
Di-n-octyl phthalate	117-84-0	26	0	1.6E-07	3.9E-07	4.3E-08	7.9E-07	1.7E-06
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	4	0	1.3E-09	4.3E-09	0	1.0E-08	1.9E-08
3,5-di-tert-Butyl-4-hydroxybenzaldehyde	1620-98-0	35	8.0E-10	2.9E-07	5.8E-07	1.8E-08	1.2E-06	2.9E-06
Fluoranthene	206-44-0	35	5.0E-08	3.6E-07	3.5E-07	2.2E-07	9.2E-07	1.7E-06
Fluorene	86-73-7	11	0	4.8E-09	1.1E-08	0	2.4E-08	5.7E-08
Hexadecane	544-76-3	28	0	3.4E-08	2.9E-08	3.6E-08	8.2E-08	1.3E-07
1-Hydroxypyrene	5315-79-7	1	0	1.9E-08	1.1E-07	0	0	6.5E-07
Lead		35	3.1E-06	1.6E-05	1.4E-05	1.2E-05	4.1E-05	7.3E-05
Manganese		35	2.9E-06	1.6E-05	9.5E-06	1.7E-05	2.6E-05	5.1E-05
2-(Methylthio)benzothiazole	615-22-5	5	0	2.4E-07	8.8E-07	0	1.4E-06	4.9E-06
Molybdenum		14	0	3.0E-08	4.1E-08	0	9.2E-08	1.5E-07
Naphthalene	91-20-3	1	0	8.5E-10	5.1E-09	0	0	3.0E-08
Naphthalene, 1-methyl-	90-12-0	31	0	2.2E-09	7.7E-09	3.7E-10	4.6E-09	4.6E-08
Naphthalene, 1,2-dimethyl-	573-98-8	12	0	5.1E-10	1.2E-09	0	2.6E-09	5.9E-09
Naphthalene, 1,6-dimethyl-	575-43-9	35	1.4E-09	3.4E-09	1.6E-09	3.0E-09	6.9E-09	9.6E-09
Naphthalene, 2-(bromomethyl)-	939-26-4	35	3.2E-09	8.9E-08	4.2E-08	8.7E-08	1.6E-07	2.0E-07
Naphthalene, 2,3-dimethyl-	581-40-8	35	6.7E-10	2.6E-08	2.6E-08	1.8E-08	7.9E-08	1.1E-07
Naphthalene, 2-methyl	91-57-6	19	0	2.0E-09	8.3E-09	3.6E-10	4.5E-09	5.0E-08
1-Octadecene	112-88-9	32	0	7.6E-08	6.7E-08	5.9E-08	2.1E-07	2.4E-07
17-Pentatriacontene	6971-40-0	9	0	6.5E-08	1.5E-07	0	3.5E-07	6.8E-07

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Phenanthrene	85-01-8	35	2.8E-08	1.6E-07	2.0E-07	9.0E-08	4.6E-07	1.0E-06
Phenanthrene, 1-methyl	832-69-9	35	3.7E-09	4.3E-08	4.1E-08	3.0E-08	1.1E-07	1.9E-07
Phenanthrene, 2-methyl-	2531-84-2	35	1.2E-09	5.5E-08	6.3E-08	3.3E-08	1.6E-07	3.0E-07
Phenanthrene, 3-methyl	832-71-3	35	7.0E-09	9.1E-08	9.8E-08	5.8E-08	2.5E-07	4.6E-07
N-Phenylbenzamide	93-98-1	22	0	3.6E-07	6.9E-07	5.5E-08	2.2E-06	2.5E-06
Phthalimide	85-41-6	16	0	6.4E-08	1.5E-07	0	3.2E-07	6.8E-07
Pyrene	129-00-0	35	1.4E-07	7.7E-07	5.0E-07	6.3E-07	1.6E-06	2.2E-06
Pyridine, 2-(4-methylphenyl)-	4467-06-5	2	0	1.6E-09	9.4E-09	0	5.6E-10	5.6E-08
Selenium		4	0	9.7E-08	3.0E-07	0	6.8E-07	1.4E-06
Strontium		35	1.3E-06	1.4E-05	2.7E-05	7.3E-06	4.1E-05	1.6E-04
Thallium		21	0	3.9E-09	6.6E-09	3.1E-09	1.2E-08	3.5E-08
Tin		30	0	1.5E-07	1.5E-07	1.1E-07	4.0E-07	6.0E-07
Triethylene glycol monobutyl ether	143-22-6	3	0	1.9E-08	7.6E-08	0	9.8E-08	4.2E-07
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	35	3.2E-08	5.6E-08	1.8E-08	5.1E-08	8.6E-08	1.1E-07
Vanadium		2	0	7.9E-08	3.2E-07	0	4.1E-07	1.4E-06
Zinc		35	7.5E-04	3.4E-03	1.8E-03	3.3E-03	6.1E-03	9.7E-03

[a] 35 field-specific $ADD_{ing\text{-}field}$ are included in the table. $ADD_{ing\text{-}field}$ was calculated from field-specific average concentrations ($C_{ing\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial gastrointestinal fluids extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

Table F-343. Field-Specific Average Ingestion Daily Dose[a] for Chronic Non-Cancer Hazard ($ADD_{ing\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related General Chemicals**[b]—Combined Gender **Spectators 2<6 Years**

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Acenaphthylene	208-96-8	35	3.2E-10	2.4E-09	2.3E-09	1.5E-09	7.1E-09	9.0E-09
Aluminum		35	5.4E-05	1.7E-04	8.7E-05	1.6E-04	3.1E-04	4.0E-04
Aniline	62-53-3	12	0	1.4E-08	3.1E-08	0	7.6E-08	1.4E-07
Anthracene	120-12-7	28	0	6.4E-09	1.1E-08	2.5E-09	2.4E-08	5.2E-08
Anthracene, 2-methyl-	613-12-7	35	3.7E-09	2.5E-08	2.2E-08	1.8E-08	5.9E-08	1.1E-07
Anthracene, 9,10-dimethyl	781-43-1	2	0	2.1E-10	1.1E-09	0	1.3E-10	6.8E-09
Anthracene, 9,10-diphenyl-	1499-10-1	2	0	1.6E-09	7.3E-09	0	4.5E-09	4.1E-08
Anthracene, 9-phenyl	602-55-1	30	0	2.4E-09	2.5E-09	1.5E-09	7.6E-09	1.1E-08

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Antimony		35	1.1E-08	1.9E-07	1.6E-07	1.6E-07	4.3E-07	7.8E-07
Barium		35	3.1E-06	1.2E-05	8.0E-06	1.1E-05	2.2E-05	4.4E-05
Benzene, n-butyl-	104-51-8	29	0	1.4E-09	3.5E-09	7.6E-10	2.1E-09	2.1E-08
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	20	0	3.7E-07	5.1E-07	1.4E-07	1.4E-06	1.8E-06
Benz[a]anthracene	56-55-3	35	1.5E-09	2.2E-08	2.5E-08	1.1E-08	6.9E-08	9.7E-08
Benzo[b]fluoranthene	205-99-2	35	6.3E-09	3.1E-08	2.3E-08	2.1E-08	7.5E-08	9.0E-08
7H-Benzo[c]fluorene	205-12-9	31	0	5.9E-09	9.7E-09	1.9E-09	2.4E-08	4.8E-08
Benzo[k]fluoranthene	207-08-9	35	8.4E-10	1.0E-08	9.4E-09	6.3E-09	2.9E-08	3.7E-08
Benzothiazole	95-16-9	35	8.7E-07	3.8E-06	2.6E-06	2.8E-06	7.8E-06	9.0E-06
Benzothiazole, 2-phenyl-	883-93-2	35	1.2E-07	4.1E-07	3.8E-07	2.9E-07	9.3E-07	2.2E-06
Benzothiazolone	934-34-9	35	6.1E-06	9.6E-06	1.9E-06	9.5E-06	1.2E-05	1.3E-05
Benzyl butyl phthalate	85-68-7	35	9.9E-09	1.9E-07	1.6E-07	1.7E-07	4.3E-07	7.7E-07
Beryllium		11	0	4.9E-09	7.8E-09	0	1.7E-08	2.7E-08
Butylated Hydroxytoluene	128-37-0	19	0	5.2E-09	9.6E-09	1.8E-09	2.6E-08	4.3E-08
Cadmium		34	0	1.3E-07	8.1E-08	1.2E-07	2.8E-07	3.1E-07
Chromium		35	6.8E-08	3.7E-07	3.6E-07	2.4E-07	8.0E-07	2.0E-06
Cobalt		35	1.6E-06	8.3E-06	5.7E-06	7.9E-06	1.6E-05	2.9E-05
Copper		35	6.5E-06	1.6E-05	8.5E-06	1.5E-05	2.7E-05	5.2E-05
Cyclohexyl isothiocyanate	1122-82-3	29	0	1.2E-06	8.9E-07	1.2E-06	2.8E-06	3.2E-06
Dibenz[a,h]anthracene	53-70-3	7	0	1.3E-09	3.3E-09	0	6.0E-09	1.6E-08
Dibenzothiophene	132-65-0	27	0	5.2E-09	7.8E-09	1.5E-09	2.1E-08	3.1E-08
Dibutyl phthalate	84-74-2	31	0	3.7E-07	2.8E-07	2.9E-07	8.9E-07	1.1E-06
Diethyl Phthalate	84-66-2	23	0	3.1E-08	2.7E-08	3.4E-08	7.3E-08	9.6E-08
Diisobutyl Phthalate	84-69-5	32	0	3.7E-08	9.5E-08	8.3E-09	9.8E-08	5.6E-07
Diisooctylphthalate	27554-26-3	33	0	7.8E-07	5.8E-07	5.7E-07	2.0E-06	2.1E-06
Di-n-octyl phthalate	117-84-0	26	0	7.7E-08	1.9E-07	2.0E-08	3.7E-07	8.1E-07
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	4	0	6.4E-10	2.0E-09	0	4.9E-09	8.9E-09
3,5-di-tert-Butyl-4-hydroxybenzaldehyde	1620-98-0	35	3.8E-10	1.4E-07	2.7E-07	8.4E-09	5.6E-07	1.4E-06
Fluoranthene	206-44-0	35	2.4E-08	1.7E-07	1.7E-07	1.0E-07	4.4E-07	8.2E-07
Fluorene	86-73-7	11	0	2.3E-09	5.4E-09	0	1.1E-08	2.7E-08
Hexadecane	544-76-3	28	0	1.6E-08	1.4E-08	1.7E-08	3.9E-08	6.3E-08
1-Hydroxypyrene	5315-79-7	1	0	8.8E-09	5.2E-08	0	0	3.1E-07
Lead		35	1.5E-06	7.7E-06	6.6E-06	5.8E-06	1.9E-05	3.5E-05
Manganese		35	1.4E-06	7.6E-06	4.5E-06	7.9E-06	1.2E-05	2.4E-05

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
2-(Methylthio)benzothiazole	615-22-5	5	0	1.2E-07	4.2E-07	0	6.5E-07	2.3E-06
Molybdenum		14	0	1.4E-08	2.0E-08	0	4.3E-08	7.0E-08
Naphthalene	91-20-3	1	0	4.1E-10	2.4E-09	0	0	1.4E-08
Naphthalene, 1-methyl-	90-12-0	31	0	1.0E-09	3.6E-09	1.7E-10	2.2E-09	2.2E-08
Naphthalene, 1,2-dimethyl-	573-98-8	12	0	2.4E-10	5.5E-10	0	1.2E-09	2.8E-09
Naphthalene, 1,6-dimethyl-	575-43-9	35	6.4E-10	1.6E-09	7.7E-10	1.4E-09	3.3E-09	4.5E-09
Naphthalene, 2-(bromomethyl)-	939-26-4	35	1.5E-09	4.2E-08	2.0E-08	4.1E-08	7.4E-08	9.6E-08
Naphthalene, 2,3-dimethyl-	581-40-8	35	3.2E-10	1.2E-08	1.2E-08	8.6E-09	3.7E-08	5.4E-08
Naphthalene, 2-methyl	91-57-6	19	0	9.5E-10	4.0E-09	1.7E-10	2.1E-09	2.3E-08
1-Octadecene	112-88-9	32	0	3.6E-08	3.2E-08	2.8E-08	9.7E-08	1.1E-07
17-Pentatriacontene	6971-40-0	9	0	3.1E-08	7.2E-08	0	1.7E-07	3.2E-07
Phenanthrene	85-01-8	35	1.3E-08	7.6E-08	9.4E-08	4.3E-08	2.2E-07	4.8E-07
Phenanthrene, 1-methyl	832-69-9	35	1.7E-09	2.0E-08	1.9E-08	1.4E-08	5.0E-08	8.8E-08
Phenanthrene, 2-methyl-	2531-84-2	35	5.5E-10	2.6E-08	3.0E-08	1.6E-08	7.4E-08	1.4E-07
Phenanthrene, 3-methyl	832-71-3	35	3.3E-09	4.3E-08	4.6E-08	2.7E-08	1.2E-07	2.2E-07
N-Phenylbenzamide	93-98-1	22	0	1.7E-07	3.3E-07	2.6E-08	1.0E-06	1.2E-06
Phthalimide	85-41-6	16	0	3.0E-08	7.0E-08	0	1.5E-07	3.2E-07
Pyrene	129-00-0	35	6.8E-08	3.6E-07	2.4E-07	3.0E-07	7.7E-07	1.0E-06
Pyridine, 2-(4-methylphenyl)-	4467-06-5	2	0	7.8E-10	4.5E-09	0	2.6E-10	2.6E-08
Selenium		4	0	4.6E-08	1.4E-07	0	3.2E-07	6.8E-07
Strontium		35	6.2E-07	6.5E-06	1.3E-05	3.5E-06	1.9E-05	7.4E-05
Thallium		21	0	1.8E-09	3.1E-09	1.5E-09	5.7E-09	1.7E-08
Tin		30	0	7.2E-08	7.2E-08	5.3E-08	1.9E-07	2.8E-07
Triethylene glycol monobutyl ether	143-22-6	3	0	8.9E-09	3.6E-08	0	4.6E-08	2.0E-07
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	35	1.5E-08	2.6E-08	8.4E-09	2.4E-08	4.1E-08	5.0E-08
Vanadium		2	0	3.7E-08	1.5E-07	0	1.9E-07	6.6E-07
Zinc		35	3.5E-04	1.6E-03	8.5E-04	1.5E-03	2.9E-03	4.6E-03

[a] 35 field-specific $ADD_{ing\text{-}field}$ are included in the table. $ADD_{ing\text{-}field}$ was calculated from field-specific average concentrations ($C_{ing\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial gastrointestinal fluids extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

Table F-344. Field-Specific Average Ingestion Daily Dose[a] for Chronic Non-Cancer Hazard ($ADD_{ing\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related General Chemicals**[b]—Combined Gender **Spectators 6<11 Years**

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Acenaphthylene	208-96-8	35	2.2E-10	1.7E-09	1.6E-09	1.0E-09	5.0E-09	6.3E-09
Aluminum		35	3.8E-05	1.2E-04	6.1E-05	1.1E-04	2.2E-04	2.8E-04
Aniline	62-53-3	12	0	9.5E-09	2.2E-08	0	5.3E-08	9.6E-08
Anthracene	120-12-7	28	0	4.5E-09	7.9E-09	1.7E-09	1.7E-08	3.7E-08
Anthracene, 2-methyl-	613-12-7	35	2.6E-09	1.8E-08	1.6E-08	1.3E-08	4.1E-08	8.0E-08
Anthracene, 9,10-dimethyl	781-43-1	2	0	1.4E-10	8.0E-10	0	9.4E-11	4.8E-09
Anthracene, 9,10-diphenyl-	1499-10-1	2	0	1.1E-09	5.1E-09	0	3.2E-09	2.9E-08
Anthracene, 9-phenyl	602-55-1	30	0	1.7E-09	1.8E-09	1.0E-09	5.3E-09	7.6E-09
Antimony		35	7.9E-09	1.3E-07	1.1E-07	1.1E-07	3.0E-07	5.4E-07
Barium		35	2.1E-06	8.3E-06	5.6E-06	8.1E-06	1.6E-05	3.1E-05
Benzene, n-butyl-	104-51-8	29	0	9.6E-10	2.4E-09	5.4E-10	1.5E-09	1.5E-08
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	20	0	2.6E-07	3.6E-07	9.8E-08	9.6E-07	1.3E-06
Benz[a]anthracene	56-55-3	35	1.0E-09	1.6E-08	1.7E-08	7.5E-09	4.9E-08	6.8E-08
Benzo[b]fluoranthene	205-99-2	35	4.4E-09	2.2E-08	1.6E-08	1.4E-08	5.2E-08	6.3E-08
7H-Benzo[c]fluorene	205-12-9	31	0	4.2E-09	6.8E-09	1.4E-09	1.7E-08	3.4E-08
Benzo[k]fluoranthene	207-08-9	35	5.9E-10	7.0E-09	6.6E-09	4.4E-09	2.0E-08	2.6E-08
Benzothiazole	95-16-9	35	6.1E-07	2.7E-06	1.8E-06	2.0E-06	5.5E-06	6.3E-06
Benzothiazole, 2-phenyl-	883-93-2	35	8.1E-08	2.8E-07	2.7E-07	2.1E-07	6.5E-07	1.5E-06
Benzothiazolone	934-34-9	35	4.3E-06	6.8E-06	1.3E-06	6.6E-06	8.7E-06	8.9E-06
Benzyl butyl phthalate	85-68-7	35	6.9E-09	1.4E-07	1.1E-07	1.2E-07	3.0E-07	5.4E-07
Beryllium		11	0	3.4E-09	5.5E-09	0	1.2E-08	1.9E-08
Butylated Hydroxytoluene	128-37-0	19	0	3.6E-09	6.8E-09	1.3E-09	1.8E-08	3.0E-08
Cadmium		34	0	9.2E-08	5.7E-08	8.3E-08	1.9E-07	2.1E-07
Chromium		35	4.7E-08	2.6E-07	2.5E-07	1.7E-07	5.6E-07	1.4E-06
Cobalt		35	1.1E-06	5.8E-06	4.0E-06	5.6E-06	1.1E-05	2.0E-05
Copper		35	4.5E-06	1.1E-05	5.9E-06	1.0E-05	1.9E-05	3.6E-05
Cyclohexyl isothiocyanate	1122-82-3	29	0	8.5E-07	6.2E-07	8.4E-07	2.0E-06	2.2E-06
Dibenz[a,h]anthracene	53-70-3	7	0	9.3E-10	2.3E-09	0	4.2E-09	1.2E-08
Dibenzothiophene	132-65-0	27	0	3.6E-09	5.5E-09	1.1E-09	1.5E-08	2.2E-08
Dibutyl phthalate	84-74-2	31	0	2.6E-07	2.0E-07	2.1E-07	6.3E-07	7.4E-07
Diethyl Phthalate	84-66-2	23	0	2.2E-08	1.9E-08	2.4E-08	5.1E-08	6.7E-08
Diisobutyl Phthalate	84-69-5	32	0	2.6E-08	6.7E-08	5.9E-09	6.9E-08	3.9E-07

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Diisooctylphthalate	27554-26-3	33	0	5.5E-07	4.1E-07	4.0E-07	1.4E-06	1.4E-06
Di-n-octyl phthalate	117-84-0	26	0	5.4E-08	1.3E-07	1.4E-08	2.6E-07	5.7E-07
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	4	0	4.5E-10	1.4E-09	0	3.4E-09	6.2E-09
3,5-di-tert-Butyl-4-hydroxybenzaldehyde	1620-98-0	35	2.6E-10	9.5E-08	1.9E-07	5.9E-09	3.9E-07	9.6E-07
Fluoranthene	206-44-0	35	1.7E-08	1.2E-07	1.2E-07	7.2E-08	3.1E-07	5.8E-07
Fluorene	86-73-7	11	0	1.6E-09	3.8E-09	0	7.9E-09	1.9E-08
Hexadecane	544-76-3	28	0	1.1E-08	9.6E-09	1.2E-08	2.7E-08	4.4E-08
1-Hydroxypyrene	5315-79-7	1	0	6.2E-09	3.7E-08	0	0	2.2E-07
Lead		35	1.0E-06	5.4E-06	4.7E-06	4.1E-06	1.4E-05	2.4E-05
Manganese		35	9.7E-07	5.3E-06	3.2E-06	5.5E-06	8.8E-06	1.7E-05
2-(Methylthio)benzothiazole	615-22-5	5	0	8.1E-08	2.9E-07	0	4.6E-07	1.6E-06
Molybdenum		14	0	9.9E-09	1.4E-08	0	3.0E-08	4.9E-08
Naphthalene	91-20-3	1	0	2.8E-10	1.7E-09	0	0	9.9E-09
Naphthalene, 1-methyl-	90-12-0	31	0	7.3E-10	2.5E-09	1.2E-10	1.5E-09	1.5E-08
Naphthalene, 1,2-dimethyl-	573-98-8	12	0	1.7E-10	3.8E-10	0	8.6E-10	2.0E-09
Naphthalene, 1,6-dimethyl-	575-43-9	35	4.5E-10	1.1E-09	5.4E-10	9.9E-10	2.3E-09	3.2E-09
Naphthalene, 2-(bromomethyl)-	939-26-4	35	1.1E-09	3.0E-08	1.4E-08	2.9E-08	5.2E-08	6.7E-08
Naphthalene, 2,3-dimethyl-	581-40-8	35	2.2E-10	8.7E-09	8.7E-09	6.0E-09	2.6E-08	3.8E-08
Naphthalene, 2-methyl	91-57-6	19	0	6.6E-10	2.8E-09	1.2E-10	1.5E-09	1.6E-08
1-Octadecene	112-88-9	32	0	2.5E-08	2.2E-08	2.0E-08	6.8E-08	7.8E-08
17-Pentatriacontene	6971-40-0	9	0	2.1E-08	5.1E-08	0	1.2E-07	2.3E-07
Phenanthrene	85-01-8	35	9.2E-09	5.3E-08	6.6E-08	3.0E-08	1.5E-07	3.4E-07
Phenanthrene, 1-methyl	832-69-9	35	1.2E-09	1.4E-08	1.4E-08	1.0E-08	3.5E-08	6.2E-08
Phenanthrene, 2-methyl-	2531-84-2	35	3.8E-10	1.8E-08	2.1E-08	1.1E-08	5.2E-08	1.0E-07
Phenanthrene, 3-methyl	832-71-3	35	2.3E-09	3.0E-08	3.2E-08	1.9E-08	8.3E-08	1.5E-07
N-Phenylbenzamide	93-98-1	22	0	1.2E-07	2.3E-07	1.8E-08	7.2E-07	8.4E-07
Phthalimide	85-41-6	16	0	2.1E-08	4.9E-08	0	1.1E-07	2.3E-07
Pyrene	129-00-0	35	4.7E-08	2.6E-07	1.7E-07	2.1E-07	5.4E-07	7.3E-07
Pyridine, 2-(4-methylphenyl)-	4467-06-5	2	0	5.5E-10	3.1E-09	0	1.9E-10	1.9E-08
Selenium		4	0	3.2E-08	9.9E-08	0	2.3E-07	4.8E-07
Strontium		35	4.4E-07	4.6E-06	8.9E-06	2.4E-06	1.4E-05	5.2E-05
Thallium		21	0	1.3E-09	2.2E-09	1.0E-09	4.0E-09	1.2E-08
Tin		30	0	5.0E-08	5.0E-08	3.7E-08	1.3E-07	2.0E-07

Chemical	CASRN[c]	Detection	$ADD_{ing-field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Triethylene glycol monobutyl ether	143-22-6	3	0	6.2E-09	2.5E-08	0	3.3E-08	1.4E-07
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	35	1.1E-08	1.8E-08	5.9E-09	1.7E-08	2.8E-08	3.5E-08
Vanadium		2	0	2.6E-08	1.1E-07	0	1.4E-07	4.6E-07
Zinc		35	2.5E-04	1.1E-03	6.0E-04	1.1E-03	2.0E-03	3.2E-03

[a] 35 field-specific $ADD_{ing-field}$ are included in the table. $ADD_{ing-field}$ was calculated from field-specific average concentrations ($C_{ing-crumb\ rubber-field}$) of a chemical detected in artificial gastrointestinal fluids extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

Table F-345. Field-Specific Average Ingestion Daily Dose[a] for Chronic Non-Cancer Hazard ($ADD_{ing-field}$, milligrams per kilogram BW per day) of **Field-Related General Chemicals**[b]—Combined Gender **Spectators 11<16 Years**

Chemical	CASRN[c]	Detection	$ADD_{ing-field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Acenaphthylene	208-96-8	35	1.7E-11	1.3E-10	1.2E-10	8.1E-11	3.9E-10	5.0E-10
Aluminum		35	3.0E-06	9.4E-06	4.8E-06	8.6E-06	1.7E-05	2.2E-05
Aniline	62-53-3	12	0	7.5E-10	1.7E-09	0	4.2E-09	7.5E-09
Anthracene	120-12-7	28	0	3.5E-10	6.2E-10	1.4E-10	1.3E-09	2.9E-09
Anthracene, 2-methyl-	613-12-7	35	2.1E-10	1.4E-09	1.2E-09	1.0E-09	3.2E-09	6.2E-09
Anthracene, 9,10-dimethyl	781-43-1	2	0	1.1E-11	6.3E-11	0	7.4E-12	3.7E-10
Anthracene, 9,10-diphenyl-	1499-10-1	2	0	8.8E-11	4.0E-10	0	2.5E-10	2.2E-09
Anthracene, 9-phenyl	602-55-1	30	0	1.3E-10	1.4E-10	8.1E-11	4.2E-10	6.0E-10
Antimony		35	6.2E-10	1.0E-08	9.0E-09	8.6E-09	2.3E-08	4.3E-08
Barium		35	1.7E-07	6.5E-07	4.4E-07	6.3E-07	1.2E-06	2.4E-06
Benzene, n-butyl-	104-51-8	29	0	7.5E-11	1.9E-10	4.2E-11	1.2E-10	1.2E-09
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	20	0	2.0E-08	2.8E-08	7.7E-09	7.5E-08	1.0E-07
Benz[a]anthracene	56-55-3	35	8.0E-11	1.2E-09	1.3E-09	5.9E-10	3.8E-09	5.4E-09
Benzo[b]fluoranthene	205-99-2	35	3.4E-10	1.7E-09	1.2E-09	1.1E-09	4.1E-09	5.0E-09
7H-Benzo[c]fluorene	205-12-9	31	0	3.3E-10	5.3E-10	1.1E-10	1.3E-09	2.6E-09
Benzo[k]fluoranthene	207-08-9	35	4.6E-11	5.5E-10	5.2E-10	3.5E-10	1.6E-09	2.1E-09
Benzothiazole	95-16-9	35	4.8E-08	2.1E-07	1.4E-07	1.5E-07	4.3E-07	4.9E-07
Benzothiazole, 2-phenyl-	883-93-2	35	6.4E-09	2.2E-08	2.1E-08	1.6E-08	5.1E-08	1.2E-07
Benzothiazolone	934-34-9	35	3.3E-07	5.3E-07	1.0E-07	5.2E-07	6.8E-07	7.0E-07

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Benzyl butyl phthalate	85-68-7	35	5.4E-10	1.1E-08	8.8E-09	9.4E-09	2.4E-08	4.2E-08
Beryllium		11	0	2.7E-10	4.3E-10	0	9.3E-10	1.5E-09
Butylated Hydroxytoluene	128-37-0	19	0	2.8E-10	5.3E-10	9.9E-11	1.4E-09	2.4E-09
Cadmium		34	0	7.2E-09	4.4E-09	6.5E-09	1.5E-08	1.7E-08
Chromium		35	3.7E-09	2.0E-08	2.0E-08	1.3E-08	4.4E-08	1.1E-07
Cobalt		35	8.5E-08	4.6E-07	3.1E-07	4.4E-07	8.8E-07	1.6E-06
Copper		35	3.6E-07	9.0E-07	4.7E-07	8.2E-07	1.5E-06	2.8E-06
Cyclohexyl isothiocyanate	1122-82-3	29	0	6.6E-08	4.9E-08	6.6E-08	1.6E-07	1.7E-07
Dibenz[a,h]anthracene	53-70-3	7	0	7.3E-11	1.8E-10	0	3.3E-10	9.1E-10
Dibenzothiophene	132-65-0	27	0	2.8E-10	4.3E-10	8.3E-11	1.1E-09	1.7E-09
Dibutyl phthalate	84-74-2	31	0	2.0E-08	1.5E-08	1.6E-08	4.9E-08	5.8E-08
Diethyl Phthalate	84-66-2	23	0	1.7E-09	1.5E-09	1.8E-09	4.0E-09	5.3E-09
Diisobutyl Phthalate	84-69-5	32	0	2.0E-09	5.2E-09	4.6E-10	5.4E-09	3.1E-08
Diisooctylphthalate	27554-26-3	33	0	4.3E-08	3.2E-08	3.2E-08	1.1E-07	1.1E-07
Di-n-octyl phthalate	117-84-0	26	0	4.2E-09	1.0E-08	1.1E-09	2.1E-08	4.5E-08
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	4	0	3.5E-11	1.1E-10	0	2.7E-10	4.9E-10
3,5-di-tert-Butyl-4-hydroxybenzaldehyde	1620-98-0	35	2.1E-11	7.5E-09	1.5E-08	4.6E-10	3.1E-08	7.5E-08
Fluoranthene	206-44-0	35	1.3E-09	9.5E-09	9.2E-09	5.7E-09	2.4E-08	4.5E-08
Fluorene	86-73-7	11	0	1.2E-10	3.0E-10	0	6.2E-10	1.5E-09
Hexadecane	544-76-3	28	0	8.9E-10	7.5E-10	9.5E-10	2.1E-09	3.5E-09
1-Hydroxypyrene	5315-79-7	1	0	4.9E-10	2.9E-09	0	0	1.7E-08
Lead		35	8.2E-08	4.2E-07	3.6E-07	3.2E-07	1.1E-06	1.9E-06
Manganese		35	7.6E-08	4.2E-07	2.5E-07	4.3E-07	6.9E-07	1.3E-06
2-(Methylthio)benzothiazole	615-22-5	5	0	6.4E-09	2.3E-08	0	3.6E-08	1.3E-07
Molybdenum		14	0	7.7E-10	1.1E-09	0	2.4E-09	3.8E-09
Naphthalene	91-20-3	1	0	2.2E-11	1.3E-10	0	0	7.8E-10
Naphthalene, 1-methyl-	90-12-0	31	0	5.7E-11	2.0E-10	9.6E-12	1.2E-10	1.2E-09
Naphthalene, 1,2-dimethyl-	573-98-8	12	0	1.3E-11	3.0E-11	0	6.7E-11	1.5E-10
Naphthalene, 1,6-dimethyl-	575-43-9	35	3.5E-11	8.8E-11	4.2E-11	7.7E-11	1.8E-10	2.5E-10
Naphthalene, 2-(bromomethyl)-	939-26-4	35	8.3E-11	2.3E-09	1.1E-09	2.3E-09	4.1E-09	5.3E-09
Naphthalene, 2,3-dimethyl-	581-40-8	35	1.7E-11	6.9E-10	6.8E-10	4.7E-10	2.0E-09	3.0E-09
Naphthalene, 2-methyl	91-57-6	19	0	5.2E-11	2.2E-10	9.3E-12	1.2E-10	1.3E-09
1-Octadecene	112-88-9	32	0	2.0E-09	1.7E-09	1.5E-09	5.3E-09	6.1E-09
17-Pentatriacontene	6971-40-0	9	0	1.7E-09	4.0E-09	0	9.2E-09	1.8E-08

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Phenanthrene	85-01-8	35	7.2E-10	4.2E-09	5.2E-09	2.3E-09	1.2E-08	2.7E-08
Phenanthrene, 1-methyl	832-69-9	35	9.6E-11	1.1E-09	1.1E-09	7.9E-10	2.8E-09	4.8E-09
Phenanthrene, 2-methyl-	2531-84-2	35	3.0E-11	1.4E-09	1.7E-09	8.5E-10	4.0E-09	7.8E-09
Phenanthrene, 3-methyl	832-71-3	35	1.8E-10	2.4E-09	2.5E-09	1.5E-09	6.5E-09	1.2E-08
N-Phenylbenzamide	93-98-1	22	0	9.3E-09	1.8E-08	1.4E-09	5.7E-08	6.6E-08
Phthalimide	85-41-6	16	0	1.7E-09	3.8E-09	0	8.4E-09	1.8E-08
Pyrene	129-00-0	35	3.7E-09	2.0E-08	1.3E-08	1.6E-08	4.2E-08	5.8E-08
Pyridine, 2-(4-methylphenyl)-	4467-06-5	2	0	4.3E-11	2.5E-10	0	1.5E-11	1.5E-09
Selenium		4	0	2.5E-09	7.8E-09	0	1.8E-08	3.7E-08
Strontium		35	3.4E-08	3.6E-07	7.0E-07	1.9E-07	1.1E-06	4.1E-06
Thallium		21	0	1.0E-10	1.7E-10	8.1E-11	3.1E-10	9.2E-10
Tin		30	0	3.9E-09	3.9E-09	2.9E-09	1.1E-08	1.6E-08
Triethylene glycol monobutyl ether	143-22-6	3	0	4.9E-10	2.0E-09	0	2.5E-09	1.1E-08
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	35	8.3E-10	1.4E-09	4.6E-10	1.3E-09	2.2E-09	2.8E-09
Vanadium		2	0	2.1E-09	8.5E-09	0	1.1E-08	3.6E-08
Zinc		35	1.9E-05	8.8E-05	4.7E-05	8.5E-05	1.6E-04	2.5E-04

[a] 35 field-specific $ADD_{ing\text{-}field}$ are included in the table. $ADD_{ing\text{-}field}$ was calculated from field-specific average concentrations ($C_{ing\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial gastrointestinal fluids extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

Table F-346. Field-Specific Average Ingestion Daily Dose[a] for Chronic Non-Cancer Hazard ($ADD_{ing\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related General Chemicals**[b]—Combined Gender **Spectators 16<30 Years**

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Acenaphthylene	208-96-8	35	9.9E-12	7.6E-11	7.1E-11	4.6E-11	2.2E-10	2.8E-10
Aluminum		35	1.7E-06	5.4E-06	2.7E-06	4.9E-06	9.8E-06	1.3E-05
Aniline	62-53-3	12	0	4.2E-10	9.7E-10	0	2.4E-09	4.3E-09
Anthracene	120-12-7	28	0	2.0E-10	3.5E-10	7.7E-11	7.5E-10	1.6E-09
Anthracene, 2-methyl-	613-12-7	35	1.2E-10	8.0E-10	7.0E-10	5.7E-10	1.8E-09	3.5E-09
Anthracene, 9,10-dimethyl	781-43-1	2	0	6.5E-12	3.6E-11	0	4.2E-12	2.1E-10
Anthracene, 9,10-diphenyl-	1499-10-1	2	0	5.0E-11	2.3E-10	0	1.4E-10	1.3E-09
Anthracene, 9-phenyl	602-55-1	30	0	7.5E-11	8.0E-11	4.6E-11	2.4E-10	3.4E-10

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Antimony		35	3.5E-10	5.8E-09	5.1E-09	4.9E-09	1.3E-08	2.4E-08
Barium		35	9.6E-08	3.7E-07	2.5E-07	3.6E-07	7.0E-07	1.4E-06
Benzene, n-butyl-	104-51-8	29	0	4.3E-11	1.1E-10	2.4E-11	6.6E-11	6.6E-10
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	20	0	1.2E-08	1.6E-08	4.4E-09	4.3E-08	5.7E-08
Benz[a]anthracene	56-55-3	35	4.6E-11	7.0E-10	7.7E-10	3.3E-10	2.2E-09	3.0E-09
Benzo[b]fluoranthene	205-99-2	35	2.0E-10	9.6E-10	7.1E-10	6.5E-10	2.3E-09	2.8E-09
7H-Benzo[c]fluorene	205-12-9	31	0	1.9E-10	3.0E-10	6.1E-11	7.5E-10	1.5E-09
Benzo[k]fluoranthene	207-08-9	35	2.6E-11	3.1E-10	2.9E-10	2.0E-10	9.1E-10	1.2E-09
Benzothiazole	95-16-9	35	2.7E-08	1.2E-07	8.1E-08	8.8E-08	2.4E-07	2.8E-07
Benzothiazole, 2-phenyl-	883-93-2	35	3.6E-09	1.3E-08	1.2E-08	9.2E-09	2.9E-08	6.8E-08
Benzothiazolone	934-34-9	35	1.9E-07	3.0E-07	5.9E-08	3.0E-07	3.9E-07	4.0E-07
Benzyl butyl phthalate	85-68-7	35	3.1E-10	6.0E-09	5.0E-09	5.3E-09	1.3E-08	2.4E-08
Beryllium		11	0	1.5E-10	2.5E-10	0	5.3E-10	8.4E-10
Butylated Hydroxytoluene	128-37-0	19	0	1.6E-10	3.0E-10	5.6E-11	8.1E-10	1.4E-09
Cadmium		34	0	4.1E-09	2.5E-09	3.7E-09	8.7E-09	9.5E-09
Chromium		35	2.1E-09	1.1E-08	1.1E-08	7.6E-09	2.5E-08	6.3E-08
Cobalt		35	4.8E-08	2.6E-07	1.8E-07	2.5E-07	5.0E-07	9.1E-07
Copper		35	2.0E-07	5.1E-07	2.6E-07	4.7E-07	8.4E-07	1.6E-06
Cyclohexyl isothiocyanate	1122-82-3	29	0	3.8E-08	2.8E-08	3.7E-08	8.8E-08	9.8E-08
Dibenz[a,h]anthracene	53-70-3	7	0	4.1E-11	1.0E-10	0	1.9E-10	5.2E-10
Dibenzothiophene	132-65-0	27	0	1.6E-10	2.4E-10	4.7E-11	6.5E-10	9.8E-10
Dibutyl phthalate	84-74-2	31	0	1.1E-08	8.7E-09	9.2E-09	2.8E-08	3.3E-08
Diethyl Phthalate	84-66-2	23	0	9.7E-10	8.5E-10	1.1E-09	2.3E-09	3.0E-09
Diisobutyl Phthalate	84-69-5	32	0	1.2E-09	3.0E-09	2.6E-10	3.1E-09	1.8E-08
Diisooctylphthalate	27554-26-3	33	0	2.4E-08	1.8E-08	1.8E-08	6.2E-08	6.4E-08
Di-n-octyl phthalate	117-84-0	26	0	2.4E-09	5.8E-09	6.3E-10	1.2E-08	2.5E-08
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	4	0	2.0E-11	6.3E-11	0	1.5E-10	2.8E-10
3,5-di-tert-Butyl-4-hydroxybenzaldehyde	1620-98-0	35	1.2E-11	4.3E-09	8.6E-09	2.6E-10	1.8E-08	4.3E-08
Fluoranthene	206-44-0	35	7.4E-10	5.4E-09	5.3E-09	3.2E-09	1.4E-08	2.6E-08
Fluorene	86-73-7	11	0	7.0E-11	1.7E-10	0	3.5E-10	8.4E-10
Hexadecane	544-76-3	28	0	5.1E-10	4.3E-10	5.4E-10	1.2E-09	2.0E-09
1-Hydroxypyrene	5315-79-7	1	0	2.8E-10	1.6E-09	0	0	9.7E-09
Lead		35	4.7E-08	2.4E-07	2.1E-07	1.8E-07	6.0E-07	1.1E-06
Manganese		35	4.3E-08	2.4E-07	1.4E-07	2.5E-07	3.9E-07	7.6E-07

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
2-(Methylthio)benzothiazole	615-22-5	5	0	3.6E-09	1.3E-08	0	2.0E-08	7.3E-08
Molybdenum		14	0	4.4E-10	6.1E-10	0	1.4E-09	2.2E-09
Naphthalene	91-20-3	1	0	1.3E-11	7.5E-11	0	0	4.4E-10
Naphthalene, 1-methyl-	90-12-0	31	0	3.3E-11	1.1E-10	5.4E-12	6.9E-11	6.8E-10
Naphthalene, 1,2-dimethyl-	573-98-8	12	0	7.6E-12	1.7E-11	0	3.8E-11	8.7E-11
Naphthalene, 1,6-dimethyl-	575-43-9	35	2.0E-11	5.0E-11	2.4E-11	4.4E-11	1.0E-10	1.4E-10
Naphthalene, 2-(bromomethyl)-	939-26-4	35	4.7E-11	1.3E-09	6.2E-10	1.3E-09	2.3E-09	3.0E-09
Naphthalene, 2,3-dimethyl-	581-40-8	35	9.9E-12	3.9E-10	3.9E-10	2.7E-10	1.2E-09	1.7E-09
Naphthalene, 2-methyl	91-57-6	19	0	3.0E-11	1.2E-10	5.3E-12	6.6E-11	7.3E-10
1-Octadecene	112-88-9	32	0	1.1E-09	9.9E-10	8.8E-10	3.0E-09	3.5E-09
17-Pentatriacontene	6971-40-0	9	0	9.6E-10	2.3E-09	0	5.2E-09	1.0E-08
Phenanthrene	85-01-8	35	4.1E-10	2.4E-09	2.9E-09	1.3E-09	6.8E-09	1.5E-08
Phenanthrene, 1-methyl	832-69-9	35	5.4E-11	6.3E-10	6.1E-10	4.5E-10	1.6E-09	2.7E-09
Phenanthrene, 2-methyl-	2531-84-2	35	1.7E-11	8.2E-10	9.4E-10	4.9E-10	2.3E-09	4.5E-09
Phenanthrene, 3-methyl	832-71-3	35	1.0E-10	1.3E-09	1.4E-09	8.6E-10	3.7E-09	6.8E-09
N-Phenylbenzamide	93-98-1	22	0	5.3E-09	1.0E-08	8.1E-10	3.2E-08	3.7E-08
Phthalimide	85-41-6	16	0	9.5E-10	2.2E-09	0	4.8E-09	1.0E-08
Pyrene	129-00-0	35	2.1E-09	1.1E-08	7.4E-09	9.4E-09	2.4E-08	3.3E-08
Pyridine, 2-(4-methylphenyl)-	4467-06-5	2	0	2.4E-11	1.4E-10	0	8.3E-12	8.3E-10
Selenium		4	0	1.4E-09	4.4E-09	0	1.0E-08	2.1E-08
Strontium		35	2.0E-08	2.0E-07	4.0E-07	1.1E-07	6.1E-07	2.3E-06
Thallium		21	0	5.7E-11	9.7E-11	4.6E-11	1.8E-10	5.2E-10
Tin		30	0	2.2E-09	2.2E-09	1.7E-09	6.0E-09	8.8E-09
Triethylene glycol monobutyl ether	143-22-6	3	0	2.8E-10	1.1E-09	0	1.4E-09	6.2E-09
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	35	4.7E-10	8.2E-10	2.6E-10	7.6E-10	1.3E-09	1.6E-09
Vanadium		2	0	1.2E-09	4.8E-09	0	6.1E-09	2.1E-08
Zinc		35	1.1E-05	5.0E-05	2.7E-05	4.8E-05	9.0E-05	1.4E-04

[a] 35 field-specific $ADD_{ing\text{-}field}$ are included in the table. $ADD_{ing\text{-}field}$ was calculated from field-specific average concentrations ($C_{ing\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial gastrointestinal fluids extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

Table F-347. Field-Specific Average Ingestion Daily Dose[a] for Chronic Non-Cancer Hazard ($ADD_{ing\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related General Chemicals**[b]—Combined Gender **Spectators 30<40 Years**

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Acenaphthylene	208-96-8	35	9.3E-12	7.2E-11	6.7E-11	4.4E-11	2.1E-10	2.7E-10
Aluminum		35	1.6E-06	5.1E-06	2.6E-06	4.6E-06	9.2E-06	1.2E-05
Aniline	62-53-3	12	0	4.0E-10	9.2E-10	0	2.2E-09	4.0E-09
Anthracene	120-12-7	28	0	1.9E-10	3.3E-10	7.3E-11	7.1E-10	1.6E-09
Anthracene, 2-methyl-	613-12-7	35	1.1E-10	7.5E-10	6.6E-10	5.4E-10	1.7E-09	3.4E-09
Anthracene, 9,10-dimethyl	781-43-1	2	0	6.1E-12	3.4E-11	0	4.0E-12	2.0E-10
Anthracene, 9,10-diphenyl-	1499-10-1	2	0	4.7E-11	2.2E-10	0	1.3E-10	1.2E-09
Anthracene, 9-phenyl	602-55-1	30	0	7.1E-11	7.5E-11	4.3E-11	2.2E-10	3.2E-10
Antimony		35	3.3E-10	5.5E-09	4.8E-09	4.6E-09	1.3E-08	2.3E-08
Barium		35	9.1E-08	3.5E-07	2.4E-07	3.4E-07	6.6E-07	1.3E-06
Benzene, n-butyl-	104-51-8	29	0	4.0E-11	1.0E-10	2.3E-11	6.2E-11	6.2E-10
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	20	0	1.1E-08	1.5E-08	4.1E-09	4.1E-08	5.4E-08
Benz[a]anthracene	56-55-3	35	4.3E-11	6.6E-10	7.2E-10	3.2E-10	2.1E-09	2.9E-09
Benzo[b]fluoranthene	205-99-2	35	1.9E-10	9.1E-10	6.7E-10	6.1E-10	2.2E-09	2.7E-09
7H-Benzo[c]fluorene	205-12-9	31	0	1.8E-10	2.9E-10	5.7E-11	7.1E-10	1.4E-09
Benzo[k]fluoranthene	207-08-9	35	2.5E-11	2.9E-10	2.8E-10	1.9E-10	8.6E-10	1.1E-09
Benzothiazole	95-16-9	35	2.6E-08	1.1E-07	7.7E-08	8.3E-08	2.3E-07	2.7E-07
Benzothiazole, 2-phenyl-	883-93-2	35	3.4E-09	1.2E-08	1.1E-08	8.7E-09	2.8E-08	6.4E-08
Benzothiazolone	934-34-9	35	1.8E-07	2.9E-07	5.5E-08	2.8E-07	3.7E-07	3.8E-07
Benzyl butyl phthalate	85-68-7	35	2.9E-10	5.7E-09	4.7E-09	5.1E-09	1.3E-08	2.3E-08
Beryllium		11	0	1.4E-10	2.3E-10	0	5.0E-10	8.0E-10
Butylated Hydroxytoluene	128-37-0	19	0	1.5E-10	2.8E-10	5.3E-11	7.7E-10	1.3E-09
Cadmium		34	0	3.9E-09	2.4E-09	3.5E-09	8.2E-09	9.0E-09
Chromium		35	2.0E-09	1.1E-08	1.1E-08	7.2E-09	2.4E-08	6.0E-08
Cobalt		35	4.6E-08	2.5E-07	1.7E-07	2.3E-07	4.7E-07	8.6E-07
Copper		35	1.9E-07	4.8E-07	2.5E-07	4.4E-07	7.9E-07	1.5E-06
Cyclohexyl isothiocyanate	1122-82-3	29	0	3.6E-08	2.6E-08	3.5E-08	8.4E-08	9.3E-08
Dibenz[a,h]anthracene	53-70-3	7	0	3.9E-11	9.8E-11	0	1.8E-10	4.9E-10
Dibenzothiophene	132-65-0	27	0	1.5E-10	2.3E-10	4.5E-11	6.2E-10	9.3E-10
Dibutyl phthalate	84-74-2	31	0	1.1E-08	8.2E-09	8.7E-09	2.6E-08	3.1E-08
Diethyl Phthalate	84-66-2	23	0	9.1E-10	8.0E-10	9.9E-10	2.2E-09	2.8E-09
Diisobutyl Phthalate	84-69-5	32	0	1.1E-09	2.8E-09	2.5E-10	2.9E-09	1.7E-08

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Diisooctylphthalate	27554-26-3	33	0	2.3E-08	1.7E-08	1.7E-08	5.8E-08	6.1E-08
Di-n-octyl phthalate	117-84-0	26	0	2.3E-09	5.5E-09	6.0E-10	1.1E-08	2.4E-08
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	4	0	1.9E-11	6.0E-11	0	1.4E-10	2.6E-10
3,5-di-tert-Butyl-4-hydroxybenzaldehyde	1620-98-0	35	1.1E-11	4.0E-09	8.1E-09	2.5E-10	1.7E-08	4.0E-08
Fluoranthene	206-44-0	35	7.0E-10	5.1E-09	5.0E-09	3.1E-09	1.3E-08	2.4E-08
Fluorene	86-73-7	11	0	6.7E-11	1.6E-10	0	3.3E-10	7.9E-10
Hexadecane	544-76-3	28	0	4.8E-10	4.0E-10	5.1E-10	1.1E-09	1.9E-09
1-Hydroxypyrene	5315-79-7	1	0	2.6E-10	1.5E-09	0	0	9.1E-09
Lead		35	4.4E-08	2.3E-07	2.0E-07	1.7E-07	5.7E-07	1.0E-06
Manganese		35	4.1E-08	2.3E-07	1.3E-07	2.3E-07	3.7E-07	7.2E-07
2-(Methylthio)benzothiazole	615-22-5	5	0	3.4E-09	1.2E-08	0	1.9E-08	6.9E-08
Molybdenum		14	0	4.2E-10	5.8E-10	0	1.3E-09	2.1E-09
Naphthalene	91-20-3	1	0	1.2E-11	7.1E-11	0	0	4.2E-10
Naphthalene, 1-methyl-	90-12-0	31	0	3.1E-11	1.1E-10	5.2E-12	6.5E-11	6.4E-10
Naphthalene, 1,2-dimethyl-	573-98-8	12	0	7.2E-12	1.6E-11	0	3.6E-11	8.3E-11
Naphthalene, 1,6-dimethyl-	575-43-9	35	1.9E-11	4.8E-11	2.3E-11	4.2E-11	9.7E-11	1.3E-10
Naphthalene, 2-(bromomethyl)-	939-26-4	35	4.4E-11	1.3E-09	5.9E-10	1.2E-09	2.2E-09	2.8E-09
Naphthalene, 2,3-dimethyl-	581-40-8	35	9.3E-12	3.7E-10	3.6E-10	2.5E-10	1.1E-09	1.6E-09
Naphthalene, 2-methyl	91-57-6	19	0	2.8E-11	1.2E-10	5.0E-12	6.3E-11	6.9E-10
1-Octadecene	112-88-9	32	0	1.1E-09	9.3E-10	8.3E-10	2.9E-09	3.3E-09
17-Pentatriacontene	6971-40-0	9	0	9.0E-10	2.1E-09	0	5.0E-09	9.6E-09
Phenanthrene	85-01-8	35	3.9E-10	2.2E-09	2.8E-09	1.3E-09	6.4E-09	1.4E-08
Phenanthrene, 1-methyl	832-69-9	35	5.2E-11	6.0E-10	5.7E-10	4.2E-10	1.5E-09	2.6E-09
Phenanthrene, 2-methyl-	2531-84-2	35	1.6E-11	7.7E-10	8.9E-10	4.6E-10	2.2E-09	4.2E-09
Phenanthrene, 3-methyl	832-71-3	35	9.8E-11	1.3E-09	1.4E-09	8.1E-10	3.5E-09	6.4E-09
N-Phenylbenzamide	93-98-1	22	0	5.0E-09	9.7E-09	7.6E-10	3.0E-08	3.5E-08
Phthalimide	85-41-6	16	0	9.0E-10	2.1E-09	0	4.5E-09	9.5E-09
Pyrene	129-00-0	35	2.0E-09	1.1E-08	7.0E-09	8.9E-09	2.3E-08	3.1E-08
Pyridine, 2-(4-methylphenyl)-	4467-06-5	2	0	2.3E-11	1.3E-10	0	7.8E-12	7.8E-10
Selenium		4	0	1.4E-09	4.2E-09	0	9.5E-09	2.0E-08
Strontium		35	1.8E-08	1.9E-07	3.7E-07	1.0E-07	5.7E-07	2.2E-06
Thallium		21	0	5.4E-11	9.2E-11	4.3E-11	1.7E-10	5.0E-10
Tin		30	0	2.1E-09	2.1E-09	1.6E-09	5.7E-09	8.3E-09

Chemical	CASRN[c]	Detection	$ADD_{ing-field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Triethylene glycol monobutyl ether	143-22-6	3	0	2.6E-10	1.1E-09	0	1.4E-09	5.9E-09
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	35	4.5E-10	7.8E-10	2.5E-10	7.2E-10	1.2E-09	1.5E-09
Vanadium		2	0	1.1E-09	4.5E-09	0	5.7E-09	1.9E-08
Zinc		35	1.0E-05	4.7E-05	2.5E-05	4.6E-05	8.5E-05	1.4E-04

[a] 35 field-specific $ADD_{ing-field}$ are included in the table. $ADD_{ing-field}$ was calculated from field-specific average concentrations ($C_{ing-crumb\ rubber-field}$) of a chemical detected in artificial gastrointestinal fluids extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

Table F-348. Field-Specific Average Ingestion Daily Dose[a] for Chronic Non-Cancer Hazard ($ADD_{ing-field}$, milligrams per kilogram BW per day) of **Field-Related General Chemicals**[b]—Combined Gender **Spectators 40<50 Years**

Chemical	CASRN[c]	Detection	$ADD_{ing-field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Acenaphthylene	208-96-8	35	8.8E-12	6.8E-11	6.4E-11	4.1E-11	2.0E-10	2.5E-10
Aluminum		35	1.5E-06	4.8E-06	2.4E-06	4.4E-06	8.7E-06	1.1E-05
Aniline	62-53-3	12	0	3.8E-10	8.7E-10	0	2.1E-09	3.8E-09
Anthracene	120-12-7	28	0	1.8E-10	3.1E-10	6.9E-11	6.7E-10	1.5E-09
Anthracene, 2-methyl-	613-12-7	35	1.0E-10	7.1E-10	6.3E-10	5.1E-10	1.6E-09	3.2E-09
Anthracene, 9,10-dimethyl	781-43-1	2	0	5.8E-12	3.2E-11	0	3.7E-12	1.9E-10
Anthracene, 9,10-diphenyl-	1499-10-1	2	0	4.5E-11	2.0E-10	0	1.3E-10	1.1E-09
Anthracene, 9-phenyl	602-55-1	30	0	6.8E-11	7.1E-11	4.1E-11	2.1E-10	3.0E-10
Antimony		35	3.2E-10	5.2E-09	4.6E-09	4.4E-09	1.2E-08	2.2E-08
Barium		35	8.6E-08	3.3E-07	2.3E-07	3.2E-07	6.2E-07	1.2E-06
Benzene, n-butyl-	104-51-8	29	0	3.8E-11	9.8E-11	2.1E-11	5.9E-11	5.9E-10
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	20	0	1.0E-08	1.4E-08	3.9E-09	3.8E-08	5.1E-08
Benz[a]anthracene	56-55-3	35	4.1E-11	6.3E-10	6.9E-10	3.0E-10	1.9E-09	2.7E-09
Benzo[b]fluoranthene	205-99-2	35	1.8E-10	8.6E-10	6.4E-10	5.8E-10	2.1E-09	2.5E-09
7H-Benzo[c]fluorene	205-12-9	31	0	1.7E-10	2.7E-10	5.4E-11	6.8E-10	1.3E-09
Benzo[k]fluoranthene	207-08-9	35	2.3E-11	2.8E-10	2.6E-10	1.8E-10	8.2E-10	1.0E-09
Benzothiazole	95-16-9	35	2.4E-08	1.1E-07	7.3E-08	7.9E-08	2.2E-07	2.5E-07
Benzothiazole, 2-phenyl-	883-93-2	35	3.2E-09	1.1E-08	1.1E-08	8.2E-09	2.6E-08	6.1E-08
Benzothiazolone	934-34-9	35	1.7E-07	2.7E-07	5.2E-08	2.7E-07	3.5E-07	3.6E-07

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Benzyl butyl phthalate	85-68-7	35	2.8E-10	5.4E-09	4.5E-09	4.8E-09	1.2E-08	2.2E-08
Beryllium		11	0	1.4E-10	2.2E-10	0	4.8E-10	7.5E-10
Butylated Hydroxytoluene	128-37-0	19	0	1.4E-10	2.7E-10	5.0E-11	7.3E-10	1.2E-09
Cadmium		34	0	3.7E-09	2.3E-09	3.3E-09	7.8E-09	8.5E-09
Chromium		35	1.9E-09	1.0E-08	1.0E-08	6.8E-09	2.2E-08	5.7E-08
Cobalt		35	4.3E-08	2.3E-07	1.6E-07	2.2E-07	4.5E-07	8.1E-07
Copper		35	1.8E-07	4.6E-07	2.4E-07	4.2E-07	7.5E-07	1.4E-06
Cyclohexyl isothiocyanate	1122-82-3	29	0	3.4E-08	2.5E-08	3.4E-08	7.9E-08	8.8E-08
Dibenz[a,h]anthracene	53-70-3	7	0	3.7E-11	9.2E-11	0	1.7E-10	4.6E-10
Dibenzothiophene	132-65-0	27	0	1.4E-10	2.2E-10	4.2E-11	5.8E-10	8.8E-10
Dibutyl phthalate	84-74-2	31	0	1.0E-08	7.8E-09	8.2E-09	2.5E-08	2.9E-08
Diethyl Phthalate	84-66-2	23	0	8.7E-10	7.6E-10	9.4E-10	2.0E-09	2.7E-09
Diisobutyl Phthalate	84-69-5	32	0	1.0E-09	2.7E-09	2.3E-10	2.8E-09	1.6E-08
Diisooctylphthalate	27554-26-3	33	0	2.2E-08	1.6E-08	1.6E-08	5.5E-08	5.8E-08
Di-n-octyl phthalate	117-84-0	26	0	2.1E-09	5.2E-09	5.7E-10	1.0E-08	2.3E-08
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	4	0	1.8E-11	5.7E-11	0	1.4E-10	2.5E-10
3,5-di-tert-Butyl-4-hydroxybenzaldehyde	1620-98-0	35	1.1E-11	3.8E-09	7.7E-09	2.4E-10	1.6E-08	3.8E-08
Fluoranthene	206-44-0	35	6.6E-10	4.8E-09	4.7E-09	2.9E-09	1.2E-08	2.3E-08
Fluorene	86-73-7	11	0	6.3E-11	1.5E-10	0	3.1E-10	7.5E-10
Hexadecane	544-76-3	28	0	4.6E-10	3.8E-10	4.8E-10	1.1E-09	1.8E-09
1-Hydroxypyrene	5315-79-7	1	0	2.5E-10	1.5E-09	0	0	8.6E-09
Lead		35	4.2E-08	2.2E-07	1.9E-07	1.6E-07	5.4E-07	9.7E-07
Manganese		35	3.9E-08	2.1E-07	1.3E-07	2.2E-07	3.5E-07	6.8E-07
2-(Methylthio)benzothiazole	615-22-5	5	0	3.2E-09	1.2E-08	0	1.8E-08	6.5E-08
Molybdenum		14	0	3.9E-10	5.5E-10	0	1.2E-09	2.0E-09
Naphthalene	91-20-3	1	0	1.1E-11	6.7E-11	0	0	4.0E-10
Naphthalene, 1-methyl-	90-12-0	31	0	2.9E-11	1.0E-10	4.9E-12	6.1E-11	6.0E-10
Naphthalene, 1,2-dimethyl-	573-98-8	12	0	6.8E-12	1.5E-11	0	3.4E-11	7.8E-11
Naphthalene, 1,6-dimethyl-	575-43-9	35	1.8E-11	4.5E-11	2.2E-11	3.9E-11	9.1E-11	1.3E-10
Naphthalene, 2-(bromomethyl)-	939-26-4	35	4.2E-11	1.2E-09	5.6E-10	1.2E-09	2.1E-09	2.7E-09
Naphthalene, 2,3-dimethyl-	581-40-8	35	8.9E-12	3.5E-10	3.5E-10	2.4E-10	1.0E-09	1.5E-09
Naphthalene, 2-methyl	91-57-6	19	0	2.7E-11	1.1E-10	4.7E-12	6.0E-11	6.6E-10
1-Octadecene	112-88-9	32	0	1.0E-09	8.8E-10	7.9E-10	2.7E-09	3.1E-09
17-Pentatriacontene	6971-40-0	9	0	8.6E-10	2.0E-09	0	4.7E-09	9.1E-09

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Phenanthrene	85-01-8	35	3.7E-10	2.1E-09	2.6E-09	1.2E-09	6.1E-09	1.4E-08
Phenanthrene, 1-methyl	832-69-9	35	4.9E-11	5.6E-10	5.4E-10	4.0E-10	1.4E-09	2.5E-09
Phenanthrene, 2-methyl-	2531-84-2	35	1.5E-11	7.3E-10	8.4E-10	4.3E-10	2.1E-09	4.0E-09
Phenanthrene, 3-methyl	832-71-3	35	9.3E-11	1.2E-09	1.3E-09	7.7E-10	3.3E-09	6.1E-09
N-Phenylbenzamide	93-98-1	22	0	4.7E-09	9.2E-09	7.2E-10	2.9E-08	3.3E-08
Phthalimide	85-41-6	16	0	8.5E-10	2.0E-09	0	4.3E-09	9.0E-09
Pyrene	129-00-0	35	1.9E-09	1.0E-08	6.6E-09	8.4E-09	2.1E-08	2.9E-08
Pyridine, 2-(4-methylphenyl)-	4467-06-5	2	0	2.2E-11	1.2E-10	0	7.4E-12	7.4E-10
Selenium		4	0	1.3E-09	4.0E-09	0	9.0E-09	1.9E-08
Strontium		35	1.7E-08	1.8E-07	3.5E-07	9.7E-08	5.4E-07	2.1E-06
Thallium		21	0	5.1E-11	8.7E-11	4.1E-11	1.6E-10	4.7E-10
Tin		30	0	2.0E-09	2.0E-09	1.5E-09	5.4E-09	7.9E-09
Triethylene glycol monobutyl ether	143-22-6	3	0	2.5E-10	1.0E-09	0	1.3E-09	5.6E-09
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	35	4.2E-10	7.4E-10	2.3E-10	6.8E-10	1.1E-09	1.4E-09
Vanadium		2	0	1.0E-09	4.3E-09	0	5.4E-09	1.8E-08
Zinc		35	9.9E-06	4.5E-05	2.4E-05	4.3E-05	8.0E-05	1.3E-04

[a] 35 field-specific $ADD_{ing\text{-}field}$ are included in the table. $ADD_{ing\text{-}field}$ was calculated from field-specific average concentrations ($C_{ing\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial gastrointestinal fluids extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

Table F-349. Field-Specific Average Ingestion Daily Dose[a] for Chronic Non-Cancer Hazard ($ADD_{ing\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related General Chemicals**[b]—Combined Gender **Spectators 50<70 Years**

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Acenaphthylene	208-96-8	35	8.9E-12	6.8E-11	6.4E-11	4.1E-11	2.0E-10	2.5E-10
Aluminum		35	1.5E-06	4.8E-06	2.4E-06	4.4E-06	8.8E-06	1.1E-05
Aniline	62-53-3	12	0	3.8E-10	8.7E-10	0	2.1E-09	3.8E-09
Anthracene	120-12-7	28	0	1.8E-10	3.2E-10	6.9E-11	6.8E-10	1.5E-09
Anthracene, 2-methyl-	613-12-7	35	1.0E-10	7.2E-10	6.3E-10	5.2E-10	1.6E-09	3.2E-09
Anthracene, 9,10-dimethyl	781-43-1	2	0	5.8E-12	3.2E-11	0	3.8E-12	1.9E-10
Anthracene, 9,10-diphenyl-	1499-10-1	2	0	4.5E-11	2.0E-10	0	1.3E-10	1.1E-09
Anthracene, 9-phenyl	602-55-1	30	0	6.8E-11	7.1E-11	4.1E-11	2.1E-10	3.0E-10

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Antimony		35	3.2E-10	5.2E-09	4.6E-09	4.4E-09	1.2E-08	2.2E-08
Barium		35	8.6E-08	3.3E-07	2.3E-07	3.2E-07	6.3E-07	1.2E-06
Benzene, n-butyl-	104-51-8	29	0	3.8E-11	9.8E-11	2.1E-11	5.9E-11	5.9E-10
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	20	0	1.0E-08	1.4E-08	3.9E-09	3.8E-08	5.1E-08
Benz[a]anthracene	56-55-3	35	4.1E-11	6.3E-10	6.9E-10	3.0E-10	1.9E-09	2.7E-09
Benzo[b]fluoranthene	205-99-2	35	1.8E-10	8.6E-10	6.4E-10	5.8E-10	2.1E-09	2.5E-09
7H-Benzo[c]fluorene	205-12-9	31	0	1.7E-10	2.7E-10	5.5E-11	6.8E-10	1.3E-09
Benzo[k]fluoranthene	207-08-9	35	2.4E-11	2.8E-10	2.6E-10	1.8E-10	8.2E-10	1.1E-09
Benzothiazole	95-16-9	35	2.4E-08	1.1E-07	7.3E-08	7.9E-08	2.2E-07	2.5E-07
Benzothiazole, 2-phenyl-	883-93-2	35	3.2E-09	1.1E-08	1.1E-08	8.3E-09	2.6E-08	6.1E-08
Benzothiazolone	934-34-9	35	1.7E-07	2.7E-07	5.3E-08	2.7E-07	3.5E-07	3.6E-07
Benzyl butyl phthalate	85-68-7	35	2.8E-10	5.4E-09	4.5E-09	4.8E-09	1.2E-08	2.2E-08
Beryllium		11	0	1.4E-10	2.2E-10	0	4.8E-10	7.6E-10
Butylated Hydroxytoluene	128-37-0	19	0	1.4E-10	2.7E-10	5.0E-11	7.3E-10	1.2E-09
Cadmium		34	0	3.7E-09	2.3E-09	3.3E-09	7.8E-09	8.6E-09
Chromium		35	1.9E-09	1.0E-08	1.0E-08	6.8E-09	2.2E-08	5.7E-08
Cobalt		35	4.4E-08	2.3E-07	1.6E-07	2.2E-07	4.5E-07	8.1E-07
Copper		35	1.8E-07	4.6E-07	2.4E-07	4.2E-07	7.5E-07	1.4E-06
Cyclohexyl isothiocyanate	1122-82-3	29	0	3.4E-08	2.5E-08	3.4E-08	7.9E-08	8.8E-08
Dibenz[a,h]anthracene	53-70-3	7	0	3.7E-11	9.3E-11	0	1.7E-10	4.6E-10
Dibenzothiophene	132-65-0	27	0	1.5E-10	2.2E-10	4.2E-11	5.9E-10	8.8E-10
Dibutyl phthalate	84-74-2	31	0	1.0E-08	7.8E-09	8.2E-09	2.5E-08	3.0E-08
Diethyl Phthalate	84-66-2	23	0	8.7E-10	7.6E-10	9.4E-10	2.1E-09	2.7E-09
Diisobutyl Phthalate	84-69-5	32	0	1.0E-09	2.7E-09	2.3E-10	2.8E-09	1.6E-08
Diisooctylphthalate	27554-26-3	33	0	2.2E-08	1.6E-08	1.6E-08	5.5E-08	5.8E-08
Di-n-octyl phthalate	117-84-0	26	0	2.2E-09	5.2E-09	5.7E-10	1.0E-08	2.3E-08
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	4	0	1.8E-11	5.7E-11	0	1.4E-10	2.5E-10
3,5-di-tert-Butyl-4-hydroxybenzaldehyde	1620-98-0	35	1.1E-11	3.8E-09	7.7E-09	2.4E-10	1.6E-08	3.8E-08
Fluoranthene	206-44-0	35	6.6E-10	4.9E-09	4.7E-09	2.9E-09	1.2E-08	2.3E-08
Fluorene	86-73-7	11	0	6.3E-11	1.5E-10	0	3.1E-10	7.5E-10
Hexadecane	544-76-3	28	0	4.6E-10	3.8E-10	4.8E-10	1.1E-09	1.8E-09
1-Hydroxypyrene	5315-79-7	1	0	2.5E-10	1.5E-09	0	0	8.7E-09
Lead		35	4.2E-08	2.2E-07	1.9E-07	1.6E-07	5.4E-07	9.8E-07
Manganese		35	3.9E-08	2.1E-07	1.3E-07	2.2E-07	3.5E-07	6.8E-07

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
2-(Methylthio)benzothiazole	615-22-5	5	0	3.3E-09	1.2E-08	0	1.8E-08	6.6E-08
Molybdenum		14	0	3.9E-10	5.5E-10	0	1.2E-09	2.0E-09
Naphthalene	91-20-3	1	0	1.1E-11	6.7E-11	0	0	4.0E-10
Naphthalene, 1-methyl-	90-12-0	31	0	2.9E-11	1.0E-10	4.9E-12	6.2E-11	6.1E-10
Naphthalene, 1,2-dimethyl-	573-98-8	12	0	6.8E-12	1.5E-11	0	3.4E-11	7.8E-11
Naphthalene, 1,6-dimethyl-	575-43-9	35	1.8E-11	4.5E-11	2.2E-11	3.9E-11	9.2E-11	1.3E-10
Naphthalene, 2-(bromomethyl)-	939-26-4	35	4.2E-11	1.2E-09	5.6E-10	1.2E-09	2.1E-09	2.7E-09
Naphthalene, 2,3-dimethyl-	581-40-8	35	8.9E-12	3.5E-10	3.5E-10	2.4E-10	1.0E-09	1.5E-09
Naphthalene, 2-methyl	91-57-6	19	0	2.7E-11	1.1E-10	4.8E-12	6.0E-11	6.6E-10
1-Octadecene	112-88-9	32	0	1.0E-09	8.8E-10	7.9E-10	2.7E-09	3.1E-09
17-Pentatriacontene	6971-40-0	9	0	8.6E-10	2.0E-09	0	4.7E-09	9.1E-09
Phenanthrene	85-01-8	35	3.7E-10	2.1E-09	2.6E-09	1.2E-09	6.1E-09	1.4E-08
Phenanthrene, 1-methyl	832-69-9	35	4.9E-11	5.7E-10	5.4E-10	4.0E-10	1.4E-09	2.5E-09
Phenanthrene, 2-methyl-	2531-84-2	35	1.5E-11	7.3E-10	8.4E-10	4.4E-10	2.1E-09	4.0E-09
Phenanthrene, 3-methyl	832-71-3	35	9.3E-11	1.2E-09	1.3E-09	7.7E-10	3.3E-09	6.1E-09
N-Phenylbenzamide	93-98-1	22	0	4.7E-09	9.2E-09	7.3E-10	2.9E-08	3.3E-08
Phthalimide	85-41-6	16	0	8.5E-10	2.0E-09	0	4.3E-09	9.0E-09
Pyrene	129-00-0	35	1.9E-09	1.0E-08	6.6E-09	8.4E-09	2.1E-08	2.9E-08
Pyridine, 2-(4-methylphenyl)-	4467-06-5	2	0	2.2E-11	1.3E-10	0	7.4E-12	7.4E-10
Selenium		4	0	1.3E-09	4.0E-09	0	9.0E-09	1.9E-08
Strontium		35	1.8E-08	1.8E-07	3.6E-07	9.7E-08	5.4E-07	2.1E-06
Thallium		21	0	5.1E-11	8.7E-11	4.1E-11	1.6E-10	4.7E-10
Tin		30	0	2.0E-09	2.0E-09	1.5E-09	5.4E-09	7.9E-09
Triethylene glycol monobutyl ether	143-22-6	3	0	2.5E-10	1.0E-09	0	1.3E-09	5.6E-09
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	35	4.3E-10	7.4E-10	2.4E-10	6.8E-10	1.1E-09	1.4E-09
Vanadium		2	0	1.0E-09	4.3E-09	0	5.5E-09	1.8E-08
Zinc		35	9.9E-06	4.5E-05	2.4E-05	4.3E-05	8.0E-05	1.3E-04

[a] 35 field-specific $ADD_{ing\text{-}field}$ are included in the table. $ADD_{ing\text{-}field}$ was calculated from field-specific average concentrations ($C_{ing\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial gastrointestinal fluids extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

F.5.7. Average Ingestion Daily Dose (ADD_{ing}) for Lifetime Cancer Risk Assessment of Carcinogens

Table F-350. Average Ingestion Daily Dose[a] (ADD_{ing}, milligrams per kilogram BW per day) for Lifetime Cancer Risk Assessment of **Field-Related Carcinogens**—Combined Gender **Athletes**

Chemical	CASRN[c]	ADD_{ing}						
		2<6 Years	6<11 Years	11<16 Years	16<30 Years	30<40 Years	40<50 Years	50<70 Years
Aniline	62-53-3	8.2E-09	5.5E-09	4.2E-09	4.7E-09	3.1E-09	2.7E-09	2.7E-09
Arsenic		4.8E-08	3.2E-08	2.5E-08	2.7E-08	1.8E-08	1.6E-08	1.6E-08
Benz[a]anthracene	56-55-3	1.3E-08	9.0E-09	7.0E-09	7.8E-09	5.2E-09	4.4E-09	4.5E-09
Benzo[a]pyrene	50-32-8	1.1E-08	7.4E-09	5.7E-09	6.4E-09	4.3E-09	3.6E-09	3.7E-09
Benzo[b]fluoranthene	205-99-2	1.9E-08	1.2E-08	9.6E-09	1.1E-08	7.1E-09	6.0E-09	6.2E-09
Benzo[k]fluoranthene	207-08-9	6.0E-09	4.0E-09	3.1E-09	3.5E-09	2.3E-09	2.0E-09	2.0E-09
Chromium		2.2E-07	1.5E-07	1.1E-07	1.3E-07	8.5E-08	7.2E-08	7.3E-08
Chrysene	218-01-9	6.0E-08	4.0E-08	3.1E-08	3.5E-08	2.3E-08	2.0E-08	2.0E-08
Cyclopenta[cd]pyrene	27208-37-3	1.3E-08	8.6E-09	6.7E-09	7.4E-09	4.9E-09	4.2E-09	4.3E-09
Dibenz[a,h]anthracene	53-70-3	8.0E-10	5.3E-10	4.1E-10	4.6E-10	3.1E-10	2.6E-10	2.7E-10
Indeno[1,2,3-cd]pyrene	193-39-5	2.3E-09	1.5E-09	1.2E-09	1.3E-09	8.7E-10	7.3E-10	7.5E-10
Lead		4.6E-06	3.1E-06	2.4E-06	2.7E-06	1.8E-06	1.5E-06	1.5E-06
Naphthalene	91-20-3	2.4E-10	1.6E-10	1.3E-10	1.4E-10	9.4E-11	8.0E-11	8.1E-11

[a] ADD_{ing} was calculated from the mean of 35 individual field average concentrations ($C_{ing\text{-}crumb\ rubber}$) of a chemical detected in artificial gastrointestinal fluids extracts of crumb rubber samples.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

Table F-351. Average Ingestion Daily Dose[a] (ADD_{ing}, milligrams per kilogram BW per day) for Lifetime Cancer Risk Assessment of **Field-Related Carcinogens**—Combined Gender **Coaches**

Chemical	CASRN[c]	ADD_{ing}			
		16<30 Years	30<40 Years	40<50 Years	50<70 Years
Aniline	62-53-3	1.2E-09	1.1E-09	1.1E-09	1.1E-09
Arsenic		6.9E-09	6.5E-09	6.4E-09	6.4E-09
Benz[a]anthracene	56-55-3	2.0E-09	1.8E-09	1.8E-09	1.8E-09
Benzo[a]pyrene	50-32-8	1.6E-09	1.5E-09	1.5E-09	1.5E-09
Benzo[b]fluoranthene	205-99-2	2.7E-09	2.5E-09	2.5E-09	2.5E-09
Benzo[k]fluoranthene	207-08-9	8.7E-10	8.2E-10	8.0E-10	8.0E-10
Chromium		3.2E-08	3.0E-08	3.0E-08	3.0E-08
Chrysene	218-01-9	8.7E-09	8.2E-09	8.0E-09	8.0E-09
Cyclopenta[cd]pyrene	27208-37-3	1.9E-09	1.8E-09	1.7E-09	1.7E-09
Dibenz[a,h]anthracene	53-70-3	1.2E-10	1.1E-10	1.1E-10	1.1E-10

Chemical	CASRN[c]	ADD_{ing}			
		16<30 Years	30<40 Years	40<50 Years	50<70 Years
Indeno[1,2,3-cd]pyrene	193-39-5	3.3E-10	3.1E-10	3.0E-10	3.0E-10
Lead		6.7E-07	6.3E-07	6.2E-07	6.2E-07
Naphthalene	91-20-3	3.6E-11	3.3E-11	3.3E-11	3.3E-11

[a] ADD_{ing} was calculated from the mean of 35 individual field average concentrations ($C_{ing\text{-}crumb\ rubber}$) of a chemical detected in artificial gastrointestinal fluids extracts of crumb rubber samples.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

Table F-352. Average Ingestion Daily Dose[a] (ADD_{ing}, milligrams per kilogram BW per day) for Lifetime Cancer Risk Assessment of **Field-Related Carcinogens**—Combined Gender **Referees**

Chemical	CASRN[c]	ADD_{ing}			
		16<30 Years	30<40 Years	40<50 Years	50<70 Years
Aniline	62-53-3	5.2E-10	4.9E-10	4.8E-10	4.8E-10
Arsenic		3.0E-09	2.9E-09	2.8E-09	2.8E-09
Benz[a]anthracene	56-55-3	8.6E-10	8.1E-10	7.9E-10	7.9E-10
Benzo[a]pyrene	50-32-8	7.1E-10	6.6E-10	6.5E-10	6.5E-10
Benzo[b]fluoranthene	205-99-2	1.2E-09	1.1E-09	1.1E-09	1.1E-09
Benzo[k]fluoranthene	207-08-9	3.8E-10	3.6E-10	3.5E-10	3.5E-10
Chromium		1.4E-08	1.3E-08	1.3E-08	1.3E-08
Chrysene	218-01-9	3.8E-09	3.6E-09	3.5E-09	3.5E-09
Cyclopenta[cd]pyrene	27208-37-3	8.2E-10	7.7E-10	7.6E-10	7.6E-10
Dibenz[a,h]anthracene	53-70-3	5.1E-11	4.8E-11	4.7E-11	4.7E-11
Indeno[1,2,3-cd]pyrene	193-39-5	1.4E-10	1.4E-10	1.3E-10	1.3E-10
Lead		3.0E-07	2.8E-07	2.7E-07	2.7E-07
Naphthalene	91-20-3	1.6E-11	1.5E-11	1.4E-11	1.4E-11

[a] ADD_{ing} was calculated from the mean of 35 individual field average concentrations ($C_{ing\text{-}crumb\ rubber}$) of a chemical detected in artificial gastrointestinal fluids extracts of crumb rubber samples.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

Table F-353. Average Ingestion Daily Dose[a] (ADD_{ing}, milligrams per kilogram BW per day) for Lifetime Cancer Risk Assessment of **Field-Related Carcinogens**—Combined Gender **Spectators**

Chemical	CASRN[c]	ADD_{ing}								
		Third trimester fetus	0<2 Years	2<6 Years	6<11 Years	11<16 Years	16<30 Years	30<40 Years	40<50 Years	50<70 Years
Aniline	62-53-3	4.1E-10	2.9E-08	1.4E-08	9.5E-09	7.5E-10	4.2E-10	4.0E-10	3.8E-10	3.8E-10
Arsenic		2.4E-09	1.7E-07	7.9E-08	5.5E-08	4.3E-09	2.5E-09	2.3E-09	2.2E-09	2.2E-09
Benz[a]anthracene	56-55-3	6.8E-10	4.7E-08	2.2E-08	1.6E-08	1.2E-09	7.0E-10	6.6E-10	6.3E-10	6.3E-10
Benzo[a]pyrene	50-32-8	5.6E-10	3.9E-08	1.8E-08	1.3E-08	1.0E-09	5.7E-10	5.4E-10	5.1E-10	5.2E-10
Benzo[b]fluoranthene	205-99-2	9.3E-10	6.5E-08	3.1E-08	2.2E-08	1.7E-09	9.6E-10	9.1E-10	8.6E-10	8.6E-10
Benzo[k]fluoranthene	207-08-9	3.0E-10	2.1E-08	1.0E-08	7.0E-09	5.5E-10	3.1E-10	2.9E-10	2.8E-10	2.8E-10
Chromium		1.1E-08	7.7E-07	3.7E-07	2.6E-07	2.0E-08	1.1E-08	1.1E-08	1.0E-08	1.0E-08
Chrysene	218-01-9	3.0E-09	2.1E-07	1.0E-07	7.0E-08	5.5E-09	3.1E-09	2.9E-09	2.8E-09	2.8E-09
Cyclopenta[cd]pyrene	27208-37-3	6.5E-10	4.5E-08	2.1E-08	1.5E-08	1.2E-09	6.7E-10	6.3E-10	6.0E-10	6.0E-10
Dibenz[a,h]anthracene	53-70-3	4.0E-11	2.8E-09	1.3E-09	9.3E-10	7.3E-11	4.1E-11	3.9E-11	3.7E-11	3.7E-11
Indeno[1,2,3-cd]pyrene	193-39-5	1.1E-10	7.9E-09	3.7E-09	2.6E-09	2.1E-10	1.2E-10	1.1E-10	1.0E-10	1.0E-10
Lead		2.3E-07	1.6E-05	7.7E-06	5.4E-06	4.2E-07	2.4E-07	2.3E-07	2.2E-07	2.2E-07
Naphthalene	91-20-3	1.2E-11	8.5E-10	4.1E-10	2.8E-10	2.2E-11	1.3E-11	1.2E-11	1.1E-11	1.1E-11

[a] ADD_{ing} was calculated from the mean of 35 individual field average concentrations ($C_{ing\text{-}crumb\ rubber}$) of a chemical detected in artificial gastrointestinal fluids extracts of crumb rubber samples.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.

INDIVIDUAL FIELD ASSESSMENT (Table F-354 to Table F-377)

Table F-354. Field-Specific Average Ingestion Daily Dose[a] for Lifetime Cancer Risk Assessment ($ADD_{ing\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Athletes 2<6 Years**

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	12	0	8.2E-09	1.9E-08	0	4.6E-08	8.2E-08
Arsenic		35	5.6E-09	4.8E-08	3.4E-08	4.3E-08	8.6E-08	1.8E-07
Benz[a]anthracene	56-55-3	35	8.8E-10	1.3E-08	1.5E-08	6.4E-09	4.2E-08	5.9E-08
Benzo[a]pyrene	50-32-8	35	2.2E-09	1.1E-08	9.1E-09	7.9E-09	3.1E-08	3.3E-08
Benzo[b]fluoranthene	205-99-2	35	3.8E-09	1.9E-08	1.4E-08	1.2E-08	4.5E-08	5.4E-08
Benzo[k]fluoranthene	207-08-9	35	5.1E-10	6.0E-09	5.7E-09	3.8E-09	1.8E-08	2.3E-08
Chromium		35	4.1E-08	2.2E-07	2.2E-07	1.5E-07	4.8E-07	1.2E-06
Chrysene	218-01-9	35	1.5E-08	6.0E-08	3.2E-08	6.0E-08	1.0E-07	1.6E-07
Cyclopenta[cd]pyrene	27208-37-3	35	2.3E-09	1.3E-08	1.2E-08	1.1E-08	3.4E-08	6.1E-08
Dibenz[a,h]anthracene	53-70-3	7	0	8.0E-10	2.0E-09	0	3.6E-09	9.9E-09

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Indeno[1,2,3-cd]pyrene	193-39-5	12	0	2.3E-09	3.9E-09	0	9.6E-09	1.5E-08
Lead		35	9.0E-07	4.6E-06	4.0E-06	3.5E-06	1.2E-05	2.1E-05
Naphthalene	91-20-3	1	0	2.4E-10	1.4E-09	0	0	8.5E-09

[a] 35 field-specific $ADD_{ing\text{-}field}$ are included in the table. $ADD_{ing\text{-}field}$ was calculated from field-specific average concentrations ($C_{ing\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial gastrointestinal fluids extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

Table F-355. Field-Specific Average Ingestion Daily Dose[a] for Lifetime Cancer Risk Assessment ($ADD_{ing\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Athletes 6<11 Years**

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	12	0	5.5E-09	1.2E-08	0	3.0E-08	5.5E-08
Arsenic		35	3.7E-09	3.2E-08	2.2E-08	2.9E-08	5.7E-08	1.2E-07
Benz[a]anthracene	56-55-3	35	5.9E-10	9.0E-09	9.9E-09	4.3E-09	2.8E-08	3.9E-08
Benzo[a]pyrene	50-32-8	35	1.4E-09	7.4E-09	6.1E-09	5.3E-09	2.0E-08	2.2E-08
Benzo[b]fluoranthene	205-99-2	35	2.5E-09	1.2E-08	9.1E-09	8.3E-09	3.0E-08	3.6E-08
Benzo[k]fluoranthene	207-08-9	35	3.4E-10	4.0E-09	3.8E-09	2.5E-09	1.2E-08	1.5E-08
Chromium		35	2.7E-08	1.5E-07	1.4E-07	9.7E-08	3.2E-07	8.2E-07
Chrysene	218-01-9	35	1.0E-08	4.0E-08	2.1E-08	4.0E-08	6.9E-08	1.1E-07
Cyclopenta[cd]pyrene	27208-37-3	35	1.5E-09	8.6E-09	8.0E-09	7.4E-09	2.3E-08	4.0E-08
Dibenz[a,h]anthracene	53-70-3	7	0	5.3E-10	1.3E-09	0	2.4E-09	6.6E-09
Indeno[1,2,3-cd]pyrene	193-39-5	12	0	1.5E-09	2.6E-09	0	6.4E-09	1.0E-08
Lead		35	6.0E-07	3.1E-06	2.7E-06	2.3E-06	7.8E-06	1.4E-05
Naphthalene	91-20-3	1	0	1.6E-10	9.6E-10	0	0	5.7E-09

[a] 35 field-specific $ADD_{ing\text{-}field}$ are included in the table. $ADD_{ing\text{-}field}$ was calculated from field-specific average concentrations ($C_{ing\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial gastrointestinal fluids extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

Table F-356. Field-Specific Average Ingestion Daily Dose[a] for Lifetime Cancer Risk Assessment ($ADD_{ing\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Athletes 11<16 Years**

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	12	0	4.2E-09	9.7E-09	0	2.4E-08	4.3E-08
Arsenic		35	2.9E-09	2.5E-08	1.7E-08	2.2E-08	4.4E-08	9.5E-08
Benz[a]anthracene	56-55-3	35	4.5E-10	7.0E-09	7.6E-09	3.3E-09	2.2E-08	3.0E-08
Benzo[a]pyrene	50-32-8	35	1.1E-09	5.7E-09	4.7E-09	4.1E-09	1.6E-08	1.7E-08
Benzo[b]fluoranthene	205-99-2	35	2.0E-09	9.6E-09	7.1E-09	6.4E-09	2.3E-08	2.8E-08
Benzo[k]fluoranthene	207-08-9	35	2.6E-10	3.1E-09	2.9E-09	2.0E-09	9.1E-09	1.2E-08
Chromium		35	2.1E-08	1.1E-07	1.1E-07	7.5E-08	2.5E-07	6.3E-07
Chrysene	218-01-9	35	7.8E-09	3.1E-08	1.6E-08	3.1E-08	5.3E-08	8.5E-08
Cyclopenta[cd]pyrene	27208-37-3	35	1.2E-09	6.7E-09	6.2E-09	5.8E-09	1.8E-08	3.1E-08
Dibenz[a,h]anthracene	53-70-3	7	0	4.1E-10	1.0E-09	0	1.9E-09	5.1E-09
Indeno[1,2,3-cd]pyrene	193-39-5	12	0	1.2E-09	2.0E-09	0	4.9E-09	8.0E-09
Lead		35	4.6E-07	2.4E-06	2.1E-06	1.8E-06	6.0E-06	1.1E-05
Naphthalene	91-20-3	1	0	1.3E-10	7.5E-10	0	0	4.4E-09

[a] 35 field-specific $ADD_{ing\text{-}field}$ are included in the table. $ADD_{ing\text{-}field}$ was calculated from field-specific average concentrations ($C_{ing\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial gastrointestinal fluids extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

Table F-357. Field-Specific Average Ingestion Daily Dose[a] for Lifetime Cancer Risk Assessment ($ADD_{ing\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Athletes 16<30 Years**

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	12	0	4.7E-09	1.1E-08	0	2.6E-08	4.7E-08
Arsenic		35	3.2E-09	2.7E-08	1.9E-08	2.5E-08	4.9E-08	1.1E-07
Benz[a]anthracene	56-55-3	35	5.1E-10	7.8E-09	8.5E-09	3.7E-09	2.4E-08	3.4E-08
Benzo[a]pyrene	50-32-8	35	1.3E-09	6.4E-09	5.2E-09	4.5E-09	1.8E-08	1.9E-08
Benzo[b]fluoranthene	205-99-2	35	2.2E-09	1.1E-08	7.9E-09	7.2E-09	2.6E-08	3.1E-08
Benzo[k]fluoranthene	207-08-9	35	2.9E-10	3.5E-09	3.3E-09	2.2E-09	1.0E-08	1.3E-08
Chromium		35	2.3E-08	1.3E-07	1.2E-07	8.4E-08	2.8E-07	7.0E-07
Chrysene	218-01-9	35	8.7E-09	3.5E-08	1.8E-08	3.5E-08	5.9E-08	9.5E-08
Cyclopenta[cd]pyrene	27208-37-3	35	1.3E-09	7.4E-09	6.9E-09	6.4E-09	2.0E-08	3.5E-08
Dibenz[a,h]anthracene	53-70-3	7	0	4.6E-10	1.1E-09	0	2.1E-09	5.7E-09

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Indeno[1,2,3-cd]pyrene	193-39-5	12	0	1.3E-09	2.3E-09	0	5.5E-09	8.9E-09
Lead		35	5.2E-07	2.7E-06	2.3E-06	2.0E-06	6.7E-06	1.2E-05
Naphthalene	91-20-3	1	0	1.4E-10	8.3E-10	0	0	4.9E-09

[a] 35 field-specific $ADD_{ing\text{-}field}$ are included in the table. $ADD_{ing\text{-}field}$ was calculated from field-specific average concentrations ($C_{ing\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial gastrointestinal fluids extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

Table F-358. Field-Specific Average Ingestion Daily Dose[a] for Lifetime Cancer Risk Assessment ($ADD_{ing\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Athletes 30<40 Years**

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	12	0	3.1E-09	7.2E-09	0	1.8E-08	3.2E-08
Arsenic		35	2.2E-09	1.8E-08	1.3E-08	1.7E-08	3.3E-08	7.0E-08
Benz[a]anthracene	56-55-3	35	3.4E-10	5.2E-09	5.7E-09	2.5E-09	1.6E-08	2.3E-08
Benzo[a]pyrene	50-32-8	35	8.4E-10	4.3E-09	3.5E-09	3.0E-09	1.2E-08	1.2E-08
Benzo[b]fluoranthene	205-99-2	35	1.5E-09	7.1E-09	5.3E-09	4.8E-09	1.7E-08	2.1E-08
Benzo[k]fluoranthene	207-08-9	35	1.9E-10	2.3E-09	2.2E-09	1.5E-09	6.8E-09	8.7E-09
Chromium		35	1.6E-08	8.5E-08	8.3E-08	5.6E-08	1.9E-07	4.7E-07
Chrysene	218-01-9	35	5.8E-09	2.3E-08	1.2E-08	2.3E-08	4.0E-08	6.3E-08
Cyclopenta[cd]pyrene	27208-37-3	35	8.7E-10	4.9E-09	4.6E-09	4.3E-09	1.3E-08	2.3E-08
Dibenz[a,h]anthracene	53-70-3	7	0	3.1E-10	7.7E-10	0	1.4E-09	3.8E-09
Indeno[1,2,3-cd]pyrene	193-39-5	12	0	8.7E-10	1.5E-09	0	3.7E-09	5.9E-09
Lead		35	3.4E-07	1.8E-06	1.5E-06	1.3E-06	4.5E-06	8.1E-06
Naphthalene	91-20-3	1	0	9.4E-11	5.6E-10	0	0	3.3E-09

[a] 35 field-specific $ADD_{ing\text{-}field}$ are included in the table. $ADD_{ing\text{-}field}$ was calculated from field-specific average concentrations ($C_{ing\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial gastrointestinal fluids extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

Table F-359. Field-Specific Average Ingestion Daily Dose[a] for Lifetime Cancer Risk Assessment ($ADD_{ing\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Athletes 40<50 Years**

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	12	0	2.7E-09	6.1E-09	0	1.5E-08	2.7E-08
Arsenic		35	1.8E-09	1.6E-08	1.1E-08	1.4E-08	2.8E-08	6.0E-08
Benz[a]anthracene	56-55-3	35	2.9E-10	4.4E-09	4.8E-09	2.1E-09	1.4E-08	1.9E-08
Benzo[a]pyrene	50-32-8	35	7.1E-10	3.6E-09	3.0E-09	2.6E-09	1.0E-08	1.1E-08
Benzo[b]fluoranthene	205-99-2	35	1.2E-09	6.0E-09	4.5E-09	4.1E-09	1.5E-08	1.8E-08
Benzo[k]fluoranthene	207-08-9	35	1.6E-10	2.0E-09	1.8E-09	1.2E-09	5.7E-09	7.3E-09
Chromium		35	1.3E-08	7.2E-08	7.0E-08	4.8E-08	1.6E-07	4.0E-07
Chrysene	218-01-9	35	4.9E-09	2.0E-08	1.0E-08	2.0E-08	3.3E-08	5.4E-08
Cyclopenta[cd]pyrene	27208-37-3	35	7.4E-10	4.2E-09	3.9E-09	3.6E-09	1.1E-08	2.0E-08
Dibenz[a,h]anthracene	53-70-3	7	0	2.6E-10	6.5E-10	0	1.2E-09	3.2E-09
Indeno[1,2,3-cd]pyrene	193-39-5	12	0	7.3E-10	1.3E-09	0	3.1E-09	5.0E-09
Lead		35	2.9E-07	1.5E-06	1.3E-06	1.1E-06	3.8E-06	6.8E-06
Naphthalene	91-20-3	1	0	8.0E-11	4.7E-10	0	0	2.8E-09

[a] 35 field-specific $ADD_{ing\text{-}field}$ are included in the table. $ADD_{ing\text{-}field}$ was calculated from field-specific average concentrations ($C_{ing\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial gastrointestinal fluids extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

Table F-360. Field-Specific Average Ingestion Daily Dose[a] for Lifetime Cancer Risk Assessment ($ADD_{ing\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Athletes 50<70 Years**

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	12	0	2.7E-09	6.2E-09	0	1.5E-08	2.7E-08
Arsenic		35	1.9E-09	1.6E-08	1.1E-08	1.4E-08	2.9E-08	6.1E-08
Benz[a]anthracene	56-55-3	35	2.9E-10	4.5E-09	4.9E-09	2.1E-09	1.4E-08	2.0E-08
Benzo[a]pyrene	50-32-8	35	7.2E-10	3.7E-09	3.0E-09	2.6E-09	1.0E-08	1.1E-08
Benzo[b]fluoranthene	205-99-2	35	1.3E-09	6.2E-09	4.6E-09	4.1E-09	1.5E-08	1.8E-08
Benzo[k]fluoranthene	207-08-9	35	1.7E-10	2.0E-09	1.9E-09	1.3E-09	5.8E-09	7.5E-09
Chromium		35	1.4E-08	7.3E-08	7.2E-08	4.9E-08	1.6E-07	4.1E-07
Chrysene	218-01-9	35	5.0E-09	2.0E-08	1.1E-08	2.0E-08	3.4E-08	5.5E-08
Cyclopenta[cd]pyrene	27208-37-3	35	7.5E-10	4.3E-09	4.0E-09	3.7E-09	1.1E-08	2.0E-08
Dibenz[a,h]anthracene	53-70-3	7	0	2.7E-10	6.6E-10	0	1.2E-09	3.3E-09

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Indeno[1,2,3-cd]pyrene	193-39-5	12	0	7.5E-10	1.3E-09	0	3.2E-09	5.1E-09
Lead		35	3.0E-07	1.5E-06	1.3E-06	1.2E-06	3.9E-06	7.0E-06
Naphthalene	91-20-3	1	0	8.1E-11	4.8E-10	0	0	2.8E-09

[a] 35 field-specific $ADD_{ing\text{-}field}$ are included in the table. $ADD_{ing\text{-}field}$ was calculated from field-specific average concentrations ($C_{ing\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial gastrointestinal fluids extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

Table F-361. Field-Specific Average Ingestion Daily Dose[a] for Lifetime Cancer Risk Assessment ($ADD_{ing\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Coaches 16<30 Years**

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	12	0	1.2E-09	2.7E-09	0	6.6E-09	1.2E-08
Arsenic		35	8.2E-10	6.9E-09	4.9E-09	6.3E-09	1.2E-08	2.7E-08
Benz[a]anthracene	56-55-3	35	1.3E-10	2.0E-09	2.1E-09	9.4E-10	6.1E-09	8.5E-09
Benzo[a]pyrene	50-32-8	35	3.2E-10	1.6E-09	1.3E-09	1.1E-09	4.5E-09	4.7E-09
Benzo[b]fluoranthene	205-99-2	35	5.5E-10	2.7E-09	2.0E-09	1.8E-09	6.5E-09	7.9E-09
Benzo[k]fluoranthene	207-08-9	35	7.3E-11	8.7E-10	8.2E-10	5.5E-10	2.6E-09	3.3E-09
Chromium		35	5.9E-09	3.2E-08	3.1E-08	2.1E-08	7.0E-08	1.8E-07
Chrysene	218-01-9	35	2.2E-09	8.7E-09	4.6E-09	8.7E-09	1.5E-08	2.4E-08
Cyclopenta[cd]pyrene	27208-37-3	35	3.3E-10	1.9E-09	1.7E-09	1.6E-09	4.9E-09	8.8E-09
Dibenz[a,h]anthracene	53-70-3	7	0	1.2E-10	2.9E-10	0	5.2E-10	1.4E-09
Indeno[1,2,3-cd]pyrene	193-39-5	12	0	3.3E-10	5.7E-10	0	1.4E-09	2.2E-09
Lead		35	1.3E-07	6.7E-07	5.8E-07	5.1E-07	1.7E-06	3.0E-06
Naphthalene	91-20-3	1	0	3.6E-11	2.1E-10	0	0	1.2E-09

[a] 35 field-specific $ADD_{ing\text{-}field}$ are included in the table. $ADD_{ing\text{-}field}$ was calculated from field-specific average concentrations ($C_{ing\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial gastrointestinal fluids extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

Table F-362. Field-Specific Average Ingestion Daily Dose[a] for Lifetime Cancer Risk Assessment ($ADD_{ing\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Coaches 30<40 Years**

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	12	0	1.1E-09	2.6E-09	0	6.2E-09	1.1E-08
Arsenic		35	7.7E-10	6.5E-09	4.6E-09	5.9E-09	1.2E-08	2.5E-08
Benz[a]anthracene	56-55-3	35	1.2E-10	1.8E-09	2.0E-09	8.8E-10	5.7E-09	8.0E-09
Benzo[a]pyrene	50-32-8	35	3.0E-10	1.5E-09	1.2E-09	1.1E-09	4.2E-09	4.4E-09
Benzo[b]fluoranthene	205-99-2	35	5.2E-10	2.5E-09	1.9E-09	1.7E-09	6.1E-09	7.4E-09
Benzo[k]fluoranthene	207-08-9	35	6.9E-11	8.2E-10	7.7E-10	5.2E-10	2.4E-09	3.1E-09
Chromium		35	5.6E-09	3.0E-08	2.9E-08	2.0E-08	6.6E-08	1.7E-07
Chrysene	218-01-9	35	2.1E-09	8.2E-09	4.4E-09	8.2E-09	1.4E-08	2.2E-08
Cyclopenta[cd]pyrene	27208-37-3	35	3.1E-10	1.8E-09	1.6E-09	1.5E-09	4.6E-09	8.3E-09
Dibenz[a,h]anthracene	53-70-3	7	0	1.1E-10	2.7E-10	0	4.9E-10	1.4E-09
Indeno[1,2,3-cd]pyrene	193-39-5	12	0	3.1E-10	5.4E-10	0	1.3E-09	2.1E-09
Lead		35	1.2E-07	6.3E-07	5.5E-07	4.8E-07	1.6E-06	2.9E-06
Naphthalene	91-20-3	1	0	3.3E-11	2.0E-10	0	0	1.2E-09

[a] 35 field-specific $ADD_{ing\text{-}field}$ are included in the table. $ADD_{ing\text{-}field}$ was calculated from field-specific average concentrations ($C_{ing\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial gastrointestinal fluids extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

Table F-363. Field-Specific Average Ingestion Daily Dose[a] for Lifetime Cancer Risk Assessment ($ADD_{ing\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Coaches 40<50 Years**

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	12	0	1.1E-09	2.5E-09	0	6.1E-09	1.1E-08
Arsenic		35	7.5E-10	6.4E-09	4.5E-09	5.7E-09	1.1E-08	2.5E-08
Benz[a]anthracene	56-55-3	35	1.2E-10	1.8E-09	2.0E-09	8.6E-10	5.6E-09	7.8E-09
Benzo[a]pyrene	50-32-8	35	2.9E-10	1.5E-09	1.2E-09	1.1E-09	4.1E-09	4.3E-09
Benzo[b]fluoranthene	205-99-2	35	5.0E-10	2.5E-09	1.8E-09	1.7E-09	6.0E-09	7.3E-09
Benzo[k]fluoranthene	207-08-9	35	6.7E-11	8.0E-10	7.6E-10	5.1E-10	2.4E-09	3.0E-09
Chromium		35	5.5E-09	3.0E-08	2.9E-08	1.9E-08	6.4E-08	1.6E-07
Chrysene	218-01-9	35	2.0E-09	8.0E-09	4.3E-09	8.0E-09	1.4E-08	2.2E-08
Cyclopenta[cd]pyrene	27208-37-3	35	3.0E-10	1.7E-09	1.6E-09	1.5E-09	4.5E-09	8.1E-09
Dibenz[a,h]anthracene	53-70-3	7	0	1.1E-10	2.7E-10	0	4.8E-10	1.3E-09

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Indeno[1,2,3-cd]pyrene	193-39-5	12	0	3.0E-10	5.3E-10	0	1.3E-09	2.1E-09
Lead		35	1.2E-07	6.2E-07	5.3E-07	4.7E-07	1.6E-06	2.8E-06
Naphthalene	91-20-3	1	0	3.3E-11	1.9E-10	0	0	1.1E-09

[a] 35 field-specific $ADD_{ing\text{-}field}$ are included in the table. $ADD_{ing\text{-}field}$ was calculated from field-specific average concentrations ($C_{ing\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial gastrointestinal fluids extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

Table F-364. Field-Specific Average Ingestion Daily Dose[a] for Lifetime Cancer Risk Assessment ($ADD_{ing\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related Carcinogens[b]**—Combined Gender **Coaches 50<70 Years**

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	12	0	1.1E-09	2.5E-09	0	6.1E-09	1.1E-08
Arsenic		35	7.5E-10	6.4E-09	4.5E-09	5.8E-09	1.2E-08	2.5E-08
Benz[a]anthracene	56-55-3	35	1.2E-10	1.8E-09	2.0E-09	8.6E-10	5.6E-09	7.9E-09
Benzo[a]pyrene	50-32-8	35	2.9E-10	1.5E-09	1.2E-09	1.1E-09	4.1E-09	4.4E-09
Benzo[b]fluoranthene	205-99-2	35	5.1E-10	2.5E-09	1.8E-09	1.7E-09	6.0E-09	7.3E-09
Benzo[k]fluoranthene	207-08-9	35	6.8E-11	8.0E-10	7.6E-10	5.1E-10	2.4E-09	3.0E-09
Chromium		35	5.5E-09	3.0E-08	2.9E-08	2.0E-08	6.5E-08	1.6E-07
Chrysene	218-01-9	35	2.0E-09	8.0E-09	4.3E-09	8.0E-09	1.4E-08	2.2E-08
Cyclopenta[cd]pyrene	27208-37-3	35	3.0E-10	1.7E-09	1.6E-09	1.5E-09	4.5E-09	8.1E-09
Dibenz[a,h]anthracene	53-70-3	7	0	1.1E-10	2.7E-10	0	4.8E-10	1.3E-09
Indeno[1,2,3-cd]pyrene	193-39-5	12	0	3.0E-10	5.3E-10	0	1.3E-09	2.1E-09
Lead		35	1.2E-07	6.2E-07	5.4E-07	4.7E-07	1.6E-06	2.8E-06
Naphthalene	91-20-3	1	0	3.3E-11	1.9E-10	0	0	1.1E-09

[a] 35 field-specific $ADD_{ing\text{-}field}$ are included in the table. $ADD_{ing\text{-}field}$ was calculated from field-specific average concentrations ($C_{ing\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial gastrointestinal fluids extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

Table F-365. Field-Specific Average Ingestion Daily Dose[a] for Lifetime Cancer Risk Assessment ($ADD_{ing\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Referees 16<30 Years**

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	12	0	5.2E-10	1.2E-09	0	2.9E-09	5.3E-09
Arsenic		35	3.6E-10	3.0E-09	2.2E-09	2.7E-09	5.5E-09	1.2E-08
Benz[a]anthracene	56-55-3	35	5.6E-11	8.6E-10	9.4E-10	4.1E-10	2.7E-09	3.7E-09
Benzo[a]pyrene	50-32-8	35	1.4E-10	7.1E-10	5.8E-10	5.0E-10	2.0E-09	2.1E-09
Benzo[b]fluoranthene	205-99-2	35	2.4E-10	1.2E-09	8.8E-10	7.9E-10	2.9E-09	3.5E-09
Benzo[k]fluoranthene	207-08-9	35	3.2E-11	3.8E-10	3.6E-10	2.4E-10	1.1E-09	1.4E-09
Chromium		35	2.6E-09	1.4E-08	1.4E-08	9.3E-09	3.1E-08	7.8E-08
Chrysene	218-01-9	35	9.6E-10	3.8E-09	2.0E-09	3.8E-09	6.6E-09	1.1E-08
Cyclopenta[cd]pyrene	27208-37-3	35	1.4E-10	8.2E-10	7.6E-10	7.1E-10	2.2E-09	3.9E-09
Dibenz[a,h]anthracene	53-70-3	7	0	5.1E-11	1.3E-10	0	2.3E-10	6.3E-10
Indeno[1,2,3-cd]pyrene	193-39-5	12	0	1.4E-10	2.5E-10	0	6.1E-10	9.8E-10
Lead		35	5.7E-08	3.0E-07	2.6E-07	2.2E-07	7.4E-07	1.3E-06
Naphthalene	91-20-3	1	0	1.6E-11	9.2E-11	0	0	5.5E-10

[a] 35 field-specific $ADD_{ing\text{-}field}$ are included in the table. $ADD_{ing\text{-}field}$ was calculated from field-specific average concentrations ($C_{ing\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial gastrointestinal fluids extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

Table F-366. Field-Specific Average Ingestion Daily Dose[a] for Lifetime Cancer Risk Assessment ($ADD_{ing\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Referees 30<40 Years**

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	12	0	4.9E-10	1.1E-09	0	2.7E-09	4.9E-09
Arsenic		35	3.4E-10	2.9E-09	2.0E-09	2.6E-09	5.2E-09	1.1E-08
Benz[a]anthracene	56-55-3	35	5.3E-11	8.1E-10	8.9E-10	3.9E-10	2.5E-09	3.5E-09
Benzo[a]pyrene	50-32-8	35	1.3E-10	6.6E-10	5.4E-10	4.7E-10	1.8E-09	1.9E-09
Benzo[b]fluoranthene	205-99-2	35	2.3E-10	1.1E-09	8.2E-10	7.5E-10	2.7E-09	3.3E-09
Benzo[k]fluoranthene	207-08-9	35	3.0E-11	3.6E-10	3.4E-10	2.3E-10	1.1E-09	1.4E-09
Chromium		35	2.4E-09	1.3E-08	1.3E-08	8.7E-09	2.9E-08	7.3E-08
Chrysene	218-01-9	35	9.1E-10	3.6E-09	1.9E-09	3.6E-09	6.2E-09	9.9E-09
Cyclopenta[cd]pyrene	27208-37-3	35	1.4E-10	7.7E-10	7.2E-10	6.7E-10	2.0E-09	3.6E-09
Dibenz[a,h]anthracene	53-70-3	7	0	4.8E-11	1.2E-10	0	2.2E-10	6.0E-10

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Indeno[1,2,3-cd]pyrene	193-39-5	12	0	1.4E-10	2.4E-10	0	5.7E-10	9.2E-10
Lead		35	5.4E-08	2.8E-07	2.4E-07	2.1E-07	7.0E-07	1.3E-06
Naphthalene	91-20-3	1	0	1.5E-11	8.7E-11	0	0	5.1E-10

[a] 35 field-specific $ADD_{ing\text{-}field}$ are included in the table. $ADD_{ing\text{-}field}$ was calculated from field-specific average concentrations ($C_{ing\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial gastrointestinal fluids extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

Table F-367. Field-Specific Average Ingestion Daily Dose[a] for Lifetime Cancer Risk Assessment ($ADD_{ing\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Referees 40<50 Years**

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	12	0	4.8E-10	1.1E-09	0	2.7E-09	4.8E-09
Arsenic		35	3.3E-10	2.8E-09	2.0E-09	2.5E-09	5.0E-09	1.1E-08
Benz[a]anthracene	56-55-3	35	5.2E-11	7.9E-10	8.7E-10	3.8E-10	2.5E-09	3.4E-09
Benzo[a]pyrene	50-32-8	35	1.3E-10	6.5E-10	5.3E-10	4.6E-10	1.8E-09	1.9E-09
Benzo[b]fluoranthene	205-99-2	35	2.2E-10	1.1E-09	8.0E-10	7.3E-10	2.6E-09	3.2E-09
Benzo[k]fluoranthene	207-08-9	35	3.0E-11	3.5E-10	3.3E-10	2.2E-10	1.0E-09	1.3E-09
Chromium		35	2.4E-09	1.3E-08	1.3E-08	8.6E-09	2.8E-08	7.2E-08
Chrysene	218-01-9	35	8.9E-10	3.5E-09	1.9E-09	3.5E-09	6.0E-09	9.7E-09
Cyclopenta[cd]pyrene	27208-37-3	35	1.3E-10	7.6E-10	7.0E-10	6.5E-10	2.0E-09	3.6E-09
Dibenz[a,h]anthracene	53-70-3	7	0	4.7E-11	1.2E-10	0	2.1E-10	5.8E-10
Indeno[1,2,3-cd]pyrene	193-39-5	12	0	1.3E-10	2.3E-10	0	5.6E-10	9.1E-10
Lead		35	5.3E-08	2.7E-07	2.3E-07	2.1E-07	6.8E-07	1.2E-06
Naphthalene	91-20-3	1	0	1.4E-11	8.5E-11	0	0	5.0E-10

[a] 35 field-specific $ADD_{ing\text{-}field}$ are included in the table. $ADD_{ing\text{-}field}$ was calculated from field-specific average concentrations ($C_{ing\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial gastrointestinal fluids extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

Table F-368. Field-Specific Average Ingestion Daily Dose[a] for Lifetime Cancer Risk Assessment ($ADD_{ing\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Referees 50<70 Years**

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	12	0	4.8E-10	1.1E-09	0	2.7E-09	4.8E-09
Arsenic		35	3.3E-10	2.8E-09	2.0E-09	2.5E-09	5.1E-09	1.1E-08
Benz[a]anthracene	56-55-3	35	5.2E-11	7.9E-10	8.7E-10	3.8E-10	2.5E-09	3.5E-09
Benzo[a]pyrene	50-32-8	35	1.3E-10	6.5E-10	5.3E-10	4.6E-10	1.8E-09	1.9E-09
Benzo[b]fluoranthene	205-99-2	35	2.2E-10	1.1E-09	8.1E-10	7.3E-10	2.6E-09	3.2E-09
Benzo[k]fluoranthene	207-08-9	35	3.0E-11	3.5E-10	3.3E-10	2.2E-10	1.0E-09	1.3E-09
Chromium		35	2.4E-09	1.3E-08	1.3E-08	8.6E-09	2.8E-08	7.2E-08
Chrysene	218-01-9	35	8.9E-10	3.5E-09	1.9E-09	3.5E-09	6.0E-09	9.7E-09
Cyclopenta[cd]pyrene	27208-37-3	35	1.3E-10	7.6E-10	7.0E-10	6.5E-10	2.0E-09	3.6E-09
Dibenz[a,h]anthracene	53-70-3	7	0	4.7E-11	1.2E-10	0	2.1E-10	5.8E-10
Indeno[1,2,3-cd]pyrene	193-39-5	12	0	1.3E-10	2.3E-10	0	5.6E-10	9.1E-10
Lead		35	5.3E-08	2.7E-07	2.4E-07	2.1E-07	6.9E-07	1.2E-06
Naphthalene	91-20-3	1	0	1.4E-11	8.5E-11	0	0	5.0E-10

[a] 35 field-specific $ADD_{ing\text{-}field}$ are included in the table. $ADD_{ing\text{-}field}$ was calculated from field-specific average concentrations ($C_{ing\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial gastrointestinal fluids extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

Table F-369. Field-Specific Average Ingestion Daily Dose[a] for Lifetime Cancer Risk Assessment ($ADD_{ing\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Spectators Third Trimester Fetus<0 Years**

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	12	0	4.1E-10	9.4E-10	0	2.3E-09	4.2E-09
Arsenic		35	2.8E-10	2.4E-09	1.7E-09	2.2E-09	4.3E-09	9.2E-09
Benz[a]anthracene	56-55-3	35	4.4E-11	6.8E-10	7.4E-10	3.2E-10	2.1E-09	3.0E-09
Benzo[a]pyrene	50-32-8	35	1.1E-10	5.6E-10	4.6E-10	4.0E-10	1.5E-09	1.6E-09
Benzo[b]fluoranthene	205-99-2	35	1.9E-10	9.3E-10	6.9E-10	6.3E-10	2.3E-09	2.7E-09
Benzo[k]fluoranthene	207-08-9	35	2.5E-11	3.0E-10	2.9E-10	1.9E-10	8.9E-10	1.1E-09
Chromium		35	2.1E-09	1.1E-08	1.1E-08	7.4E-09	2.4E-08	6.2E-08
Chrysene	218-01-9	35	7.6E-10	3.0E-09	1.6E-09	3.0E-09	5.2E-09	8.3E-09
Cyclopenta[cd]pyrene	27208-37-3	35	1.1E-10	6.5E-10	6.0E-10	5.6E-10	1.7E-09	3.1E-09
Dibenz[a,h]anthracene	53-70-3	7	0	4.0E-11	1.0E-10	0	1.8E-10	5.0E-10

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Indeno[1,2,3-cd]pyrene	193-39-5	12	0	1.1E-10	2.0E-10	0	4.8E-10	7.8E-10
Lead		35	4.5E-08	2.3E-07	2.0E-07	1.8E-07	5.9E-07	1.1E-06
Naphthalene	91-20-3	1	0	1.2E-11	7.3E-11	0	0	4.3E-10

[a] 35 field-specific $ADD_{ing\text{-}field}$ are included in the table. $ADD_{ing\text{-}field}$ was calculated from field-specific average concentrations ($C_{ing\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial gastrointestinal fluids extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

Table F-370. Field-Specific Average Ingestion Daily Dose[a] for Lifetime Cancer Risk Assessment ($ADD_{ing\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Spectators 0<2 Years**

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	12	0	2.9E-08	6.6E-08	0	1.6E-07	2.9E-07
Arsenic		35	2.0E-08	1.7E-07	1.2E-07	1.5E-07	3.0E-07	6.4E-07
Benz[a]anthracene	56-55-3	35	3.1E-09	4.7E-08	5.2E-08	2.3E-08	1.5E-07	2.1E-07
Benzo[a]pyrene	50-32-8	35	7.6E-09	3.9E-08	3.2E-08	2.8E-08	1.1E-07	1.1E-07
Benzo[b]fluoranthene	205-99-2	35	1.3E-08	6.5E-08	4.8E-08	4.4E-08	1.6E-07	1.9E-07
Benzo[k]fluoranthene	207-08-9	35	1.8E-09	2.1E-08	2.0E-08	1.3E-08	6.2E-08	7.9E-08
Chromium		35	1.4E-07	7.7E-07	7.6E-07	5.1E-07	1.7E-06	4.3E-06
Chrysene	218-01-9	35	5.3E-08	2.1E-07	1.1E-07	2.1E-07	3.6E-07	5.8E-07
Cyclopenta[cd]pyrene	27208-37-3	35	7.9E-09	4.5E-08	4.2E-08	3.9E-08	1.2E-07	2.1E-07
Dibenz[a,h]anthracene	53-70-3	7	0	2.8E-09	7.0E-09	0	1.3E-08	3.5E-08
Indeno[1,2,3-cd]pyrene	193-39-5	12	0	7.9E-09	1.4E-08	0	3.3E-08	5.4E-08
Lead		35	3.1E-06	1.6E-05	1.4E-05	1.2E-05	4.1E-05	7.3E-05
Naphthalene	91-20-3	1	0	8.5E-10	5.1E-09	0	0	3.0E-08

[a] 35 field-specific $ADD_{ing\text{-}field}$ are included in the table. $ADD_{ing\text{-}field}$ was calculated from field-specific average concentrations ($C_{ing\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial gastrointestinal fluids extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

Table F-371. Field-Specific Average Ingestion Daily Dose[a] for Lifetime Cancer Risk Assessment ($ADD_{ing\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Spectators 2<6 Years**

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	12	0	1.4E-08	3.1E-08	0	7.6E-08	1.4E-07
Arsenic		35	9.3E-09	7.9E-08	5.6E-08	7.1E-08	1.4E-07	3.0E-07
Benz[a]anthracene	56-55-3	35	1.5E-09	2.2E-08	2.5E-08	1.1E-08	6.9E-08	9.7E-08
Benzo[a]pyrene	50-32-8	35	3.6E-09	1.8E-08	1.5E-08	1.3E-08	5.1E-08	5.4E-08
Benzo[b]fluoranthene	205-99-2	35	6.3E-09	3.1E-08	2.3E-08	2.1E-08	7.5E-08	9.0E-08
Benzo[k]fluoranthene	207-08-9	35	8.4E-10	1.0E-08	9.4E-09	6.3E-09	2.9E-08	3.7E-08
Chromium		35	6.8E-08	3.7E-07	3.6E-07	2.4E-07	8.0E-07	2.0E-06
Chrysene	218-01-9	35	2.5E-08	1.0E-07	5.3E-08	9.9E-08	1.7E-07	2.7E-07
Cyclopenta[cd]pyrene	27208-37-3	35	3.8E-09	2.1E-08	2.0E-08	1.8E-08	5.6E-08	1.0E-07
Dibenz[a,h]anthracene	53-70-3	7	0	1.3E-09	3.3E-09	0	6.0E-09	1.6E-08
Indeno[1,2,3-cd]pyrene	193-39-5	12	0	3.7E-09	6.5E-09	0	1.6E-08	2.6E-08
Lead		35	1.5E-06	7.7E-06	6.6E-06	5.8E-06	1.9E-05	3.5E-05
Naphthalene	91-20-3	1	0	4.1E-10	2.4E-09	0	0	1.4E-08

[a] 35 field-specific $ADD_{ing\text{-}field}$ are included in the table. $ADD_{ing\text{-}field}$ was calculated from field-specific average concentrations ($C_{ing\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial gastrointestinal fluids extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

Table F-372. Field-Specific Average Ingestion Daily Dose[a] for Lifetime Cancer Risk Assessment ($ADD_{ing\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Spectators 6<11 Years**

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	12	0	9.5E-09	2.2E-08	0	5.3E-08	9.6E-08
Arsenic		35	6.5E-09	5.5E-08	3.9E-08	5.0E-08	1.0E-07	2.1E-07
Benz[a]anthracene	56-55-3	35	1.0E-09	1.6E-08	1.7E-08	7.5E-09	4.9E-08	6.8E-08
Benzo[a]pyrene	50-32-8	35	2.5E-09	1.3E-08	1.1E-08	9.2E-09	3.6E-08	3.8E-08
Benzo[b]fluoranthene	205-99-2	35	4.4E-09	2.2E-08	1.6E-08	1.4E-08	5.2E-08	6.3E-08
Benzo[k]fluoranthene	207-08-9	35	5.9E-10	7.0E-09	6.6E-09	4.4E-09	2.0E-08	2.6E-08
Chromium		35	4.7E-08	2.6E-07	2.5E-07	1.7E-07	5.6E-07	1.4E-06
Chrysene	218-01-9	35	1.8E-08	7.0E-08	3.7E-08	7.0E-08	1.2E-07	1.9E-07
Cyclopenta[cd]pyrene	27208-37-3	35	2.6E-09	1.5E-08	1.4E-08	1.3E-08	3.9E-08	7.0E-08
Dibenz[a,h]anthracene	53-70-3	7	0	9.3E-10	2.3E-09	0	4.2E-09	1.2E-08

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Indeno[1,2,3-cd]pyrene	193-39-5	12	0	2.6E-09	4.6E-09	0	1.1E-08	1.8E-08
Lead		35	1.0E-06	5.4E-06	4.7E-06	4.1E-06	1.4E-05	2.4E-05
Naphthalene	91-20-3	1	0	2.8E-10	1.7E-09	0	0	9.9E-09

[a] 35 field-specific $ADD_{ing\text{-}field}$ are included in the table. $ADD_{ing\text{-}field}$ was calculated from field-specific average concentrations ($C_{ing\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial gastrointestinal fluids extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

Table F-373. Field-Specific Average Ingestion Daily Dose[a] for Lifetime Cancer Risk Assessment ($ADD_{ing\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Spectators 11<16 Years**

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	12	0	7.5E-10	1.7E-09	0	4.2E-09	7.5E-09
Arsenic		35	5.1E-10	4.3E-09	3.1E-09	3.9E-09	7.8E-09	1.7E-08
Benz[a]anthracene	56-55-3	35	8.0E-11	1.2E-09	1.3E-09	5.9E-10	3.8E-09	5.4E-09
Benzo[a]pyrene	50-32-8	35	2.0E-10	1.0E-09	8.3E-10	7.2E-10	2.8E-09	3.0E-09
Benzo[b]fluoranthene	205-99-2	35	3.4E-10	1.7E-09	1.2E-09	1.1E-09	4.1E-09	5.0E-09
Benzo[k]fluoranthene	207-08-9	35	4.6E-11	5.5E-10	5.2E-10	3.5E-10	1.6E-09	2.1E-09
Chromium		35	3.7E-09	2.0E-08	2.0E-08	1.3E-08	4.4E-08	1.1E-07
Chrysene	218-01-9	35	1.4E-09	5.5E-09	2.9E-09	5.5E-09	9.4E-09	1.5E-08
Cyclopenta[cd]pyrene	27208-37-3	35	2.1E-10	1.2E-09	1.1E-09	1.0E-09	3.1E-09	5.5E-09
Dibenz[a,h]anthracene	53-70-3	7	0	7.3E-11	1.8E-10	0	3.3E-10	9.1E-10
Indeno[1,2,3-cd]pyrene	193-39-5	12	0	2.1E-10	3.6E-10	0	8.7E-10	1.4E-09
Lead		35	8.2E-08	4.2E-07	3.6E-07	3.2E-07	1.1E-06	1.9E-06
Naphthalene	91-20-3	1	0	2.2E-11	1.3E-10	0	0	7.8E-10

[a] 35 field-specific $ADD_{ing\text{-}field}$ are included in the table. $ADD_{ing\text{-}field}$ was calculated from field-specific average concentrations ($C_{ing\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial gastrointestinal fluids extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

Table F-374. Field-Specific Average Ingestion Daily Dose[a] for Lifetime Cancer Risk Assessment ($ADD_{ing\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Spectators 16<30 Years**

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	12	0	4.2E-10	9.7E-10	0	2.4E-09	4.3E-09
Arsenic		35	2.9E-10	2.5E-09	1.7E-09	2.2E-09	4.5E-09	9.5E-09
Benz[a]anthracene	56-55-3	35	4.6E-11	7.0E-10	7.7E-10	3.3E-10	2.2E-09	3.0E-09
Benzo[a]pyrene	50-32-8	35	1.1E-10	5.7E-10	4.7E-10	4.1E-10	1.6E-09	1.7E-09
Benzo[b]fluoranthene	205-99-2	35	2.0E-10	9.6E-10	7.1E-10	6.5E-10	2.3E-09	2.8E-09
Benzo[k]fluoranthene	207-08-9	35	2.6E-11	3.1E-10	2.9E-10	2.0E-10	9.1E-10	1.2E-09
Chromium		35	2.1E-09	1.1E-08	1.1E-08	7.6E-09	2.5E-08	6.3E-08
Chrysene	218-01-9	35	7.8E-10	3.1E-09	1.7E-09	3.1E-09	5.3E-09	8.5E-09
Cyclopenta[cd]pyrene	27208-37-3	35	1.2E-10	6.7E-10	6.2E-10	5.8E-10	1.8E-09	3.1E-09
Dibenz[a,h]anthracene	53-70-3	7	0	4.1E-11	1.0E-10	0	1.9E-10	5.2E-10
Indeno[1,2,3-cd]pyrene	193-39-5	12	0	1.2E-10	2.0E-10	0	5.0E-10	8.0E-10
Lead		35	4.7E-08	2.4E-07	2.1E-07	1.8E-07	6.0E-07	1.1E-06
Naphthalene	91-20-3	1	0	1.3E-11	7.5E-11	0	0	4.4E-10

[a] 35 field-specific $ADD_{ing\text{-}field}$ are included in the table. $ADD_{ing\text{-}field}$ was calculated from field-specific average concentrations ($C_{ing\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial gastrointestinal fluids extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

Table F-375. Field-Specific Average Ingestion Daily Dose[a] for Lifetime Cancer Risk Assessment ($ADD_{ing\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Spectators 30<40 Years**

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	12	0	4.0E-10	9.2E-10	0	2.2E-09	4.0E-09
Arsenic		35	2.7E-10	2.3E-09	1.7E-09	2.1E-09	4.2E-09	9.0E-09
Benz[a]anthracene	56-55-3	35	4.3E-11	6.6E-10	7.2E-10	3.2E-10	2.1E-09	2.9E-09
Benzo[a]pyrene	50-32-8	35	1.1E-10	5.4E-10	4.5E-10	3.9E-10	1.5E-09	1.6E-09
Benzo[b]fluoranthene	205-99-2	35	1.9E-10	9.1E-10	6.7E-10	6.1E-10	2.2E-09	2.7E-09
Benzo[k]fluoranthene	207-08-9	35	2.5E-11	2.9E-10	2.8E-10	1.9E-10	8.6E-10	1.1E-09
Chromium		35	2.0E-09	1.1E-08	1.1E-08	7.2E-09	2.4E-08	6.0E-08
Chrysene	218-01-9	35	7.4E-10	2.9E-09	1.6E-09	2.9E-09	5.0E-09	8.1E-09
Cyclopenta[cd]pyrene	27208-37-3	35	1.1E-10	6.3E-10	5.9E-10	5.5E-10	1.7E-09	3.0E-09
Dibenz[a,h]anthracene	53-70-3	7	0	3.9E-11	9.8E-11	0	1.8E-10	4.9E-10

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Indeno[1,2,3-cd]pyrene	193-39-5	12	0	1.1E-10	1.9E-10	0	4.7E-10	7.6E-10
Lead		35	4.4E-08	2.3E-07	2.0E-07	1.7E-07	5.7E-07	1.0E-06
Naphthalene	91-20-3	1	0	1.2E-11	7.1E-11	0	0	4.2E-10

[a] 35 field-specific $ADD_{ing\text{-}field}$ are included in the table. $ADD_{ing\text{-}field}$ was calculated from field-specific average concentrations ($C_{ing\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial gastrointestinal fluids extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

Table F-376. Field-Specific Average Ingestion Daily Dose[a] for Lifetime Cancer Risk Assessment ($ADD_{ing\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Spectators 40<50 Years**

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	12	0	3.8E-10	8.7E-10	0	2.1E-09	3.8E-09
Arsenic		35	2.6E-10	2.2E-09	1.6E-09	2.0E-09	4.0E-09	8.5E-09
Benz[a]anthracene	56-55-3	35	4.1E-11	6.3E-10	6.9E-10	3.0E-10	1.9E-09	2.7E-09
Benzo[a]pyrene	50-32-8	35	1.0E-10	5.1E-10	4.2E-10	3.7E-10	1.4E-09	1.5E-09
Benzo[b]fluoranthene	205-99-2	35	1.8E-10	8.6E-10	6.4E-10	5.8E-10	2.1E-09	2.5E-09
Benzo[k]fluoranthene	207-08-9	35	2.3E-11	2.8E-10	2.6E-10	1.8E-10	8.2E-10	1.0E-09
Chromium		35	1.9E-09	1.0E-08	1.0E-08	6.8E-09	2.2E-08	5.7E-08
Chrysene	218-01-9	35	7.0E-10	2.8E-09	1.5E-09	2.8E-09	4.8E-09	7.7E-09
Cyclopenta[cd]pyrene	27208-37-3	35	1.1E-10	6.0E-10	5.5E-10	5.2E-10	1.6E-09	2.8E-09
Dibenz[a,h]anthracene	53-70-3	7	0	3.7E-11	9.2E-11	0	1.7E-10	4.6E-10
Indeno[1,2,3-cd]pyrene	193-39-5	12	0	1.0E-10	1.8E-10	0	4.4E-10	7.2E-10
Lead		35	4.2E-08	2.2E-07	1.9E-07	1.6E-07	5.4E-07	9.7E-07
Naphthalene	91-20-3	1	0	1.1E-11	6.7E-11	0	0	4.0E-10

[a] 35 field-specific $ADD_{ing\text{-}field}$ are included in the table. $ADD_{ing\text{-}field}$ was calculated from field-specific average concentrations ($C_{ing\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial gastrointestinal fluids extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

Table F-377. Field-Specific Average Ingestion Daily Dose[a] for Lifetime Cancer Risk Assessment ($ADD_{ing\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Spectators 50<70 Years**

Chemical	CASRN[c]	Detection	$ADD_{ing\text{-}field}$					
			Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	12	0	3.8E-10	8.7E-10	0	2.1E-09	3.8E-09
Arsenic		35	2.6E-10	2.2E-09	1.6E-09	2.0E-09	4.0E-09	8.5E-09
Benz[a]anthracene	56-55-3	35	4.1E-11	6.3E-10	6.9E-10	3.0E-10	1.9E-09	2.7E-09
Benzo[a]pyrene	50-32-8	35	1.0E-10	5.2E-10	4.2E-10	3.7E-10	1.4E-09	1.5E-09
Benzo[b]fluoranthene	205-99-2	35	1.8E-10	8.6E-10	6.4E-10	5.8E-10	2.1E-09	2.5E-09
Benzo[k]fluoranthene	207-08-9	35	2.4E-11	2.8E-10	2.6E-10	1.8E-10	8.2E-10	1.1E-09
Chromium		35	1.9E-09	1.0E-08	1.0E-08	6.8E-09	2.2E-08	5.7E-08
Chrysene	218-01-9	35	7.0E-10	2.8E-09	1.5E-09	2.8E-09	4.8E-09	7.7E-09
Cyclopenta[cd]pyrene	27208-37-3	35	1.1E-10	6.0E-10	5.6E-10	5.2E-10	1.6E-09	2.8E-09
Dibenz[a,h]anthracene	53-70-3	7	0	3.7E-11	9.3E-11	0	1.7E-10	4.6E-10
Indeno[1,2,3-cd]pyrene	193-39-5	12	0	1.0E-10	1.8E-10	0	4.4E-10	7.2E-10
Lead		35	4.2E-08	2.2E-07	1.9E-07	1.6E-07	5.4E-07	9.8E-07
Naphthalene	91-20-3	1	0	1.1E-11	6.7E-11	0	0	4.0E-10

[a] 35 field-specific $ADD_{ing\text{-}field}$ are included in the table. $ADD_{ing\text{-}field}$ was calculated from field-specific average concentrations ($C_{ing\text{-}crumb\ rubber\text{-}field}$) of a chemical detected in artificial gastrointestinal fluids extracts of crumb rubber samples from an individual field.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

F.6. Lifetime Average Daily Dose (LADD)

This section presents the lifetime average daily dose (LADD) of all detected chemicals on synthetic turf fields for the inhalation ($LADD_{inh}$), ingestion ($LADD_{ing}$), and dermal ($LADD_{der}$) pathways when toxicity criteria are available for the calculation of cancer risk. Details of each exposure pathway and how to calculate the LADD are presented in Main Report Sections 5.2.3 and 5.4.5. An example calculation for each pathway is presented in Appendix G.1.2.

F.6.1. Inhalation Lifetime Average Daily Dose ($LADD_{inh}$) for Lifetime Cancer Risk Assessment of Carcinogens

Table F-378. **On-Field** Inhalation Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{inh}$, mg per kg BW per day) of Chemicals—Combined Gender

Athletes

Chemical	CASRN	$LADD_{inh}$							
		2<6 years	6<11 years	11<16 years	16<30 years	30<40 years	40<50 years	50<70 years	Lifetime
Field-Related Chemicals									
Aniline	62-53-3	4.9E-08	8.0E-08	7.8E-08	1.4E-07	6.4E-08	6.3E-08	1.2E-07	6.0E-07
Benz[a]anthracene	56-55-3	3.7E-11	6.1E-11	5.9E-11	1.0E-10	4.9E-11	4.8E-11	9.4E-11	4.5E-10
Benzo[a]pyrene	50-32-8	8.7E-09	1.4E-08	1.4E-08	2.4E-08	1.1E-08	1.1E-08	2.2E-08	1.0E-07
Benzo[b]fluoranthene	205-99-2	1.9E-10	3.0E-10	3.0E-10	5.2E-10	2.4E-10	2.4E-10	4.7E-10	2.3E-09
Benzo[k]fluoranthene	207-08-9	2.3E-10	3.8E-10	3.7E-10	6.5E-10	3.0E-10	3.0E-10	5.9E-10	2.8E-09
Chrysene	218-01-9	1.6E-09	2.5E-09	2.5E-09	4.3E-09	2.0E-09	2.0E-09	3.9E-09	1.9E-08
Cyclopenta[cd]pyrene	27208-37-3	5.5E-10	8.9E-10	8.7E-10	1.5E-09	7.2E-10	7.1E-10	1.4E-09	6.7E-09
Dibenz[a,h]anthracene	53-70-3	1.1E-09	1.8E-09	1.7E-09	3.0E-09	1.4E-09	1.4E-09	2.7E-09	1.3E-08
Indeno[1,2,3-cd]pyrene	193-39-5	8.2E-10	1.3E-09	1.3E-09	2.3E-09	1.1E-09	1.0E-09	2.1E-09	9.9E-09
Methyl Isobutyl Ketone	108-10-1	1.2E-07	1.9E-07	1.9E-07	3.3E-07	1.5E-07	1.5E-07	3.0E-07	1.4E-06
Naphthalene	91-20-3	2.0E-07	3.3E-07	3.2E-07	5.6E-07	2.6E-07	2.6E-07	5.1E-07	2.4E-06
Styrene	100-42-5	4.5E-07	7.3E-07	7.1E-07	1.2E-06	5.8E-07	5.7E-07	1.1E-06	5.4E-06
Non-Field-Related Chemicals									
Acetaldehyde	75-07-0	1.9E-05	3.1E-05	3.0E-05	5.3E-05	2.5E-05	2.5E-05	4.8E-05	2.3E-04
Benzene	71-43-2	4.6E-06	7.5E-06	7.3E-06	1.3E-05	6.0E-06	5.9E-06	1.2E-05	5.6E-05
Benzene, 1,4-dichloro	106-46-7	1.5E-07	2.4E-07	2.3E-07	4.1E-07	1.9E-07	1.9E-07	3.7E-07	1.8E-06
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	4.4E-06	7.1E-06	6.9E-06	1.2E-05	5.7E-06	5.6E-06	1.1E-05	5.3E-05
Ethylbenzene	100-41-4	1.3E-06	2.1E-06	2.1E-06	3.6E-06	1.7E-06	1.7E-06	3.3E-06	1.6E-05
Formaldehyde	50-00-0	2.9E-05	4.7E-05	4.6E-05	8.1E-05	3.8E-05	3.7E-05	7.3E-05	3.5E-04
Tetrachloroethylene	127-18-4	3.6E-07	5.9E-07	5.8E-07	1.0E-06	4.7E-07	4.7E-07	9.1E-07	4.4E-06

[a] On-Field $LADD_{inh}$ was calculated from the 35 individual field average concentrations ($C_{air\text{-}avg}$) of a chemical detected in air on the fields and is the sum across all age groups in a receptor category.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-379. **On-Field** Inhalation Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{inh}$, mg per kg BW per day) of Chemicals—Combined Gender

Coaches

Chemical	CASRN	$LADD_{inh}$				
		16<30 years	30<40 years	40<50 years	50<70 years	Lifetime
Field-Related Chemicals						
Aniline	62-53-3	5.7E-08	3.5E-08	3.6E-08	7.2E-08	2.0E-07
Benz[a]anthracene	56-55-3	4.3E-11	2.7E-11	2.7E-11	5.5E-11	1.5E-10

Chemical	CASRN	$LADD_{inh}$				
		16<30 years	30<40 years	40<50 years	50<70 years	Lifetime
Benzo[a]pyrene	50-32-8	1.0E-08	6.2E-09	6.3E-09	1.3E-08	3.5E-08
Benzo[b]fluoranthene	205-99-2	2.2E-10	1.3E-10	1.4E-10	2.7E-10	7.6E-10
Benzo[k]fluoranthene	207-08-9	2.7E-10	1.7E-10	1.7E-10	3.4E-10	9.4E-10
Chrysene	218-01-9	1.8E-09	1.1E-09	1.1E-09	2.3E-09	6.3E-09
Cyclopenta[cd]pyrene	27208-37-3	6.4E-10	4.0E-10	4.0E-10	8.0E-10	2.2E-09
Dibenz[a,h]anthracene	53-70-3	1.3E-09	7.8E-10	7.9E-10	1.6E-09	4.4E-09
Indeno[1,2,3-cd]pyrene	193-39-5	9.4E-10	5.9E-10	5.9E-10	1.2E-09	3.3E-09
Methyl Isobutyl Ketone	108-10-1	1.4E-07	8.5E-08	8.6E-08	1.7E-07	4.8E-07
Naphthalene	91-20-3	2.3E-07	1.5E-07	1.5E-07	2.9E-07	8.2E-07
Styrene	100-42-5	5.1E-07	3.2E-07	3.2E-07	6.5E-07	1.8E-06
Non-Field-Related Chemicals						
Acetaldehyde	75-07-0	2.2E-05	1.4E-05	1.4E-05	2.8E-05	7.8E-05
Benzene	71-43-2	5.3E-06	3.3E-06	3.3E-06	6.7E-06	1.9E-05
Benzene, 1,4-dichloro	106-46-7	1.7E-07	1.0E-07	1.1E-07	2.1E-07	5.9E-07
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	5.0E-06	3.1E-06	3.2E-06	6.4E-06	1.8E-05
Ethylbenzene	100-41-4	1.5E-06	9.4E-07	9.5E-07	1.9E-06	5.3E-06
Formaldehyde	50-00-0	3.3E-05	2.1E-05	2.1E-05	4.2E-05	1.2E-04
Tetrachloroethylene	127-18-4	4.2E-07	2.6E-07	2.6E-07	5.3E-07	1.5E-06

[a] On-Field $LADD_{inh}$ was calculated from the 35 individual field average concentrations ($C_{air\text{-}avg}$) of a chemical detected in air on the fields and is the sum across all age groups in a receptor category.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-380. **On-Field** Inhalation Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{inh}$, mg per kg BW per day) of Chemicals—Combined Gender **Referees**

Chemical	CASRN	$LADD_{inh}$				
		16<30 years	30<40 years	40<50 years	50<70 years	Lifetime
Field-Related Chemicals						
Aniline	62-53-3	2.1E-08	1.3E-08	1.3E-08	2.7E-08	7.4E-08
Benz[a]anthracene	56-55-3	1.6E-11	1.0E-11	1.0E-11	2.0E-11	5.6E-11
Benzo[a]pyrene	50-32-8	3.7E-09	2.3E-09	2.3E-09	4.7E-09	1.3E-08
Benzo[b]fluoranthene	205-99-2	8.0E-11	5.0E-11	5.1E-11	1.0E-10	2.8E-10
Benzo[k]fluoranthene	207-08-9	1.0E-10	6.2E-11	6.3E-11	1.3E-10	3.5E-10
Chrysene	218-01-9	6.7E-10	4.2E-10	4.2E-10	8.4E-10	2.3E-09
Cyclopenta[cd]pyrene	27208-37-3	2.4E-10	1.5E-10	1.5E-10	3.0E-10	8.3E-10
Dibenz[a,h]anthracene	53-70-3	4.7E-10	2.9E-10	2.9E-10	5.9E-10	1.6E-09
Indeno[1,2,3-cd]pyrene	193-39-5	3.5E-10	2.2E-10	2.2E-10	4.4E-10	1.2E-09
Methyl Isobutyl Ketone	108-10-1	5.1E-08	3.2E-08	3.2E-08	6.4E-08	1.8E-07
Naphthalene	91-20-3	8.6E-08	5.4E-08	5.4E-08	1.1E-07	3.0E-07
Styrene	100-42-5	1.9E-07	1.2E-07	1.2E-07	2.4E-07	6.7E-07

Chemical	CASRN	$LADD_{inh}$				
		16<30 years	30<40 years	40<50 years	50<70 years	Lifetime
Non-Field-Related Chemicals						
Acetaldehyde	75-07-0	8.2E-06	5.1E-06	5.2E-06	1.0E-05	2.9E-05
Benzene	71-43-2	2.0E-06	1.2E-06	1.2E-06	2.5E-06	6.9E-06
Benzene, 1,4-dichloro	106-46-7	6.2E-08	3.9E-08	3.9E-08	7.9E-08	2.2E-07
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	1.9E-06	1.2E-06	1.2E-06	2.4E-06	6.6E-06
Ethylbenzene	100-41-4	5.6E-07	3.5E-07	3.5E-07	7.1E-07	2.0E-06
Formaldehyde	50-00-0	1.2E-05	7.8E-06	7.8E-06	1.6E-05	4.4E-05
Tetrachloroethylene	127-18-4	1.6E-07	9.7E-08	9.8E-08	2.0E-07	5.5E-07

[a] On-Field $LADD_{inh}$ was calculated from the 35 individual field average concentrations ($C_{air\text{-}avg}$) of a chemical detected in air on the fields and is the sum across all age groups in a receptor category.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-381. **On-Field** Inhalation Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{inh}$, mg per kg BW per day) of Chemicals—Combined Gender **Spectators**

Chemical	CASRN	$LADD_{inh}$									
		Third trimester fetus	0<2 years	2<6 years	6<11 years	11<16 years	16<30 years	30<40 years	40<50 years	50<70 years	Lifetime
Field-Related Chemicals											
Aniline	62-53-3	1.4E-09	8.8E-08	2.8E-08	3.3E-08	1.4E-08	8.8E-09	5.5E-09	5.5E-09	1.1E-08	1.9E-07
Benz[a]anthracene	56-55-3	1.0E-12	6.7E-11	2.1E-11	2.5E-11	1.1E-11	6.7E-12	4.2E-12	4.2E-12	8.4E-12	1.5E-10
Benzo[a]pyrene	50-32-8	2.4E-10	1.5E-08	4.9E-09	5.8E-09	2.5E-09	1.5E-09	9.6E-10	9.7E-10	2.0E-09	3.4E-08
Benzo[b]fluoranthene	205-99-2	5.2E-12	3.3E-10	1.1E-10	1.3E-10	5.4E-11	3.3E-11	2.1E-11	2.1E-11	4.2E-11	7.4E-10
Benzo[k]fluoranthene	207-08-9	6.4E-12	4.1E-10	1.3E-10	1.6E-10	6.7E-11	4.1E-11	2.6E-11	2.6E-11	5.2E-11	9.2E-10
Chrysene	218-01-9	4.3E-11	2.8E-09	8.7E-10	1.0E-09	4.5E-10	2.8E-10	1.7E-10	1.7E-10	3.5E-10	6.2E-09
Cyclopenta[cd]pyrene	27208-37-3	1.5E-11	9.8E-10	3.1E-10	3.7E-10	1.6E-10	9.8E-11	6.1E-11	6.2E-11	1.2E-10	2.2E-09
Dibenz[a,h]anthracene	53-70-3	3.0E-11	1.9E-09	6.1E-10	7.3E-10	3.1E-10	1.9E-10	1.2E-10	1.2E-10	2.5E-10	4.3E-09
Indeno[1,2,3-cd]pyrene	193-39-5	2.3E-11	1.5E-09	4.6E-10	5.5E-10	2.4E-10	1.5E-10	9.1E-11	9.2E-11	1.8E-10	3.2E-09
Methyl Isobutyl Ketone	108-10-1	3.3E-09	2.1E-07	6.7E-08	8.0E-08	3.4E-08	2.1E-08	1.3E-08	1.3E-08	2.7E-08	4.7E-07
Naphthalene	91-20-3	5.6E-09	3.6E-07	1.1E-07	1.4E-07	5.8E-08	3.6E-08	2.2E-08	2.3E-08	4.6E-08	8.0E-07
Styrene	100-42-5	1.2E-08	8.0E-07	2.5E-07	3.0E-07	1.3E-07	8.0E-08	5.0E-08	5.0E-08	1.0E-07	1.8E-06
Non-Field-Related Chemicals											
Acetaldehyde	75-07-0	5.3E-07	3.4E-05	1.1E-05	1.3E-05	5.5E-06	3.4E-06	2.1E-06	2.2E-06	4.3E-06	7.6E-05
Benzene	71-43-2	1.3E-07	8.2E-06	2.6E-06	3.1E-06	1.3E-06	8.2E-07	5.1E-07	5.2E-07	1.0E-06	1.8E-05
Benzene, 1,4-dichloro	106-46-7	4.0E-09	2.6E-07	8.2E-08	9.8E-08	4.2E-08	2.6E-08	1.6E-08	1.6E-08	3.3E-08	5.8E-07
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	1.2E-07	7.8E-06	2.5E-06	2.9E-06	1.3E-06	7.8E-07	4.9E-07	4.9E-07	9.8E-07	1.7E-05
Ethylbenzene	100-41-4	3.6E-08	2.3E-06	7.3E-07	8.7E-07	3.8E-07	2.3E-07	1.5E-07	1.5E-07	2.9E-07	5.2E-06
Formaldehyde	50-00-0	8.1E-07	5.2E-05	1.6E-05	1.9E-05	8.4E-06	5.2E-06	3.2E-06	3.3E-06	6.6E-06	1.2E-04
Tetrachloroethylene	127-18-4	1.0E-08	6.5E-07	2.0E-07	2.4E-07	1.1E-07	6.5E-08	4.0E-08	4.1E-08	8.2E-08	1.4E-06

[a] On-Field $LADD_{inh}$ was calculated from the 35 individual field average concentrations ($C_{air\text{-}avg}$) of a chemical detected in air on the fields and is the sum across all age groups in a receptor category.

CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-382. **Off-Field** Inhalation Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{inh}$, mg per kg BW per day) of Chemicals—Combined Gender **Spectators**

Chemical	CASRN	$LADD_{inh}$									
		Third trimester fetus	0<2 years	2<6 years	6<11 years	11<16 years	16<30 years	30<40 years	40<50 years	50<70 years	Lifetime
Field-Related Chemicals											
Aniline	62-53-3	1.5E-09	9.7E-08	3.1E-08	3.6E-08	1.6E-08	9.7E-09	6.0E-09	6.1E-09	1.2E-08	2.2E-07
Benzo[a]pyrene	50-32-8	2.9E-10	1.9E-08	6.0E-09	7.1E-09	3.1E-09	1.9E-09	1.2E-09	1.2E-09	2.4E-09	4.2E-08
Benzo[b]fluoranthene	205-99-2	8.0E-12	5.2E-10	1.6E-10	1.9E-10	8.4E-11	5.2E-11	3.2E-11	3.3E-11	6.5E-11	1.1E-09
Benzo[k]fluoranthene	207-08-9	6.6E-12	4.3E-10	1.3E-10	1.6E-10	6.9E-11	4.3E-11	2.7E-11	2.7E-11	5.4E-11	9.5E-10
Chrysene	218-01-9	2.2E-11	1.4E-09	4.5E-10	5.3E-10	2.3E-10	1.4E-10	8.9E-11	9.0E-11	1.8E-10	3.2E-09
Cyclopenta[cd]pyrene	27208-37-3	1.3E-11	8.6E-10	2.7E-10	3.2E-10	1.4E-10	8.6E-11	5.4E-11	5.4E-11	1.1E-10	1.9E-09
Dibenz[a,h]anthracene	53-70-3	1.9E-11	1.2E-09	3.8E-10	4.6E-10	2.0E-10	1.2E-10	7.6E-11	7.7E-11	1.5E-10	2.7E-09
Indeno[1,2,3-cd]pyrene	193-39-5	1.6E-11	1.0E-09	3.2E-10	3.8E-10	1.6E-10	1.0E-10	6.2E-11	6.3E-11	1.3E-10	2.2E-09
Methyl Isobutyl Ketone	108-10-1	7.5E-10	4.8E-08	1.5E-08	1.8E-08	7.9E-09	4.8E-09	3.0E-09	3.1E-09	6.1E-09	1.1E-07
Naphthalene	91-20-3	6.1E-09	3.9E-07	1.2E-07	1.5E-07	6.4E-08	3.9E-08	2.5E-08	2.5E-08	5.0E-08	8.8E-07
Styrene	100-42-5	1.3E-08	8.1E-07	2.6E-07	3.1E-07	1.3E-07	8.1E-08	5.1E-08	5.1E-08	1.0E-07	1.8E-06
Non-Field-Related Chemicals											
Benzene	71-43-2	1.3E-07	8.6E-06	2.7E-06	3.2E-06	1.4E-06	8.6E-07	5.4E-07	5.4E-07	1.1E-06	1.9E-05
Benzene, 1,4-dichloro	106-46-7	3.7E-09	2.4E-07	7.4E-08	8.9E-08	3.8E-08	2.4E-08	1.5E-08	1.5E-08	3.0E-08	5.2E-07
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	1.2E-07	7.8E-06	2.5E-06	2.9E-06	1.3E-06	7.8E-07	4.9E-07	4.9E-07	9.9E-07	1.7E-05
Ethylbenzene	100-41-4	3.8E-08	2.5E-06	7.8E-07	9.3E-07	4.0E-07	2.5E-07	1.5E-07	1.6E-07	3.1E-07	5.5E-06
Tetrachloroethylene	127-18-4	1.0E-08	6.7E-07	2.1E-07	2.5E-07	1.1E-07	6.7E-08	4.2E-08	4.2E-08	8.4E-08	1.5E-06

[a] Off-Field $LADD_{inh}$ was calculated from the 35 individual field average concentrations ($C_{air\text{-}avg}$) of a chemical detected in air on the fields and is the sum across all age groups in a receptor category.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

INDIVIDUAL FIELD ASSESSMENT (Table F-383 to Table F-415)

Table F-383. Field-Specific Inhalation **On-Field** Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{inh}$, mg per kg BW per day) of Chemicals—Combined Gender **Athletes 2<6 Years**

Chemical	CASRN	$LADD_{inh\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals							

Chemical	CASRN	$LADD_{inh\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	0.0E+00	4.8E-08	8.6E-08	0.0E+00	1.9E-07	3.3E-07
Benz[a]anthracene	56-55-3	0.0E+00	3.6E-11	2.2E-10	0.0E+00	0.0E+00	1.3E-09
Benzo[a]pyrene	50-32-8	0.0E+00	8.4E-09	9.1E-09	4.4E-09	2.3E-08	3.6E-08
Benzo[b]fluoranthene	205-99-2	0.0E+00	1.8E-10	7.5E-10	0.0E+00	9.5E-10	3.2E-09
Benzo[k]fluoranthene	207-08-9	0.0E+00	2.3E-10	6.8E-10	0.0E+00	1.7E-09	2.6E-09
Chrysene	218-01-9	0.0E+00	1.5E-09	2.4E-09	0.0E+00	5.7E-09	1.0E-08
Cyclopenta[cd]pyrene	27208-37-3	0.0E+00	5.4E-10	6.7E-10	2.1E-10	1.6E-09	3.1E-09
Dibenz[a,h]anthracene	53-70-3	0.0E+00	1.1E-09	2.1E-09	0.0E+00	5.4E-09	9.2E-09
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	7.9E-10	2.6E-09	0.0E+00	9.3E-09	9.3E-09
Methyl Isobutyl Ketone	108-10-1	0.0E+00	1.2E-07	3.2E-07	0.0E+00	9.2E-07	1.4E-06
Naphthalene	91-20-3	0.0E+00	2.0E-07	4.2E-07	0.0E+00	8.7E-07	2.0E-06
Styrene	100-42-5	0.0E+00	4.5E-07	9.2E-07	0.0E+00	1.5E-06	5.0E-06
Non-Field-Related Chemicals							
Acetaldehyde	75-07-0	0.0E+00	1.9E-05	1.4E-05	1.3E-05	3.7E-05	7.3E-05
Benzene	71-43-2	6.9E-07	4.6E-06	3.7E-06	3.2E-06	1.1E-05	1.9E-05
Benzene, 1,4-dichloro	106-46-7	0.0E+00	1.5E-07	3.2E-07	0.0E+00	9.0E-07	9.0E-07
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	0.0E+00	4.4E-06	4.5E-06	2.9E-06	1.3E-05	1.6E-05
Ethylbenzene	100-41-4	0.0E+00	1.3E-06	2.2E-06	0.0E+00	5.3E-06	8.8E-06
Formaldehyde	50-00-0	0.0E+00	2.8E-05	2.2E-05	2.4E-05	4.8E-05	1.2E-04
Tetrachloroethylene	127-18-4	0.0E+00	3.6E-07	8.6E-07	0.0E+00	2.4E-06	3.2E-06

[a] 35 field-specific $LADD_{inh\text{-}field}$ are included in the table. $LADD_{inh\text{-}field}$ was calculated from field-specific average concentration ($C_{air\text{-}field}$) of a chemical detected in air off an individual field
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-384. Field-Specific Inhalation **On-Field** Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{inh}$, mg per kg BW per day) of Chemicals—Combined Gender **Athletes 6<11 Years**

Chemical	CASRN	$LADD_{inh\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals							
Aniline	62-53-3	0.0E+00	7.8E-08	1.4E-07	0.0E+00	3.1E-07	5.4E-07
Benz[a]anthracene	56-55-3	0.0E+00	5.9E-11	3.5E-10	0.0E+00	0.0E+00	2.1E-09
Benzo[a]pyrene	50-32-8	0.0E+00	1.4E-08	1.5E-08	7.2E-09	3.8E-08	5.8E-08
Benzo[b]fluoranthene	205-99-2	0.0E+00	3.0E-10	1.2E-09	0.0E+00	1.5E-09	5.2E-09
Benzo[k]fluoranthene	207-08-9	0.0E+00	3.7E-10	1.1E-09	0.0E+00	2.8E-09	4.3E-09
Chrysene	218-01-9	0.0E+00	2.5E-09	3.9E-09	0.0E+00	9.3E-09	1.6E-08

Chemical	CASRN	$LADD_{inh\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Cyclopenta[cd]pyrene	27208-37-3	0.0E+00	8.7E-10	1.1E-09	3.3E-10	2.6E-09	5.1E-09
Dibenz[a,h]anthracene	53-70-3	0.0E+00	1.7E-09	3.5E-09	0.0E+00	8.8E-09	1.5E-08
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	1.3E-09	4.3E-09	0.0E+00	1.5E-08	1.5E-08
Methyl Isobutyl Ketone	108-10-1	0.0E+00	1.9E-07	5.3E-07	0.0E+00	1.5E-06	2.2E-06
Naphthalene	91-20-3	0.0E+00	3.3E-07	6.8E-07	0.0E+00	1.4E-06	3.2E-06
Styrene	100-42-5	0.0E+00	7.3E-07	1.5E-06	0.0E+00	2.4E-06	8.1E-06
Non-Field-Related Chemicals							
Acetaldehyde	75-07-0	0.0E+00	3.0E-05	2.3E-05	2.1E-05	5.9E-05	1.2E-04
Benzene	71-43-2	1.1E-06	7.5E-06	6.0E-06	5.2E-06	1.9E-05	3.0E-05
Benzene, 1,4-dichloro	106-46-7	0.0E+00	2.4E-07	5.2E-07	0.0E+00	1.5E-06	1.5E-06
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	0.0E+00	7.1E-06	7.4E-06	4.7E-06	2.1E-05	2.6E-05
Ethylbenzene	100-41-4	0.0E+00	2.1E-06	3.6E-06	0.0E+00	8.6E-06	1.4E-05
Formaldehyde	50-00-0	0.0E+00	4.6E-05	3.6E-05	3.9E-05	7.9E-05	2.0E-04
Tetrachloroethylene	127-18-4	0.0E+00	5.9E-07	1.4E-06	0.0E+00	3.9E-06	5.2E-06

[a] 35 field-specific $LADD_{inh\text{-}field}$ are included in the table. $LADD_{inh\text{-}field}$ was calculated from field-specific average concentration ($C_{air\text{-}field}$) of a chemical detected in air off an individual field
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-385. Field-Specific Inhalation **On-Field** Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{inh}$, mg per kg BW per day) of Chemicals—Combined Gender **Athletes 11<16 Years**

Chemical	CASRN	$LADD_{inh\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals							
Aniline	62-53-3	0.0E+00	7.6E-08	1.4E-07	0.0E+00	3.0E-07	5.3E-07
Benz[a]anthracene	56-55-3	0.0E+00	5.8E-11	3.4E-10	0.0E+00	0.0E+00	2.0E-09
Benzo[a]pyrene	50-32-8	0.0E+00	1.3E-08	1.4E-08	7.0E-09	3.7E-08	5.7E-08
Benzo[b]fluoranthene	205-99-2	0.0E+00	2.9E-10	1.2E-09	0.0E+00	1.5E-09	5.0E-09
Benzo[k]fluoranthene	207-08-9	0.0E+00	3.6E-10	1.1E-09	0.0E+00	2.7E-09	4.2E-09
Chrysene	218-01-9	0.0E+00	2.4E-09	3.8E-09	0.0E+00	9.1E-09	1.6E-08
Cyclopenta[cd]pyrene	27208-37-3	0.0E+00	8.5E-10	1.1E-09	3.3E-10	2.5E-09	5.0E-09
Dibenz[a,h]anthracene	53-70-3	0.0E+00	1.7E-09	3.4E-09	0.0E+00	8.6E-09	1.5E-08
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	1.3E-09	4.2E-09	0.0E+00	1.5E-08	1.5E-08
Methyl Isobutyl Ketone	108-10-1	0.0E+00	1.9E-07	5.1E-07	0.0E+00	1.5E-06	2.2E-06
Naphthalene	91-20-3	0.0E+00	3.2E-07	6.7E-07	0.0E+00	1.4E-06	3.1E-06
Styrene	100-42-5	0.0E+00	7.1E-07	1.5E-06	0.0E+00	2.4E-06	7.9E-06
Non-Field-Related Chemicals							
Acetaldehyde	75-07-0	0.0E+00	2.9E-05	2.3E-05	2.1E-05	5.8E-05	1.2E-04
Benzene	71-43-2	1.1E-06	7.3E-06	5.9E-06	5.1E-06	1.8E-05	3.0E-05

Chemical	CASRN	$LADD_{inh\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Benzene, 1,4-dichloro	106-46-7	0.0E+00	2.3E-07	5.1E-07	0.0E+00	1.4E-06	1.4E-06
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	0.0E+00	6.9E-06	7.2E-06	4.6E-06	2.1E-05	2.5E-05
Ethylbenzene	100-41-4	0.0E+00	2.1E-06	3.5E-06	0.0E+00	8.4E-06	1.4E-05
Formaldehyde	50-00-0	0.0E+00	4.5E-05	3.5E-05	3.8E-05	7.7E-05	2.0E-04
Tetrachloroethylene	127-18-4	0.0E+00	5.8E-07	1.4E-06	0.0E+00	3.9E-06	5.0E-06

[a] 35 field-specific $LADD_{inh\text{-}field}$ are included in the table. $LADD_{inh\text{-}field}$ was calculated from field-specific average concentration ($C_{air\text{-}field}$) of a chemical detected in air off an individual field
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-386. Field-Specific Inhalation **On-Field** Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{inh}$, mg per kg BW per day) of Chemicals—Combined Gender **Athletes 16<30 Years**

Chemical	CASRN	$LADD_{inh\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals							
Aniline	62-53-3	0.0E+00	1.3E-07	2.4E-07	0.0E+00	5.3E-07	9.2E-07
Benz[a]anthracene	56-55-3	0.0E+00	1.0E-10	6.0E-10	0.0E+00	0.0E+00	3.5E-09
Benzo[a]pyrene	50-32-8	0.0E+00	2.3E-08	2.5E-08	1.2E-08	6.5E-08	1.0E-07
Benzo[b]fluoranthene	205-99-2	0.0E+00	5.1E-10	2.1E-09	0.0E+00	2.7E-09	8.9E-09
Benzo[k]fluoranthene	207-08-9	0.0E+00	6.3E-10	1.9E-09	0.0E+00	4.8E-09	7.4E-09
Chrysene	218-01-9	0.0E+00	4.2E-09	6.7E-09	0.0E+00	1.6E-08	2.8E-08
Cyclopenta[cd]pyrene	27208-37-3	0.0E+00	1.5E-09	1.9E-09	5.7E-10	4.4E-09	8.7E-09
Dibenz[a,h]anthracene	53-70-3	0.0E+00	2.9E-09	6.0E-09	0.0E+00	1.5E-08	2.6E-08
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	2.2E-09	7.3E-09	0.0E+00	2.6E-08	2.6E-08
Methyl Isobutyl Ketone	108-10-1	0.0E+00	3.3E-07	9.0E-07	0.0E+00	2.6E-06	3.9E-06
Naphthalene	91-20-3	0.0E+00	5.6E-07	1.2E-06	0.0E+00	2.4E-06	5.5E-06
Styrene	100-42-5	0.0E+00	1.2E-06	2.6E-06	0.0E+00	4.2E-06	1.4E-05
Non-Field-Related Chemicals							
Acetaldehyde	75-07-0	0.0E+00	5.2E-05	4.0E-05	3.7E-05	1.0E-04	2.0E-04
Benzene	71-43-2	1.9E-06	1.3E-05	1.0E-05	9.0E-06	3.2E-05	5.2E-05
Benzene, 1,4-dichloro	106-46-7	0.0E+00	4.1E-07	8.9E-07	0.0E+00	2.5E-06	2.5E-06
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	0.0E+00	1.2E-05	1.3E-05	8.1E-06	3.6E-05	4.5E-05
Ethylbenzene	100-41-4	0.0E+00	3.6E-06	6.1E-06	0.0E+00	1.5E-05	2.4E-05
Formaldehyde	50-00-0	0.0E+00	7.9E-05	6.2E-05	6.8E-05	1.4E-04	3.5E-04
Tetrachloroethylene	127-18-4	0.0E+00	1.0E-06	2.4E-06	0.0E+00	6.8E-06	8.9E-06

[a] 35 field-specific $LADD_{inh\text{-}field}$ are included in the table. $LADD_{inh\text{-}field}$ was calculated from field-specific average concentration ($C_{air\text{-}field}$) of a chemical detected in air off an individual field
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-387. Field-Specific Inhalation **On-Field** Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{inh}$, mg per kg BW per day) of Chemicals—Combined Gender **Athletes 30<40 Years**

Chemical	CASRN	$LADD_{inh\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals							
Aniline	62-53-3	0.0E+00	6.2E-08	1.1E-07	0.0E+00	2.5E-07	4.3E-07
Benz[a]anthracene	56-55-3	0.0E+00	4.7E-11	2.8E-10	0.0E+00	0.0E+00	1.7E-09
Benzo[a]pyrene	50-32-8	0.0E+00	1.1E-08	1.2E-08	5.8E-09	3.0E-08	4.7E-08
Benzo[b]fluoranthene	205-99-2	0.0E+00	2.4E-10	9.7E-10	0.0E+00	1.2E-09	4.1E-09
Benzo[k]fluoranthene	207-08-9	0.0E+00	2.9E-10	8.8E-10	0.0E+00	2.2E-09	3.4E-09
Chrysene	218-01-9	0.0E+00	2.0E-09	3.1E-09	0.0E+00	7.4E-09	1.3E-08
Cyclopenta[cd]pyrene	27208-37-3	0.0E+00	7.0E-10	8.7E-10	2.7E-10	2.1E-09	4.1E-09
Dibenz[a,h]anthracene	53-70-3	0.0E+00	1.4E-09	2.8E-09	0.0E+00	7.1E-09	1.2E-08
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	1.0E-09	3.4E-09	0.0E+00	1.2E-08	1.2E-08
Methyl Isobutyl Ketone	108-10-1	0.0E+00	1.5E-07	4.2E-07	0.0E+00	1.2E-06	1.8E-06
Naphthalene	91-20-3	0.0E+00	2.6E-07	5.5E-07	0.0E+00	1.1E-06	2.6E-06
Styrene	100-42-5	0.0E+00	5.8E-07	1.2E-06	0.0E+00	2.0E-06	6.5E-06
Non-Field-Related Chemicals							
Acetaldehyde	75-07-0	0.0E+00	2.4E-05	1.9E-05	1.7E-05	4.8E-05	9.5E-05
Benzene	71-43-2	8.9E-07	6.0E-06	4.8E-06	4.2E-06	1.5E-05	2.4E-05
Benzene, 1,4-dichloro	106-46-7	0.0E+00	1.9E-07	4.2E-07	0.0E+00	1.2E-06	1.2E-06
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	0.0E+00	5.7E-06	5.9E-06	3.8E-06	1.7E-05	2.1E-05
Ethylbenzene	100-41-4	0.0E+00	1.7E-06	2.9E-06	0.0E+00	6.9E-06	1.1E-05
Formaldehyde	50-00-0	0.0E+00	3.7E-05	2.9E-05	3.2E-05	6.3E-05	1.6E-04
Tetrachloroethylene	127-18-4	0.0E+00	4.7E-07	1.1E-06	0.0E+00	3.2E-06	4.1E-06

[a] 35 field-specific $LADD_{inh\text{-}field}$ are included in the table. $LADD_{inh\text{-}field}$ was calculated from field-specific average concentration ($C_{air\text{-}field}$) of a chemical detected in air off an individual field
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-388. Field-Specific Inhalation **On-Field** Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{inh}$, mg per kg BW per day) of Chemicals—Combined Gender **Athletes 40<50 Years**

Chemical	CASRN	$LADD_{inh\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals							
Aniline	62-53-3	0.0E+00	6.1E-08	1.1E-07	0.0E+00	2.5E-07	4.2E-07
Benz[a]anthracene	56-55-3	0.0E+00	4.7E-11	2.8E-10	0.0E+00	0.0E+00	1.6E-09
Benzo[a]pyrene	50-32-8	0.0E+00	1.1E-08	1.2E-08	5.7E-09	3.0E-08	4.6E-08
Benzo[b]fluoranthene	205-99-2	0.0E+00	2.3E-10	9.6E-10	0.0E+00	1.2E-09	4.1E-09
Benzo[k]fluoranthene	207-08-9	0.0E+00	2.9E-10	8.7E-10	0.0E+00	2.2E-09	3.4E-09

Chemical	CASRN	$LADD_{inh\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Chrysene	218-01-9	0.0E+00	1.9E-09	3.1E-09	0.0E+00	7.3E-09	1.3E-08
Cyclopenta[cd]pyrene	27208-37-3	0.0E+00	6.9E-10	8.6E-10	2.6E-10	2.0E-09	4.0E-09
Dibenz[a,h]anthracene	53-70-3	0.0E+00	1.4E-09	2.8E-09	0.0E+00	7.0E-09	1.2E-08
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	1.0E-09	3.4E-09	0.0E+00	1.2E-08	1.2E-08
Methyl Isobutyl Ketone	108-10-1	0.0E+00	1.5E-07	4.2E-07	0.0E+00	1.2E-06	1.8E-06
Naphthalene	91-20-3	0.0E+00	2.6E-07	5.4E-07	0.0E+00	1.1E-06	2.5E-06
Styrene	100-42-5	0.0E+00	5.7E-07	1.2E-06	0.0E+00	1.9E-06	6.4E-06
Non-Field-Related Chemicals							
Acetaldehyde	75-07-0	0.0E+00	2.4E-05	1.8E-05	1.7E-05	4.7E-05	9.3E-05
Benzene	71-43-2	8.8E-07	5.9E-06	4.8E-06	4.1E-06	1.5E-05	2.4E-05
Benzene, 1,4-dichloro	106-46-7	0.0E+00	1.9E-07	4.1E-07	0.0E+00	1.2E-06	1.2E-06
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	0.0E+00	5.6E-06	5.8E-06	3.7E-06	1.7E-05	2.1E-05
Ethylbenzene	100-41-4	0.0E+00	1.7E-06	2.8E-06	0.0E+00	6.8E-06	1.1E-05
Formaldehyde	50-00-0	0.0E+00	3.6E-05	2.8E-05	3.1E-05	6.2E-05	1.6E-04
Tetrachloroethylene	127-18-4	0.0E+00	4.7E-07	1.1E-06	0.0E+00	3.1E-06	4.1E-06

[a] 35 field-specific $LADD_{inh\text{-}field}$ are included in the table. $LADD_{inh\text{-}field}$ was calculated from field-specific average concentration ($C_{air\text{-}field}$) of a chemical detected in air off an individual field
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-389. Field-Specific Inhalation **On-Field** Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{inh}$, mg per kg BW per day) of Chemicals—Combined Gender **Athletes 50<70 Years**

Chemical	CASRN	$LADD_{inh\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals							
Aniline	62-53-3	0.0E+00	1.2E-07	2.2E-07	0.0E+00	4.8E-07	8.3E-07
Benz[a]anthracene	56-55-3	0.0E+00	9.2E-11	5.4E-10	0.0E+00	0.0E+00	3.2E-09
Benzo[a]pyrene	50-32-8	0.0E+00	2.1E-08	2.3E-08	1.1E-08	5.9E-08	9.0E-08
Benzo[b]fluoranthene	205-99-2	0.0E+00	4.6E-10	1.9E-09	0.0E+00	2.4E-09	8.0E-09
Benzo[k]fluoranthene	207-08-9	0.0E+00	5.7E-10	1.7E-09	0.0E+00	4.3E-09	6.6E-09
Chrysene	218-01-9	0.0E+00	3.8E-09	6.0E-09	0.0E+00	1.4E-08	2.5E-08
Cyclopenta[cd]pyrene	27208-37-3	0.0E+00	1.3E-09	1.7E-09	5.2E-10	4.0E-09	7.9E-09
Dibenz[a,h]anthracene	53-70-3	0.0E+00	2.7E-09	5.4E-09	0.0E+00	1.4E-08	2.3E-08
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	2.0E-09	6.6E-09	0.0E+00	2.3E-08	2.3E-08
Methyl Isobutyl Ketone	108-10-1	0.0E+00	3.0E-07	8.2E-07	0.0E+00	2.3E-06	3.5E-06
Naphthalene	91-20-3	0.0E+00	5.1E-07	1.1E-06	0.0E+00	2.2E-06	5.0E-06
Styrene	100-42-5	0.0E+00	1.1E-06	2.3E-06	0.0E+00	3.8E-06	1.3E-05
Non-Field-Related Chemicals							
Acetaldehyde	75-07-0	0.0E+00	4.7E-05	3.6E-05	3.3E-05	9.2E-05	1.8E-04

Chemical	CASRN	$LADD_{inh\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Benzene	71-43-2	1.7E-06	1.2E-05	9.4E-06	8.1E-06	2.9E-05	4.7E-05
Benzene, 1,4-dichloro	106-46-7	0.0E+00	3.7E-07	8.1E-07	0.0E+00	2.3E-06	2.3E-06
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	0.0E+00	1.1E-05	1.1E-05	7.3E-06	3.3E-05	4.1E-05
Ethylbenzene	100-41-4	0.0E+00	3.3E-06	5.5E-06	0.0E+00	1.3E-05	2.2E-05
Formaldehyde	50-00-0	0.0E+00	7.1E-05	5.6E-05	6.1E-05	1.2E-04	3.1E-04
Tetrachloroethylene	127-18-4	0.0E+00	9.1E-07	2.2E-06	0.0E+00	6.1E-06	8.0E-06

[a] 35 field-specific $LADD_{inh\text{-}field}$ are included in the table. $LADD_{inh\text{-}field}$ was calculated from field-specific average concentration ($C_{air\text{-}field}$) of a chemical detected in air off an individual field
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-390. Field-Specific Inhalation **On-Field** Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{inh}$, mg per kg BW per day) of Chemicals—Combined Gender **Coaches 16<30 Years**

Chemical	CASRN	$LADD_{inh\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals							
Aniline	62-53-3	0.0E+00	5.5E-08	9.9E-08	0.0E+00	2.2E-07	3.8E-07
Benz[a]anthracene	56-55-3	0.0E+00	4.2E-11	2.5E-10	0.0E+00	0.0E+00	1.5E-09
Benzo[a]pyrene	50-32-8	0.0E+00	9.7E-09	1.0E-08	5.1E-09	2.7E-08	4.1E-08
Benzo[b]fluoranthene	205-99-2	0.0E+00	2.1E-10	8.6E-10	0.0E+00	1.1E-09	3.7E-09
Benzo[k]fluoranthene	207-08-9	0.0E+00	2.6E-10	7.8E-10	0.0E+00	2.0E-09	3.0E-09
Chrysene	218-01-9	0.0E+00	1.7E-09	2.8E-09	0.0E+00	6.6E-09	1.2E-08
Cyclopenta[cd]pyrene	27208-37-3	0.0E+00	6.2E-10	7.7E-10	2.4E-10	1.8E-09	3.6E-09
Dibenz[a,h]anthracene	53-70-3	0.0E+00	1.2E-09	2.5E-09	0.0E+00	6.3E-09	1.1E-08
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	9.1E-10	3.0E-09	0.0E+00	1.1E-08	1.1E-08
Methyl Isobutyl Ketone	108-10-1	0.0E+00	1.4E-07	3.7E-07	0.0E+00	1.1E-06	1.6E-06
Naphthalene	91-20-3	0.0E+00	2.3E-07	4.9E-07	0.0E+00	1.0E-06	2.3E-06
Styrene	100-42-5	0.0E+00	5.1E-07	1.1E-06	0.0E+00	1.7E-06	5.8E-06
Non-Field-Related Chemicals							
Acetaldehyde	75-07-0	0.0E+00	2.1E-05	1.6E-05	1.5E-05	4.2E-05	8.4E-05
Benzene	71-43-2	7.9E-07	5.3E-06	4.3E-06	3.7E-06	1.3E-05	2.1E-05
Benzene, 1,4-dichloro	106-46-7	0.0E+00	1.7E-07	3.7E-07	0.0E+00	1.0E-06	1.0E-06
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	0.0E+00	5.0E-06	5.2E-06	3.3E-06	1.5E-05	1.9E-05
Ethylbenzene	100-41-4	0.0E+00	1.5E-06	2.5E-06	0.0E+00	6.1E-06	1.0E-05
Formaldehyde	50-00-0	0.0E+00	3.3E-05	2.5E-05	2.8E-05	5.6E-05	1.4E-04
Tetrachloroethylene	127-18-4	0.0E+00	4.2E-07	9.9E-07	0.0E+00	2.8E-06	3.7E-06

[a] 35 field-specific $LADD_{inh\text{-}field}$ are included in the table. $LADD_{inh\text{-}field}$ was calculated from field-specific average concentration ($C_{air\text{-}field}$) of a chemical detected in air off an individual field
CASRN: Chemical Abstracts Service Registry Number

Values are rounded to two significant figures.

Table F-391. Field-Specific Inhalation **On-Field** Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{inh}$, mg per kg BW per day) of Chemicals—Combined Gender **Coaches 30<40 Years**

Chemical	CASRN	$LADD_{inh\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals							
Aniline	62-53-3	0.0E+00	3.4E-08	6.2E-08	0.0E+00	1.4E-07	2.4E-07
Benz[a]anthracene	56-55-3	0.0E+00	2.6E-11	1.5E-10	0.0E+00	0.0E+00	9.2E-10
Benzo[a]pyrene	50-32-8	0.0E+00	6.1E-09	6.5E-09	3.2E-09	1.7E-08	2.6E-08
Benzo[b]fluoranthene	205-99-2	0.0E+00	1.3E-10	5.4E-10	0.0E+00	6.9E-10	2.3E-09
Benzo[k]fluoranthene	207-08-9	0.0E+00	1.6E-10	4.9E-10	0.0E+00	1.2E-09	1.9E-09
Chrysene	218-01-9	0.0E+00	1.1E-09	1.7E-09	0.0E+00	4.1E-09	7.2E-09
Cyclopenta[cd]pyrene	27208-37-3	0.0E+00	3.9E-10	4.8E-10	1.5E-10	1.1E-09	2.3E-09
Dibenz[a,h]anthracene	53-70-3	0.0E+00	7.6E-10	1.5E-09	0.0E+00	3.9E-09	6.6E-09
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	5.7E-10	1.9E-09	0.0E+00	6.7E-09	6.7E-09
Methyl Isobutyl Ketone	108-10-1	0.0E+00	8.5E-08	2.3E-07	0.0E+00	6.6E-07	1.0E-06
Naphthalene	91-20-3	0.0E+00	1.5E-07	3.0E-07	0.0E+00	6.3E-07	1.4E-06
Styrene	100-42-5	0.0E+00	3.2E-07	6.6E-07	0.0E+00	1.1E-06	3.6E-06
Non-Field-Related Chemicals							
Acetaldehyde	75-07-0	0.0E+00	1.3E-05	1.0E-05	9.5E-06	2.6E-05	5.2E-05
Benzene	71-43-2	4.9E-07	3.3E-06	2.7E-06	2.3E-06	8.3E-06	1.3E-05
Benzene, 1,4-dichloro	106-46-7	0.0E+00	1.0E-07	2.3E-07	0.0E+00	6.5E-07	6.5E-07
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	0.0E+00	3.1E-06	3.3E-06	2.1E-06	9.3E-06	1.2E-05
Ethylbenzene	100-41-4	0.0E+00	9.4E-07	1.6E-06	0.0E+00	3.8E-06	6.3E-06
Formaldehyde	50-00-0	0.0E+00	2.0E-05	1.6E-05	1.7E-05	3.5E-05	8.9E-05
Tetrachloroethylene	127-18-4	0.0E+00	2.6E-07	6.2E-07	0.0E+00	1.8E-06	2.3E-06

[a] 35 field-specific $LADD_{inh\text{-}field}$ are included in the table. $LADD_{inh\text{-}field}$ was calculated from field-specific average concentration ($C_{air\text{-}field}$) of a chemical detected in air off an individual field
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-392. Field-Specific Inhalation **On-Field** Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{inh}$, mg per kg BW per day) of Chemicals—Combined Gender **Coaches 40<50 Years**

Chemical	CASRN	$LADD_{inh\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals							
Aniline	62-53-3	0.0E+00	3.5E-08	6.2E-08	0.0E+00	1.4E-07	2.4E-07
Benz[a]anthracene	56-55-3	0.0E+00	2.6E-11	1.6E-10	0.0E+00	0.0E+00	9.2E-10
Benzo[a]pyrene	50-32-8	0.0E+00	6.1E-09	6.6E-09	3.2E-09	1.7E-08	2.6E-08

Chemical	CASRN	$LADD_{inh\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Benzo[b]fluoranthene	205-99-2	0.0E+00	1.3E-10	5.4E-10	0.0E+00	6.9E-10	2.3E-09
Benzo[k]fluoranthene	207-08-9	0.0E+00	1.6E-10	4.9E-10	0.0E+00	1.2E-09	1.9E-09
Chrysene	218-01-9	0.0E+00	1.1E-09	1.7E-09	0.0E+00	4.2E-09	7.3E-09
Cyclopenta[cd]pyrene	27208-37-3	0.0E+00	3.9E-10	4.8E-10	1.5E-10	1.2E-09	2.3E-09
Dibenz[a,h]anthracene	53-70-3	0.0E+00	7.7E-10	1.6E-09	0.0E+00	3.9E-09	6.7E-09
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	5.8E-10	1.9E-09	0.0E+00	6.7E-09	6.7E-09
Methyl Isobutyl Ketone	108-10-1	0.0E+00	8.6E-08	2.4E-07	0.0E+00	6.7E-07	1.0E-06
Naphthalene	91-20-3	0.0E+00	1.5E-07	3.1E-07	0.0E+00	6.3E-07	1.4E-06
Styrene	100-42-5	0.0E+00	3.2E-07	6.7E-07	0.0E+00	1.1E-06	3.6E-06
Non-Field-Related Chemicals							
Acetaldehyde	75-07-0	0.0E+00	1.4E-05	1.0E-05	9.6E-06	2.7E-05	5.3E-05
Benzene	71-43-2	5.0E-07	3.3E-06	2.7E-06	2.4E-06	8.3E-06	1.4E-05
Benzene, 1,4-dichloro	106-46-7	0.0E+00	1.1E-07	2.3E-07	0.0E+00	6.5E-07	6.5E-07
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	0.0E+00	3.2E-06	3.3E-06	2.1E-06	9.4E-06	1.2E-05
Ethylbenzene	100-41-4	0.0E+00	9.5E-07	1.6E-06	0.0E+00	3.9E-06	6.4E-06
Formaldehyde	50-00-0	0.0E+00	2.1E-05	1.6E-05	1.8E-05	3.5E-05	9.0E-05
Tetrachloroethylene	127-18-4	0.0E+00	2.6E-07	6.2E-07	0.0E+00	1.8E-06	2.3E-06

[a] 35 field-specific $LADD_{inh\text{-}field}$ are included in the table. $LADD_{inh\text{-}field}$ was calculated from field-specific average concentration ($C_{air\text{-}field}$) of a chemical detected in air off an individual field
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-393. Field-Specific Inhalation **On-Field** Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{inh}$, mg per kg BW per day) of Chemicals—Combined Gender **Coaches 50<70 Years**

Chemical	CASRN	$LADD_{inh\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals							
Aniline	62-53-3	0.0E+00	7.0E-08	1.2E-07	0.0E+00	2.8E-07	4.8E-07
Benz[a]anthracene	56-55-3	0.0E+00	5.3E-11	3.1E-10	0.0E+00	0.0E+00	1.9E-09
Benzo[a]pyrene	50-32-8	0.0E+00	1.2E-08	1.3E-08	6.4E-09	3.4E-08	5.2E-08
Benzo[b]fluoranthene	205-99-2	0.0E+00	2.7E-10	1.1E-09	0.0E+00	1.4E-09	4.6E-09
Benzo[k]fluoranthene	207-08-9	0.0E+00	3.3E-10	9.9E-10	0.0E+00	2.5E-09	3.8E-09
Chrysene	218-01-9	0.0E+00	2.2E-09	3.5E-09	0.0E+00	8.3E-09	1.5E-08
Cyclopenta[cd]pyrene	27208-37-3	0.0E+00	7.8E-10	9.7E-10	3.0E-10	2.3E-09	4.6E-09
Dibenz[a,h]anthracene	53-70-3	0.0E+00	1.5E-09	3.1E-09	0.0E+00	7.9E-09	1.3E-08
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	1.2E-09	3.8E-09	0.0E+00	1.3E-08	1.3E-08
Methyl Isobutyl Ketone	108-10-1	0.0E+00	1.7E-07	4.7E-07	0.0E+00	1.3E-06	2.0E-06
Naphthalene	91-20-3	0.0E+00	2.9E-07	6.1E-07	0.0E+00	1.3E-06	2.9E-06
Styrene	100-42-5	0.0E+00	6.5E-07	1.3E-06	0.0E+00	2.2E-06	7.3E-06

Chemical	CASRN	$LADD_{inh-field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Non-Field-Related Chemicals							
Acetaldehyde	75-07-0	0.0E+00	2.7E-05	2.1E-05	1.9E-05	5.3E-05	1.1E-04
Benzene	71-43-2	1.0E-06	6.7E-06	5.4E-06	4.7E-06	1.7E-05	2.7E-05
Benzene, 1,4-dichloro	106-46-7	0.0E+00	2.1E-07	4.7E-07	0.0E+00	1.3E-06	1.3E-06
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	0.0E+00	6.4E-06	6.6E-06	4.2E-06	1.9E-05	2.3E-05
Ethylbenzene	100-41-4	0.0E+00	1.9E-06	3.2E-06	0.0E+00	7.8E-06	1.3E-05
Formaldehyde	50-00-0	0.0E+00	4.1E-05	3.2E-05	3.5E-05	7.1E-05	1.8E-04
Tetrachloroethylene	127-18-4	0.0E+00	5.3E-07	1.3E-06	0.0E+00	3.5E-06	4.6E-06

[a] 35 field-specific $LADD_{inh-field}$ are included in the table. $LADD_{inh-field}$ was calculated from field-specific average concentration ($C_{air-field}$) of a chemical detected in air off an individual field
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-394. Field-Specific Inhalation **On-Field** Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{inh}$, mg per kg BW per day) of Chemicals—Combined Gender **Referees 16<30 Years**

Chemical	CASRN	$LADD_{inh-field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals							
Aniline	62-53-3	0.0E+00	2.0E-08	3.7E-08	0.0E+00	8.2E-08	1.4E-07
Benz[a]anthracene	56-55-3	0.0E+00	1.6E-11	9.2E-11	0.0E+00	0.0E+00	5.4E-10
Benzo[a]pyrene	50-32-8	0.0E+00	3.6E-09	3.9E-09	1.9E-09	1.0E-08	1.5E-08
Benzo[b]fluoranthene	205-99-2	0.0E+00	7.8E-11	3.2E-10	0.0E+00	4.1E-10	1.4E-09
Benzo[k]fluoranthene	207-08-9	0.0E+00	9.7E-11	2.9E-10	0.0E+00	7.3E-10	1.1E-09
Chrysene	218-01-9	0.0E+00	6.5E-10	1.0E-09	0.0E+00	2.4E-09	4.3E-09
Cyclopenta[cd]pyrene	27208-37-3	0.0E+00	2.3E-10	2.9E-10	8.8E-11	6.8E-10	1.3E-09
Dibenz[a,h]anthracene	53-70-3	0.0E+00	4.5E-10	9.2E-10	0.0E+00	2.3E-09	3.9E-09
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	3.4E-10	1.1E-09	0.0E+00	4.0E-09	4.0E-09
Methyl Isobutyl Ketone	108-10-1	0.0E+00	5.1E-08	1.4E-07	0.0E+00	4.0E-07	5.9E-07
Naphthalene	91-20-3	0.0E+00	8.6E-08	1.8E-07	0.0E+00	3.7E-07	8.4E-07
Styrene	100-42-5	0.0E+00	1.9E-07	3.9E-07	0.0E+00	6.4E-07	2.1E-06
Non-Field-Related Chemicals							
Acetaldehyde	75-07-0	0.0E+00	8.0E-06	6.1E-06	5.6E-06	1.6E-05	3.1E-05
Benzene	71-43-2	2.9E-07	2.0E-06	1.6E-06	1.4E-06	4.9E-06	8.0E-06
Benzene, 1,4-dichloro	106-46-7	0.0E+00	6.2E-08	1.4E-07	0.0E+00	3.8E-07	3.8E-07
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	0.0E+00	1.9E-06	1.9E-06	1.2E-06	5.6E-06	6.9E-06
Ethylbenzene	100-41-4	0.0E+00	5.6E-07	9.4E-07	0.0E+00	2.3E-06	3.8E-06
Formaldehyde	50-00-0	0.0E+00	1.2E-05	9.4E-06	1.0E-05	2.1E-05	5.3E-05
Tetrachloroethylene	127-18-4	0.0E+00	1.6E-07	3.7E-07	0.0E+00	1.0E-06	1.4E-06

[a] 35 field-specific $LADD_{inh\text{-}field}$ are included in the table. $LADD_{inh\text{-}field}$ was calculated from field-specific average concentration ($C_{air\text{-}field}$) of a chemical detected in air off an individual field
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-395. Field-Specific Inhalation **On-Field** Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{inh}$, mg per kg BW per day) of Chemicals—Combined Gender **Referees 30<40 Years**

Chemical	CASRN	$LADD_{inh\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals							
Aniline	62-53-3	0.0E+00	1.3E-08	2.3E-08	0.0E+00	5.1E-08	8.8E-08
Benz[a]anthracene	56-55-3	0.0E+00	9.7E-12	5.7E-11	0.0E+00	0.0E+00	3.4E-10
Benzo[a]pyrene	50-32-8	0.0E+00	2.2E-09	2.4E-09	1.2E-09	6.2E-09	9.6E-09
Benzo[b]fluoranthene	205-99-2	0.0E+00	4.9E-11	2.0E-10	0.0E+00	2.5E-10	8.5E-10
Benzo[k]fluoranthene	207-08-9	0.0E+00	6.0E-11	1.8E-10	0.0E+00	4.6E-10	7.0E-10
Chrysene	218-01-9	0.0E+00	4.0E-10	6.4E-10	0.0E+00	1.5E-09	2.7E-09
Cyclopenta[cd]pyrene	27208-37-3	0.0E+00	1.4E-10	1.8E-10	5.5E-11	4.3E-10	8.4E-10
Dibenz[a,h]anthracene	53-70-3	0.0E+00	2.8E-10	5.7E-10	0.0E+00	1.4E-09	2.4E-09
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	2.1E-10	7.0E-10	0.0E+00	2.5E-09	2.5E-09
Methyl Isobutyl Ketone	108-10-1	0.0E+00	3.2E-08	8.6E-08	0.0E+00	2.5E-07	3.7E-07
Naphthalene	91-20-3	0.0E+00	5.4E-08	1.1E-07	0.0E+00	2.3E-07	5.3E-07
Styrene	100-42-5	0.0E+00	1.2E-07	2.5E-07	0.0E+00	4.0E-07	1.3E-06
Non-Field-Related Chemicals							
Acetaldehyde	75-07-0	0.0E+00	5.0E-06	3.8E-06	3.5E-06	9.8E-06	1.9E-05
Benzene	71-43-2	1.8E-07	1.2E-06	9.9E-07	8.6E-07	3.1E-06	5.0E-06
Benzene, 1,4-dichloro	106-46-7	0.0E+00	3.9E-08	8.5E-08	0.0E+00	2.4E-07	2.4E-07
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	0.0E+00	1.2E-06	1.2E-06	7.7E-07	3.5E-06	4.3E-06
Ethylbenzene	100-41-4	0.0E+00	3.5E-07	5.9E-07	0.0E+00	1.4E-06	2.3E-06
Formaldehyde	50-00-0	0.0E+00	7.5E-06	5.9E-06	6.5E-06	1.3E-05	3.3E-05
Tetrachloroethylene	127-18-4	0.0E+00	9.7E-08	2.3E-07	0.0E+00	6.5E-07	8.5E-07

[a] 35 field-specific $LADD_{inh\text{-}field}$ are included in the table. $LADD_{inh\text{-}field}$ was calculated from field-specific average concentration ($C_{air\text{-}field}$) of a chemical detected in air off an individual field
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-396. Field-Specific Inhalation **On-Field** Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{inh}$, mg per kg BW per day) of Chemicals—Combined Gender **Referees 40<50 Years**

Chemical	CASRN	$LADD_{inh\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals							
Aniline	62-53-3	0.0E+00	1.3E-08	2.3E-08	0.0E+00	5.2E-08	8.9E-08

Chemical	CASRN	$LADD_{inh\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Benz[a]anthracene	56-55-3	0.0E+00	9.8E-12	5.8E-11	0.0E+00	0.0E+00	3.4E-10
Benzo[a]pyrene	50-32-8	0.0E+00	2.3E-09	2.5E-09	1.2E-09	6.3E-09	9.7E-09
Benzo[b]fluoranthene	205-99-2	0.0E+00	4.9E-11	2.0E-10	0.0E+00	2.6E-10	8.6E-10
Benzo[k]fluoranthene	207-08-9	0.0E+00	6.1E-11	1.8E-10	0.0E+00	4.6E-10	7.1E-10
Chrysene	218-01-9	0.0E+00	4.1E-10	6.5E-10	0.0E+00	1.5E-09	2.7E-09
Cyclopenta[cd]pyrene	27208-37-3	0.0E+00	1.4E-10	1.8E-10	5.6E-11	4.3E-10	8.5E-10
Dibenz[a,h]anthracene	53-70-3	0.0E+00	2.9E-10	5.8E-10	0.0E+00	1.5E-09	2.5E-09
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	2.1E-10	7.1E-10	0.0E+00	2.5E-09	2.5E-09
Methyl Isobutyl Ketone	108-10-1	0.0E+00	3.2E-08	8.7E-08	0.0E+00	2.5E-07	3.7E-07
Naphthalene	91-20-3	0.0E+00	5.4E-08	1.1E-07	0.0E+00	2.4E-07	5.3E-07
Styrene	100-42-5	0.0E+00	1.2E-07	2.5E-07	0.0E+00	4.1E-07	1.3E-06
Non-Field-Related Chemicals							
Acetaldehyde	75-07-0	0.0E+00	5.0E-06	3.8E-06	3.6E-06	9.9E-06	2.0E-05
Benzene	71-43-2	1.9E-07	1.2E-06	1.0E-06	8.7E-07	3.1E-06	5.0E-06
Benzene, 1,4-dichloro	106-46-7	0.0E+00	3.9E-08	8.6E-08	0.0E+00	2.4E-07	2.4E-07
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	0.0E+00	1.2E-06	1.2E-06	7.8E-07	3.5E-06	4.3E-06
Ethylbenzene	100-41-4	0.0E+00	3.5E-07	5.9E-07	0.0E+00	1.4E-06	2.4E-06
Formaldehyde	50-00-0	0.0E+00	7.6E-06	6.0E-06	6.5E-06	1.3E-05	3.4E-05
Tetrachloroethylene	127-18-4	0.0E+00	9.8E-08	2.3E-07	0.0E+00	6.6E-07	8.6E-07

[a] 35 field-specific $LADD_{inh\text{-}field}$ are included in the table. $LADD_{inh\text{-}field}$ was calculated from field-specific average concentration ($C_{air\text{-}field}$) of a chemical detected in air off an individual field
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-397. Field-Specific Inhalation **On-Field** Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{inh}$, mg per kg BW per day) of Chemicals—Combined Gender **Referees 50<70 Years**

Chemical	CASRN	$LADD_{inh\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals							
Aniline	62-53-3	0.0E+00	2.6E-08	4.6E-08	0.0E+00	1.0E-07	1.8E-07
Benz[a]anthracene	56-55-3	0.0E+00	2.0E-11	1.2E-10	0.0E+00	0.0E+00	6.9E-10
Benzo[a]pyrene	50-32-8	0.0E+00	4.6E-09	4.9E-09	2.4E-09	1.3E-08	1.9E-08
Benzo[b]fluoranthene	205-99-2	0.0E+00	9.8E-11	4.1E-10	0.0E+00	5.2E-10	1.7E-09
Benzo[k]fluoranthene	207-08-9	0.0E+00	1.2E-10	3.7E-10	0.0E+00	9.3E-10	1.4E-09
Chrysene	218-01-9	0.0E+00	8.2E-10	1.3E-09	0.0E+00	3.1E-09	5.4E-09
Cyclopenta[cd]pyrene	27208-37-3	0.0E+00	2.9E-10	3.6E-10	1.1E-10	8.6E-10	1.7E-09
Dibenz[a,h]anthracene	53-70-3	0.0E+00	5.7E-10	1.2E-09	0.0E+00	2.9E-09	5.0E-09
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	4.3E-10	1.4E-09	0.0E+00	5.0E-09	5.0E-09
Methyl Isobutyl Ketone	108-10-1	0.0E+00	6.4E-08	1.8E-07	0.0E+00	5.0E-07	7.5E-07

Chemical	CASRN	$LADD_{inh\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Naphthalene	91-20-3	0.0E+00	1.1E-07	2.3E-07	0.0E+00	4.7E-07	1.1E-06
Styrene	100-42-5	0.0E+00	2.4E-07	5.0E-07	0.0E+00	8.1E-07	2.7E-06
Non-Field-Related Chemicals							
Acetaldehyde	75-07-0	0.0E+00	1.0E-05	7.7E-06	7.1E-06	2.0E-05	3.9E-05
Benzene	71-43-2	3.7E-07	2.5E-06	2.0E-06	1.8E-06	6.2E-06	1.0E-05
Benzene, 1,4-dichloro	106-46-7	0.0E+00	7.9E-08	1.7E-07	0.0E+00	4.9E-07	4.9E-07
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	0.0E+00	2.4E-06	2.5E-06	1.6E-06	7.0E-06	8.7E-06
Ethylbenzene	100-41-4	0.0E+00	7.1E-07	1.2E-06	0.0E+00	2.9E-06	4.7E-06
Formaldehyde	50-00-0	0.0E+00	1.5E-05	1.2E-05	1.3E-05	2.6E-05	6.7E-05
Tetrachloroethylene	127-18-4	0.0E+00	2.0E-07	4.6E-07	0.0E+00	1.3E-06	1.7E-06

[a] 35 field-specific $LADD_{inh\text{-}field}$ are included in the table. $LADD_{inh\text{-}field}$ was calculated from field-specific average concentration ($C_{air\text{-}field}$) of a chemical detected in air off an individual field
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-398. Field-Specific Inhalation **On-Field** Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{inh}$, mg per kg BW per day) of Chemicals—Combined Gender **Spectators Thrid Trimester Fetus**

Chemical	CASRN	$LADD_{inh\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals							
Aniline	62-53-3	0.0E+00	1.3E-09	2.4E-09	0.0E+00	5.3E-09	9.2E-09
Benz[a]anthracene	56-55-3	0.0E+00	1.0E-12	6.0E-12	0.0E+00	0.0E+00	3.5E-11
Benzo[a]pyrene	50-32-8	0.0E+00	2.3E-10	2.5E-10	1.2E-10	6.4E-10	9.9E-10
Benzo[b]fluoranthene	205-99-2	0.0E+00	5.0E-12	2.1E-11	0.0E+00	2.6E-11	8.8E-11
Benzo[k]fluoranthene	207-08-9	0.0E+00	6.3E-12	1.9E-11	0.0E+00	4.7E-11	7.3E-11
Chrysene	218-01-9	0.0E+00	4.2E-11	6.6E-11	0.0E+00	1.6E-10	2.8E-10
Cyclopenta[cd]pyrene	27208-37-3	0.0E+00	1.5E-11	1.8E-11	5.7E-12	4.4E-11	8.7E-11
Dibenz[a,h]anthracene	53-70-3	0.0E+00	2.9E-11	6.0E-11	0.0E+00	1.5E-10	2.5E-10
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	2.2E-11	7.3E-11	0.0E+00	2.6E-10	2.6E-10
Methyl Isobutyl Ketone	108-10-1	0.0E+00	3.3E-09	9.0E-09	0.0E+00	2.6E-08	3.8E-08
Naphthalene	91-20-3	0.0E+00	5.6E-09	1.2E-08	0.0E+00	2.4E-08	5.5E-08
Styrene	100-42-5	0.0E+00	1.2E-08	2.6E-08	0.0E+00	4.2E-08	1.4E-07
Non-Field-Related Chemicals							
Acetaldehyde	75-07-0	0.0E+00	5.1E-07	3.9E-07	3.6E-07	1.0E-06	2.0E-06
Benzene	71-43-2	1.9E-08	1.3E-07	1.0E-07	9.0E-08	3.2E-07	5.2E-07
Benzene, 1,4-dichloro	106-46-7	0.0E+00	4.0E-09	8.9E-09	0.0E+00	2.5E-08	2.5E-08
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	0.0E+00	1.2E-07	1.3E-07	8.0E-08	3.6E-07	4.5E-07
Ethylbenzene	100-41-4	0.0E+00	3.6E-08	6.1E-08	0.0E+00	1.5E-07	2.4E-07

Chemical	CASRN	$LADD_{inh\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Formaldehyde	50-00-0	0.0E+00	7.8E-07	6.1E-07	6.7E-07	1.3E-06	3.4E-06
Tetrachloroethylene	127-18-4	0.0E+00	1.0E-08	2.4E-08	0.0E+00	6.7E-08	8.8E-08

[a] 35 field-specific $LADD_{inh\text{-}field}$ are included in the table. $LADD_{inh\text{-}field}$ was calculated from field-specific average concentration ($C_{air\text{-}field}$) of a chemical detected in air off an individual field
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-399. Field-Specific Inhalation **On-Field** Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{inh}$, mg per kg BW per day) of Chemicals—Combined Gender **Spectators 0<2 Years**

Chemical	CASRN	$LADD_{inh\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals							
Aniline	62-53-3	0.0E+00	8.5E-08	1.5E-07	0.0E+00	3.4E-07	5.9E-07
Benz[a]anthracene	56-55-3	0.0E+00	6.5E-11	3.8E-10	0.0E+00	0.0E+00	2.3E-09
Benzo[a]pyrene	50-32-8	0.0E+00	1.5E-08	1.6E-08	7.9E-09	4.1E-08	6.4E-08
Benzo[b]fluoranthene	205-99-2	0.0E+00	3.2E-10	1.3E-09	0.0E+00	1.7E-09	5.7E-09
Benzo[k]fluoranthene	207-08-9	0.0E+00	4.0E-10	1.2E-09	0.0E+00	3.1E-09	4.7E-09
Chrysene	218-01-9	0.0E+00	2.7E-09	4.3E-09	0.0E+00	1.0E-08	1.8E-08
Cyclopenta[cd]pyrene	27208-37-3	0.0E+00	9.5E-10	1.2E-09	3.7E-10	2.8E-09	5.6E-09
Dibenz[a,h]anthracene	53-70-3	0.0E+00	1.9E-09	3.8E-09	0.0E+00	9.7E-09	1.6E-08
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	1.4E-09	4.7E-09	0.0E+00	1.7E-08	1.7E-08
Methyl Isobutyl Ketone	108-10-1	0.0E+00	2.1E-07	5.8E-07	0.0E+00	1.6E-06	2.5E-06
Naphthalene	91-20-3	0.0E+00	3.6E-07	7.5E-07	0.0E+00	1.6E-06	3.5E-06
Styrene	100-42-5	0.0E+00	8.0E-07	1.6E-06	0.0E+00	2.7E-06	8.9E-06
Non-Field-Related Chemicals							
Acetaldehyde	75-07-0	0.0E+00	3.3E-05	2.5E-05	2.3E-05	6.5E-05	1.3E-04
Benzene	71-43-2	1.2E-06	8.2E-06	6.6E-06	5.8E-06	2.0E-05	3.3E-05
Benzene, 1,4-dichloro	106-46-7	0.0E+00	2.6E-07	5.7E-07	0.0E+00	1.6E-06	1.6E-06
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	0.0E+00	7.8E-06	8.1E-06	5.2E-06	2.3E-05	2.9E-05
Ethylbenzene	100-41-4	0.0E+00	2.3E-06	3.9E-06	0.0E+00	9.5E-06	1.6E-05
Formaldehyde	50-00-0	0.0E+00	5.0E-05	3.9E-05	4.3E-05	8.6E-05	2.2E-04
Tetrachloroethylene	127-18-4	0.0E+00	6.5E-07	1.5E-06	0.0E+00	4.3E-06	5.7E-06

[a] 35 field-specific $LADD_{inh\text{-}field}$ are included in the table. $LADD_{inh\text{-}field}$ was calculated from field-specific average concentration ($C_{air\text{-}field}$) of a chemical detected in air off an individual field
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-400. Field-Specific Inhalation **On-Field** Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{inh}$, mg per kg BW per day) of Chemicals—Combined Gender **Spectators 2<6 Years**

Chemical	CASRN	$LADD_{inh\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals							
Aniline	62-53-3	0.0E+00	2.7E-08	4.8E-08	0.0E+00	1.1E-07	1.9E-07
Benz[a]anthracene	56-55-3	0.0E+00	2.0E-11	1.2E-10	0.0E+00	0.0E+00	7.2E-10
Benzo[a]pyrene	50-32-8	0.0E+00	4.7E-09	5.1E-09	2.5E-09	1.3E-08	2.0E-08
Benzo[b]fluoranthene	205-99-2	0.0E+00	1.0E-10	4.2E-10	0.0E+00	5.4E-10	1.8E-09
Benzo[k]fluoranthene	207-08-9	0.0E+00	1.3E-10	3.8E-10	0.0E+00	9.6E-10	1.5E-09
Chrysene	218-01-9	0.0E+00	8.5E-10	1.3E-09	0.0E+00	3.2E-09	5.6E-09
Cyclopenta[cd]pyrene	27208-37-3	0.0E+00	3.0E-10	3.7E-10	1.2E-10	9.0E-10	1.8E-09
Dibenz[a,h]anthracene	53-70-3	0.0E+00	5.9E-10	1.2E-09	0.0E+00	3.1E-09	5.2E-09
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	4.5E-10	1.5E-09	0.0E+00	5.2E-09	5.2E-09
Methyl Isobutyl Ketone	108-10-1	0.0E+00	6.7E-08	1.8E-07	0.0E+00	5.2E-07	7.8E-07
Naphthalene	91-20-3	0.0E+00	1.1E-07	2.4E-07	0.0E+00	4.9E-07	1.1E-06
Styrene	100-42-5	0.0E+00	2.5E-07	5.2E-07	0.0E+00	8.5E-07	2.8E-06
Non-Field-Related Chemicals							
Acetaldehyde	75-07-0	0.0E+00	1.0E-05	8.0E-06	7.4E-06	2.1E-05	4.1E-05
Benzene	71-43-2	3.9E-07	2.6E-06	2.1E-06	1.8E-06	6.5E-06	1.0E-05
Benzene, 1,4-dichloro	106-46-7	0.0E+00	8.2E-08	1.8E-07	0.0E+00	5.1E-07	5.1E-07
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	0.0E+00	2.5E-06	2.5E-06	1.6E-06	7.3E-06	9.0E-06
Ethylbenzene	100-41-4	0.0E+00	7.3E-07	1.2E-06	0.0E+00	3.0E-06	4.9E-06
Formaldehyde	50-00-0	0.0E+00	1.6E-05	1.2E-05	1.4E-05	2.7E-05	7.0E-05
Tetrachloroethylene	127-18-4	0.0E+00	2.0E-07	4.8E-07	0.0E+00	1.4E-06	1.8E-06

[a] 35 field-specific $LADD_{inh\text{-}field}$ are included in the table. $LADD_{inh\text{-}field}$ was calculated from field-specific average concentration ($C_{air\text{-}field}$) of a chemical detected in air off an individual field
[b] On-Field ADD_{inh} was calculated from the individual field concentrations ($C_{air\text{-}field}$) of a chemical detected in air on the fields.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-401. Field-Specific Inhalation **On-Field** Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{inh}$, mg per kg BW per day) of Chemicals—Combined Gender **Spectators 6<11 Years**

Chemical	CASRN	$LADD_{inh\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals							
Aniline	62-53-3	0.0E+00	3.2E-08	5.7E-08	0.0E+00	1.3E-07	2.2E-07
Benz[a]anthracene	56-55-3	0.0E+00	2.4E-11	1.4E-10	0.0E+00	0.0E+00	8.5E-10
Benzo[a]pyrene	50-32-8	0.0E+00	5.6E-09	6.1E-09	3.0E-09	1.6E-08	2.4E-08

Chemical	CASRN	$LADD_{inh\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Benzo[b]fluoranthene	205-99-2	0.0E+00	1.2E-10	5.0E-10	0.0E+00	6.4E-10	2.1E-09
Benzo[k]fluoranthene	207-08-9	0.0E+00	1.5E-10	4.5E-10	0.0E+00	1.1E-09	1.8E-09
Chrysene	218-01-9	0.0E+00	1.0E-09	1.6E-09	0.0E+00	3.8E-09	6.7E-09
Cyclopenta[cd]pyrene	27208-37-3	0.0E+00	3.6E-10	4.5E-10	1.4E-10	1.1E-09	2.1E-09
Dibenz[a,h]anthracene	53-70-3	0.0E+00	7.1E-10	1.4E-09	0.0E+00	3.6E-09	6.1E-09
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	5.3E-10	1.8E-09	0.0E+00	6.2E-09	6.2E-09
Methyl Isobutyl Ketone	108-10-1	0.0E+00	8.0E-08	2.2E-07	0.0E+00	6.2E-07	9.3E-07
Naphthalene	91-20-3	0.0E+00	1.4E-07	2.8E-07	0.0E+00	5.8E-07	1.3E-06
Styrene	100-42-5	0.0E+00	3.0E-07	6.2E-07	0.0E+00	1.0E-06	3.3E-06
Non-Field-Related Chemicals							
Acetaldehyde	75-07-0	0.0E+00	1.2E-05	9.5E-06	8.8E-06	2.5E-05	4.9E-05
Benzene	71-43-2	4.6E-07	3.1E-06	2.5E-06	2.2E-06	7.7E-06	1.3E-05
Benzene, 1,4-dichloro	106-46-7	0.0E+00	9.8E-08	2.1E-07	0.0E+00	6.0E-07	6.0E-07
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	0.0E+00	2.9E-06	3.0E-06	1.9E-06	8.7E-06	1.1E-05
Ethylbenzene	100-41-4	0.0E+00	8.7E-07	1.5E-06	0.0E+00	3.6E-06	5.9E-06
Formaldehyde	50-00-0	0.0E+00	1.9E-05	1.5E-05	1.6E-05	3.2E-05	8.3E-05
Tetrachloroethylene	127-18-4	0.0E+00	2.4E-07	5.8E-07	0.0E+00	1.6E-06	2.1E-06

[a] 35 field-specific $LADD_{inh\text{-}field}$ are included in the table. $LADD_{inh\text{-}field}$ was calculated from field-specific average concentration ($C_{air\text{-}field}$) of a chemical detected in air off an individual field
[b] On-Field ADD_{inh} was calculated from the individual field concentrations ($C_{air\text{-}field}$) of a chemical detected in air on the fields.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-402. Field-Specific Inhalation **On-Field** Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{inh}$, mg per kg BW per day) of Chemicals—Combined Gender **Spectators 11<16 Years**

Chemical	CASRN	$LADD_{inh\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals							
Aniline	62-53-3	0.0E+00	1.4E-08	2.5E-08	0.0E+00	5.5E-08	9.6E-08
Benz[a]anthracene	56-55-3	0.0E+00	1.1E-11	6.2E-11	0.0E+00	0.0E+00	3.7E-10
Benzo[a]pyrene	50-32-8	0.0E+00	2.4E-09	2.6E-09	1.3E-09	6.7E-09	1.0E-08
Benzo[b]fluoranthene	205-99-2	0.0E+00	5.3E-11	2.2E-10	0.0E+00	2.8E-10	9.2E-10
Benzo[k]fluoranthene	207-08-9	0.0E+00	6.5E-11	2.0E-10	0.0E+00	5.0E-10	7.6E-10
Chrysene	218-01-9	0.0E+00	4.4E-10	6.9E-10	0.0E+00	1.7E-09	2.9E-09
Cyclopenta[cd]pyrene	27208-37-3	0.0E+00	1.6E-10	1.9E-10	6.0E-11	4.6E-10	9.1E-10
Dibenz[a,h]anthracene	53-70-3	0.0E+00	3.1E-10	6.2E-10	0.0E+00	1.6E-09	2.7E-09
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	2.3E-10	7.6E-10	0.0E+00	2.7E-09	2.7E-09
Methyl Isobutyl Ketone	108-10-1	0.0E+00	3.4E-08	9.4E-08	0.0E+00	2.7E-07	4.0E-07

Chemical	CASRN	$LADD_{inh-field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Naphthalene	91-20-3	0.0E+00	5.8E-08	1.2E-07	0.0E+00	2.5E-07	5.7E-07
Styrene	100-42-5	0.0E+00	1.3E-07	2.7E-07	0.0E+00	4.4E-07	1.4E-06
Non-Field-Related Chemicals							
Acetaldehyde	75-07-0	0.0E+00	5.4E-06	4.1E-06	3.8E-06	1.1E-05	2.1E-05
Benzene	71-43-2	2.0E-07	1.3E-06	1.1E-06	9.4E-07	3.3E-06	5.4E-06
Benzene, 1,4-dichloro	106-46-7	0.0E+00	4.2E-08	9.3E-08	0.0E+00	2.6E-07	2.6E-07
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	0.0E+00	1.3E-06	1.3E-06	8.4E-07	3.8E-06	4.7E-06
Ethylbenzene	100-41-4	0.0E+00	3.8E-07	6.4E-07	0.0E+00	1.5E-06	2.5E-06
Formaldehyde	50-00-0	0.0E+00	8.2E-06	6.4E-06	7.0E-06	1.4E-05	3.6E-05
Tetrachloroethylene	127-18-4	0.0E+00	1.1E-07	2.5E-07	0.0E+00	7.0E-07	9.2E-07

[a] 35 field-specific $LADD_{inh-field}$ are included in the table. $LADD_{inh-field}$ was calculated from field-specific average concentration ($C_{air-field}$) of a chemical detected in air off an individual field.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-403. Field-Specific Inhalation **On-Field** Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{inh}$, mg per kg BW per day) of Chemicals—Combined Gender **Spectators 16<30 Years**

Chemical	CASRN	$LADD_{inh-field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals							
Aniline	62-53-3	0.0E+00	8.5E-09	1.5E-08	0.0E+00	3.4E-08	5.9E-08
Benz[a]anthracene	56-55-3	0.0E+00	6.5E-12	3.8E-11	0.0E+00	0.0E+00	2.3E-10
Benzo[a]pyrene	50-32-8	0.0E+00	1.5E-09	1.6E-09	7.9E-10	4.1E-09	6.4E-09
Benzo[b]fluoranthene	205-99-2	0.0E+00	3.2E-11	1.3E-10	0.0E+00	1.7E-10	5.7E-10
Benzo[k]fluoranthene	207-08-9	0.0E+00	4.0E-11	1.2E-10	0.0E+00	3.1E-10	4.7E-10
Chrysene	218-01-9	0.0E+00	2.7E-10	4.3E-10	0.0E+00	1.0E-09	1.8E-09
Cyclopenta[cd]pyrene	27208-37-3	0.0E+00	9.5E-11	1.2E-10	3.7E-11	2.8E-10	5.6E-10
Dibenz[a,h]anthracene	53-70-3	0.0E+00	1.9E-10	3.8E-10	0.0E+00	9.7E-10	1.6E-09
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	1.4E-10	4.7E-10	0.0E+00	1.7E-09	1.7E-09
Methyl Isobutyl Ketone	108-10-1	0.0E+00	2.1E-08	5.8E-08	0.0E+00	1.6E-07	2.5E-07
Naphthalene	91-20-3	0.0E+00	3.6E-08	7.5E-08	0.0E+00	1.6E-07	3.5E-07
Styrene	100-42-5	0.0E+00	8.0E-08	1.6E-07	0.0E+00	2.7E-07	8.9E-07
Non-Field-Related Chemicals							
Acetaldehyde	75-07-0	0.0E+00	3.3E-06	2.5E-06	2.3E-06	6.5E-06	1.3E-05
Benzene	71-43-2	1.2E-07	8.2E-07	6.6E-07	5.8E-07	2.0E-06	3.3E-06
Benzene, 1,4-dichloro	106-46-7	0.0E+00	2.6E-08	5.7E-08	0.0E+00	1.6E-07	1.6E-07
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	0.0E+00	7.8E-07	8.1E-07	5.2E-07	2.3E-06	2.9E-06
Ethylbenzene	100-41-4	0.0E+00	2.3E-07	3.9E-07	0.0E+00	9.5E-07	1.6E-06

Chemical	CASRN	$LADD_{inh\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Formaldehyde	50-00-0	0.0E+00	5.0E-06	3.9E-06	4.3E-06	8.6E-06	2.2E-05
Tetrachloroethylene	127-18-4	0.0E+00	6.5E-08	1.5E-07	0.0E+00	4.3E-07	5.7E-07

[a] 35 field-specific $LADD_{inh\text{-}field}$ are included in the table. $LADD_{inh\text{-}field}$ was calculated from field-specific average concentration ($C_{air\text{-}field}$) of a chemical detected in air off an individual field.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-404. Field-Specific Inhalation **On-Field** Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{inh}$, mg per kg BW per day) of Chemicals—Combined Gender **Spectators 30<40 Years**

Chemical	CASRN	$LADD_{inh\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals							
Aniline	62-53-3	0.0E+00	5.3E-09	9.5E-09	0.0E+00	2.1E-08	3.7E-08
Benz[a]anthracene	56-55-3	0.0E+00	4.0E-12	2.4E-11	0.0E+00	0.0E+00	1.4E-10
Benzo[a]pyrene	50-32-8	0.0E+00	9.4E-10	1.0E-09	4.9E-10	2.6E-09	4.0E-09
Benzo[b]fluoranthene	205-99-2	0.0E+00	2.0E-11	8.3E-11	0.0E+00	1.1E-10	3.5E-10
Benzo[k]fluoranthene	207-08-9	0.0E+00	2.5E-11	7.5E-11	0.0E+00	1.9E-10	2.9E-10
Chrysene	218-01-9	0.0E+00	1.7E-10	2.7E-10	0.0E+00	6.4E-10	1.1E-09
Cyclopenta[cd]pyrene	27208-37-3	0.0E+00	6.0E-11	7.4E-11	2.3E-11	1.8E-10	3.5E-10
Dibenz[a,h]anthracene	53-70-3	0.0E+00	1.2E-10	2.4E-10	0.0E+00	6.0E-10	1.0E-09
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	8.8E-11	2.9E-10	0.0E+00	1.0E-09	1.0E-09
Methyl Isobutyl Ketone	108-10-1	0.0E+00	1.3E-08	3.6E-08	0.0E+00	1.0E-07	1.5E-07
Naphthalene	91-20-3	0.0E+00	2.2E-08	4.7E-08	0.0E+00	9.7E-08	2.2E-07
Styrene	100-42-5	0.0E+00	5.0E-08	1.0E-07	0.0E+00	1.7E-07	5.6E-07
Non-Field-Related Chemicals							
Acetaldehyde	75-07-0	0.0E+00	2.1E-06	1.6E-06	1.5E-06	4.1E-06	8.1E-06
Benzene	71-43-2	7.6E-08	5.1E-07	4.1E-07	3.6E-07	1.3E-06	2.1E-06
Benzene, 1,4-dichloro	106-46-7	0.0E+00	1.6E-08	3.6E-08	0.0E+00	1.0E-07	1.0E-07
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	0.0E+00	4.9E-07	5.0E-07	3.2E-07	1.4E-06	1.8E-06
Ethylbenzene	100-41-4	0.0E+00	1.5E-07	2.4E-07	0.0E+00	5.9E-07	9.8E-07
Formaldehyde	50-00-0	0.0E+00	3.1E-06	2.5E-06	2.7E-06	5.4E-06	1.4E-05
Tetrachloroethylene	127-18-4	0.0E+00	4.0E-08	9.6E-08	0.0E+00	2.7E-07	3.5E-07

[a] 35 field-specific $LADD_{inh\text{-}field}$ are included in the table. $LADD_{inh\text{-}field}$ was calculated from field-specific average concentration ($C_{air\text{-}field}$) of a chemical detected in air off an individual field.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-405. Field-Specific Inhalation **On-Field** Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{inh}$, mg per kg BW per day) of Chemicals—Combined Gender **Spectators 40<50 Years**

Chemical	CASRN	$LADD_{inh\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals							
Aniline	62-53-3	0.0E+00	5.4E-09	9.6E-09	0.0E+00	2.2E-08	3.7E-08
Benz[a]anthracene	56-55-3	0.0E+00	4.1E-12	2.4E-11	0.0E+00	0.0E+00	1.4E-10
Benzo[a]pyrene	50-32-8	0.0E+00	9.5E-10	1.0E-09	5.0E-10	2.6E-09	4.0E-09
Benzo[b]fluoranthene	205-99-2	0.0E+00	2.0E-11	8.4E-11	0.0E+00	1.1E-10	3.6E-10
Benzo[k]fluoranthene	207-08-9	0.0E+00	2.5E-11	7.6E-11	0.0E+00	1.9E-10	3.0E-10
Chrysene	218-01-9	0.0E+00	1.7E-10	2.7E-10	0.0E+00	6.4E-10	1.1E-09
Cyclopenta[cd]pyrene	27208-37-3	0.0E+00	6.0E-11	7.5E-11	2.3E-11	1.8E-10	3.5E-10
Dibenz[a,h]anthracene	53-70-3	0.0E+00	1.2E-10	2.4E-10	0.0E+00	6.1E-10	1.0E-09
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	8.9E-11	3.0E-10	0.0E+00	1.0E-09	1.0E-09
Methyl Isobutyl Ketone	108-10-1	0.0E+00	1.3E-08	3.6E-08	0.0E+00	1.0E-07	1.6E-07
Naphthalene	91-20-3	0.0E+00	2.3E-08	4.7E-08	0.0E+00	9.8E-08	2.2E-07
Styrene	100-42-5	0.0E+00	5.0E-08	1.0E-07	0.0E+00	1.7E-07	5.6E-07
Non-Field-Related Chemicals							
Acetaldehyde	75-07-0	0.0E+00	2.1E-06	1.6E-06	1.5E-06	4.1E-06	8.2E-06
Benzene	71-43-2	7.7E-08	5.2E-07	4.2E-07	3.6E-07	1.3E-06	2.1E-06
Benzene, 1,4-dichloro	106-46-7	0.0E+00	1.6E-08	3.6E-08	0.0E+00	1.0E-07	1.0E-07
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	0.0E+00	4.9E-07	5.1E-07	3.3E-07	1.5E-06	1.8E-06
Ethylbenzene	100-41-4	0.0E+00	1.5E-07	2.5E-07	0.0E+00	6.0E-07	9.9E-07
Formaldehyde	50-00-0	0.0E+00	3.2E-06	2.5E-06	2.7E-06	5.4E-06	1.4E-05
Tetrachloroethylene	127-18-4	0.0E+00	4.1E-08	9.7E-08	0.0E+00	2.7E-07	3.6E-07

[a] 35 field-specific $LADD_{inh\text{-}field}$ are included in the table. $LADD_{inh\text{-}field}$ was calculated from field-specific average concentration ($C_{air\text{-}field}$) of a chemical detected in air off an individual field.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-406. Field-Specific Inhalation **On-Field** Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{inh}$, mg per kg BW per day) of Chemicals—Combined Gender **Spectators 50<70 Years**

Chemical	CASRN	$LADD_{inh\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals							
Aniline	62-53-3	0.0E+00	1.1E-08	1.9E-08	0.0E+00	4.3E-08	7.5E-08
Benz[a]anthracene	56-55-3	0.0E+00	8.2E-12	4.8E-11	0.0E+00	0.0E+00	2.9E-10
Benzo[a]pyrene	50-32-8	0.0E+00	1.9E-09	2.1E-09	1.0E-09	5.2E-09	8.1E-09
Benzo[b]fluoranthene	205-99-2	0.0E+00	4.1E-11	1.7E-10	0.0E+00	2.2E-10	7.2E-10
Benzo[k]fluoranthene	207-08-9	0.0E+00	5.1E-11	1.5E-10	0.0E+00	3.9E-10	5.9E-10

Chemical	CASRN	$LADD_{inh\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Chrysene	218-01-9	0.0E+00	3.4E-10	5.4E-10	0.0E+00	1.3E-09	2.3E-09
Cyclopenta[cd]pyrene	27208-37-3	0.0E+00	1.2E-10	1.5E-10	4.6E-11	3.6E-10	7.1E-10
Dibenz[a,h]anthracene	53-70-3	0.0E+00	2.4E-10	4.8E-10	0.0E+00	1.2E-09	2.1E-09
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	1.8E-10	5.9E-10	0.0E+00	2.1E-09	2.1E-09
Methyl Isobutyl Ketone	108-10-1	0.0E+00	2.7E-08	7.3E-08	0.0E+00	2.1E-07	3.1E-07
Naphthalene	91-20-3	0.0E+00	4.6E-08	9.5E-08	0.0E+00	2.0E-07	4.4E-07
Styrene	100-42-5	0.0E+00	1.0E-07	2.1E-07	0.0E+00	3.4E-07	1.1E-06
Non-Field-Related Chemicals							
Acetaldehyde	75-07-0	0.0E+00	4.2E-06	3.2E-06	3.0E-06	8.2E-06	1.6E-05
Benzene	71-43-2	1.5E-07	1.0E-06	8.4E-07	7.3E-07	2.6E-06	4.2E-06
Benzene, 1,4-dichloro	106-46-7	0.0E+00	3.3E-08	7.2E-08	0.0E+00	2.0E-07	2.0E-07
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	0.0E+00	9.8E-07	1.0E-06	6.5E-07	2.9E-06	3.6E-06
Ethylbenzene	100-41-4	0.0E+00	2.9E-07	5.0E-07	0.0E+00	1.2E-06	2.0E-06
Formaldehyde	50-00-0	0.0E+00	6.4E-06	5.0E-06	5.5E-06	1.1E-05	2.8E-05
Tetrachloroethylene	127-18-4	0.0E+00	8.2E-08	1.9E-07	0.0E+00	5.5E-07	7.2E-07

[a] 35 field-specific $LADD_{inh\text{-}field}$ are included in the table. $LADD_{inh\text{-}field}$ was calculated from field-specific average concentration ($C_{air\text{-}field}$) of a chemical detected in air off an individual field.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-407. Field-Specific Inhalation **Off-Field** Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{inh}$, mg per kg BW per day) of Chemicals—Combined Gender **Spectators Third Trimester Fetus**

Chemical	CASRN	$LADD_{inh\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals							
Aniline	62-53-3	0.0E+00	1.4E-09	2.9E-09	0.0E+00	5.3E-09	1.3E-08
Benzo[a]pyrene	50-32-8	0.0E+00	2.8E-10	4.5E-10	1.2E-10	9.5E-10	2.1E-09
Benzo[b]fluoranthene	205-99-2	0.0E+00	7.6E-12	2.5E-11	0.0E+00	8.8E-11	8.8E-11
Benzo[k]fluoranthene	207-08-9	0.0E+00	6.3E-12	2.1E-11	0.0E+00	7.3E-11	7.3E-11
Chrysene	218-01-9	0.0E+00	2.1E-11	4.6E-11	0.0E+00	8.9E-11	2.0E-10
Cyclopenta[cd]pyrene	27208-37-3	0.0E+00	1.3E-11	1.7E-11	5.7E-12	4.7E-11	5.5E-11
Dibenz[a,h]anthracene	53-70-3	0.0E+00	1.8E-11	4.1E-11	0.0E+00	1.2E-10	1.5E-10
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	1.5E-11	6.0E-11	0.0E+00	7.7E-11	2.6E-10
Methyl Isobutyl Ketone	108-10-1	0.0E+00	7.3E-10	4.3E-09	0.0E+00	0.0E+00	2.6E-08
Naphthalene	91-20-3	0.0E+00	6.0E-09	1.2E-08	0.0E+00	2.7E-08	5.4E-08
Styrene	100-42-5	0.0E+00	1.2E-08	2.7E-08	0.0E+00	4.7E-08	1.4E-07
Non-Field-Related Chemicals							
Benzene	71-43-2	0.0E+00	1.3E-07	1.1E-07	8.1E-08	3.2E-07	5.7E-07
Benzene, 1,4-dichloro	106-46-7	0.0E+00	3.6E-09	8.4E-09	0.0E+00	2.5E-08	2.5E-08

Chemical	CASRN	$LADD_{inh\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	0.0E+00	1.2E-07	1.3E-07	4.4E-08	4.0E-07	4.2E-07
Ethylbenzene	100-41-4	0.0E+00	3.7E-08	6.5E-08	0.0E+00	1.6E-07	2.7E-07
Tetrachloroethylene	127-18-4	0.0E+00	1.0E-08	2.4E-08	0.0E+00	6.7E-08	8.8E-08

[a] 35 field-specific $LADD_{inh\text{-}field}$ are included in the table. $LADD_{inh\text{-}field}$ was calculated from field-specific average concentration ($C_{air\text{-}field}$) of a chemical detected in air off an individual field.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-408. Field-Specific Inhalation **Off-Field** Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{inh}$, mg per kg BW per day) of Chemicals—Combined Gender **Spectators 0<2 Years**

Chemical	CASRN	$LADD_{inh\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals							
Aniline	62-53-3	0.0E+00	9.1E-08	1.9E-07	0.0E+00	3.4E-07	8.1E-07
Benzo[a]pyrene	50-32-8	0.0E+00	1.8E-08	2.9E-08	7.6E-09	6.1E-08	1.3E-07
Benzo[b]fluoranthene	205-99-2	0.0E+00	4.9E-10	1.6E-09	0.0E+00	5.7E-09	5.7E-09
Benzo[k]fluoranthene	207-08-9	0.0E+00	4.0E-10	1.3E-09	0.0E+00	4.7E-09	4.7E-09
Chrysene	218-01-9	0.0E+00	1.3E-09	2.9E-09	0.0E+00	5.7E-09	1.3E-08
Cyclopenta[cd]pyrene	27208-37-3	0.0E+00	8.1E-10	1.1E-09	3.7E-10	3.0E-09	3.5E-09
Dibenz[a,h]anthracene	53-70-3	0.0E+00	1.1E-09	2.6E-09	0.0E+00	7.5E-09	9.9E-09
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	9.4E-10	3.9E-09	0.0E+00	5.0E-09	1.7E-08
Methyl Isobutyl Ketone	108-10-1	0.0E+00	4.7E-08	2.8E-07	0.0E+00	0.0E+00	1.6E-06
Naphthalene	91-20-3	0.0E+00	3.8E-07	7.8E-07	0.0E+00	1.8E-06	3.5E-06
Styrene	100-42-5	0.0E+00	7.9E-07	1.7E-06	0.0E+00	3.0E-06	9.1E-06
Non-Field-Related Chemicals							
Benzene	71-43-2	0.0E+00	8.4E-06	7.2E-06	5.2E-06	2.0E-05	3.7E-05
Benzene, 1,4-dichloro	106-46-7	0.0E+00	2.3E-07	5.4E-07	0.0E+00	1.6E-06	1.6E-06
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	0.0E+00	7.6E-06	8.6E-06	2.8E-06	2.6E-05	2.7E-05
Ethylbenzene	100-41-4	0.0E+00	2.4E-06	4.2E-06	0.0E+00	1.1E-05	1.8E-05
Tetrachloroethylene	127-18-4	0.0E+00	6.5E-07	1.5E-06	0.0E+00	4.3E-06	5.7E-06

[a] 35 field-specific $LADD_{inh\text{-}field}$ are included in the table. $LADD_{inh\text{-}field}$ was calculated from field-specific average concentration ($C_{air\text{-}field}$) of a chemical detected in air off an individual field
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-409. Field-Specific Inhalation **Off-Field** Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{inh}$, mg per kg BW per day) of Chemicals—Combined Gender **Spectators 2<6 Years**

Chemical	CASRN	$LADD_{inh-field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals							
Aniline	62-53-3	0.0E+00	2.9E-08	5.9E-08	0.0E+00	1.1E-07	2.5E-07
Benzo[a]pyrene	50-32-8	0.0E+00	5.6E-09	9.1E-09	2.4E-09	1.9E-08	4.2E-08
Benzo[b]fluoranthene	205-99-2	0.0E+00	1.5E-10	5.1E-10	0.0E+00	1.8E-09	1.8E-09
Benzo[k]fluoranthene	207-08-9	0.0E+00	1.3E-10	4.2E-10	0.0E+00	1.5E-09	1.5E-09
Chrysene	218-01-9	0.0E+00	4.2E-10	9.2E-10	0.0E+00	1.8E-09	4.0E-09
Cyclopenta[cd]pyrene	27208-37-3	0.0E+00	2.6E-10	3.4E-10	1.2E-10	9.5E-10	1.1E-09
Dibenz[a,h]anthracene	53-70-3	0.0E+00	3.6E-10	8.4E-10	0.0E+00	2.4E-09	3.1E-09
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	3.0E-10	1.2E-09	0.0E+00	1.6E-09	5.2E-09
Methyl Isobutyl Ketone	108-10-1	0.0E+00	1.5E-08	8.8E-08	0.0E+00	0.0E+00	5.2E-07
Naphthalene	91-20-3	0.0E+00	1.2E-07	2.5E-07	0.0E+00	5.5E-07	1.1E-06
Styrene	100-42-5	0.0E+00	2.5E-07	5.4E-07	0.0E+00	9.5E-07	2.9E-06
Non-Field-Related Chemicals							
Benzene	71-43-2	0.0E+00	2.6E-06	2.3E-06	1.6E-06	6.5E-06	1.2E-05
Benzene, 1,4-dichloro	106-46-7	0.0E+00	7.2E-08	1.7E-07	0.0E+00	5.1E-07	5.1E-07
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	0.0E+00	2.4E-06	2.7E-06	9.0E-07	8.2E-06	8.5E-06
Ethylbenzene	100-41-4	0.0E+00	7.5E-07	1.3E-06	0.0E+00	3.3E-06	5.6E-06
Tetrachloroethylene	127-18-4	0.0E+00	2.0E-07	4.8E-07	0.0E+00	1.4E-06	1.8E-06

[a] 35 field-specific $LADD_{inh-field}$ are included in the table. $LADD_{inh-field}$ was calculated from field-specific average concentration ($C_{air-field}$) of a chemical detected in air off an individual field
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-410. Field-Specific Inhalation **Off-Field** Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{inh}$, mg per kg BW per day) of Chemicals—Combined Gender **Spectators 6<11 Years**

Chemical	CASRN	$LADD_{inh-field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals							
Aniline	62-53-3	0.0E+00	3.4E-08	7.0E-08	0.0E+00	1.3E-07	3.0E-07
Benzo[a]pyrene	50-32-8	0.0E+00	6.7E-09	1.1E-08	2.9E-09	2.3E-08	5.0E-08
Benzo[b]fluoranthene	205-99-2	0.0E+00	1.8E-10	6.1E-10	0.0E+00	2.1E-09	2.1E-09
Benzo[k]fluoranthene	207-08-9	0.0E+00	1.5E-10	5.0E-10	0.0E+00	1.8E-09	1.8E-09
Chrysene	218-01-9	0.0E+00	5.0E-10	1.1E-09	0.0E+00	2.2E-09	4.7E-09
Cyclopenta[cd]pyrene	27208-37-3	0.0E+00	3.1E-10	4.1E-10	1.4E-10	1.1E-09	1.3E-09
Dibenz[a,h]anthracene	53-70-3	0.0E+00	4.3E-10	1.0E-09	0.0E+00	2.8E-09	3.7E-09
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	3.5E-10	1.5E-09	0.0E+00	1.9E-09	6.2E-09

Chemical	CASRN	$LADD_{inh\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Methyl Isobutyl Ketone	108-10-1	0.0E+00	1.8E-08	1.0E-07	0.0E+00	0.0E+00	6.2E-07
Naphthalene	91-20-3	0.0E+00	1.4E-07	2.9E-07	0.0E+00	6.6E-07	1.3E-06
Styrene	100-42-5	0.0E+00	3.0E-07	6.4E-07	0.0E+00	1.1E-06	3.4E-06
Non-Field-Related Chemicals							
Benzene	71-43-2	0.0E+00	3.1E-06	2.7E-06	2.0E-06	7.7E-06	1.4E-05
Benzene, 1,4-dichloro	106-46-7	0.0E+00	8.6E-08	2.0E-07	0.0E+00	6.0E-07	6.0E-07
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	0.0E+00	2.9E-06	3.2E-06	1.1E-06	9.7E-06	1.0E-05
Ethylbenzene	100-41-4	0.0E+00	9.0E-07	1.6E-06	0.0E+00	4.0E-06	6.6E-06
Tetrachloroethylene	127-18-4	0.0E+00	2.4E-07	5.7E-07	0.0E+00	1.6E-06	2.1E-06

[a] 35 field-specific $LADD_{inh\text{-}field}$ are included in the table. $LADD_{inh\text{-}field}$ was calculated from field-specific average concentration ($C_{air\text{-}field}$) of a chemical detected in air off an individual field.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-411. Field-Specific Inhalation **Off-Field** Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{inh}$, mg per kg BW per day) of Chemicals—Combined Gender **Spectators 11<16 Years**

Chemical	CASRN	$LADD_{inh\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals							
Aniline	62-53-3	0.0E+00	1.5E-08	3.0E-08	0.0E+00	5.5E-08	1.3E-07
Benzo[a]pyrene	50-32-8	0.0E+00	2.9E-09	4.7E-09	1.2E-09	9.9E-09	2.2E-08
Benzo[b]fluoranthene	205-99-2	0.0E+00	7.9E-11	2.6E-10	0.0E+00	9.2E-10	9.2E-10
Benzo[k]fluoranthene	207-08-9	0.0E+00	6.5E-11	2.2E-10	0.0E+00	7.6E-10	7.6E-10
Chrysene	218-01-9	0.0E+00	2.2E-10	4.8E-10	0.0E+00	9.3E-10	2.0E-09
Cyclopenta[cd]pyrene	27208-37-3	0.0E+00	1.3E-10	1.8E-10	6.0E-11	4.9E-10	5.7E-10
Dibenz[a,h]anthracene	53-70-3	0.0E+00	1.9E-10	4.3E-10	0.0E+00	1.2E-09	1.6E-09
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	1.5E-10	6.3E-10	0.0E+00	8.0E-10	2.7E-09
Methyl Isobutyl Ketone	108-10-1	0.0E+00	7.6E-09	4.5E-08	0.0E+00	0.0E+00	2.7E-07
Naphthalene	91-20-3	0.0E+00	6.2E-08	1.3E-07	0.0E+00	2.9E-07	5.6E-07
Styrene	100-42-5	0.0E+00	1.3E-07	2.8E-07	0.0E+00	4.9E-07	1.5E-06
Non-Field-Related Chemicals							
Benzene	71-43-2	0.0E+00	1.4E-06	1.2E-06	8.4E-07	3.3E-06	6.0E-06
Benzene, 1,4-dichloro	106-46-7	0.0E+00	3.7E-08	8.8E-08	0.0E+00	2.6E-07	2.6E-07
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	0.0E+00	1.2E-06	1.4E-06	4.6E-07	4.2E-06	4.4E-06
Ethylbenzene	100-41-4	0.0E+00	3.9E-07	6.8E-07	0.0E+00	1.7E-06	2.9E-06
Tetrachloroethylene	127-18-4	0.0E+00	1.1E-07	2.5E-07	0.0E+00	7.0E-07	9.2E-07

[a] 35 field-specific $LADD_{inh\text{-}field}$ are included in the table. $LADD_{inh\text{-}field}$ was calculated from field-specific average concentration ($C_{air\text{-}field}$) of a chemical detected in air off an individual field.
CASRN: Chemical Abstracts Service Registry Number

Values are rounded to two significant figures.

Table F-412. Field-Specific Inhalation **Off-Field** Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{inh}$, mg per kg BW per day) of Chemicals—Combined Gender **Spectators 16<30 Years**

Chemical	CASRN	$LADD_{inh\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals							
Aniline	62-53-3	0.0E+00	9.1E-09	1.9E-08	0.0E+00	3.4E-08	8.1E-08
Benzo[a]pyrene	50-32-8	0.0E+00	1.8E-09	2.9E-09	7.6E-10	6.1E-09	1.3E-08
Benzo[b]fluoranthene	205-99-2	0.0E+00	4.9E-11	1.6E-10	0.0E+00	5.7E-10	5.7E-10
Benzo[k]fluoranthene	207-08-9	0.0E+00	4.0E-11	1.3E-10	0.0E+00	4.7E-10	4.7E-10
Chrysene	218-01-9	0.0E+00	1.3E-10	2.9E-10	0.0E+00	5.7E-10	1.3E-09
Cyclopenta[cd]pyrene	27208-37-3	0.0E+00	8.1E-11	1.1E-10	3.7E-11	3.0E-10	3.5E-10
Dibenz[a,h]anthracene	53-70-3	0.0E+00	1.1E-10	2.6E-10	0.0E+00	7.5E-10	9.9E-10
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	9.4E-11	3.9E-10	0.0E+00	5.0E-10	1.7E-09
Methyl Isobutyl Ketone	108-10-1	0.0E+00	4.7E-09	2.8E-08	0.0E+00	0.0E+00	1.6E-07
Naphthalene	91-20-3	0.0E+00	3.8E-08	7.8E-08	0.0E+00	1.8E-07	3.5E-07
Styrene	100-42-5	0.0E+00	7.9E-08	1.7E-07	0.0E+00	3.0E-07	9.1E-07
Non-Field-Related Chemicals							
Benzene	71-43-2	0.0E+00	8.4E-07	7.2E-07	5.2E-07	2.0E-06	3.7E-06
Benzene, 1,4-dichloro	106-46-7	0.0E+00	2.3E-08	5.4E-08	0.0E+00	1.6E-07	1.6E-07
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	0.0E+00	7.6E-07	8.6E-07	2.8E-07	2.6E-06	2.7E-06
Ethylbenzene	100-41-4	0.0E+00	2.4E-07	4.2E-07	0.0E+00	1.1E-06	1.8E-06
Tetrachloroethylene	127-18-4	0.0E+00	6.5E-08	1.5E-07	0.0E+00	4.3E-07	5.7E-07

[a] 35 field-specific $LADD_{inh\text{-}field}$ are included in the table. $LADD_{inh\text{-}field}$ was calculated from field-specific average concentration ($C_{air\text{-}field}$) of a chemical detected in air off an individual field.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-413. Field-Specific Inhalation **Off-Field** Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{inh}$, mg per kg BW per day) of Chemicals—Combined Gender **Spectators 30<40 Years**

Chemical	CASRN	$LADD_{inh\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals							
Aniline	62-53-3	0.0E+00	5.7E-09	1.2E-08	0.0E+00	2.1E-08	5.0E-08
Benzo[a]pyrene	50-32-8	0.0E+00	1.1E-09	1.8E-09	4.7E-10	3.8E-09	8.4E-09
Benzo[b]fluoranthene	205-99-2	0.0E+00	3.0E-11	1.0E-10	0.0E+00	3.5E-10	3.5E-10
Benzo[k]fluoranthene	207-08-9	0.0E+00	2.5E-11	8.3E-11	0.0E+00	2.9E-10	2.9E-10
Chrysene	218-01-9	0.0E+00	8.4E-11	1.8E-10	0.0E+00	3.6E-10	7.9E-10
Cyclopenta[cd]pyrene	27208-37-3	0.0E+00	5.1E-11	6.8E-11	2.3E-11	1.9E-10	2.2E-10

Chemical	CASRN	$LADD_{inh\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Dibenz[a,h]anthracene	53-70-3	0.0E+00	7.2E-11	1.7E-10	0.0E+00	4.7E-10	6.2E-10
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	5.9E-11	2.4E-10	0.0E+00	3.1E-10	1.0E-09
Methyl Isobutyl Ketone	108-10-1	0.0E+00	2.9E-09	1.7E-08	0.0E+00	0.0E+00	1.0E-07
Naphthalene	91-20-3	0.0E+00	2.4E-08	4.9E-08	0.0E+00	1.1E-07	2.2E-07
Styrene	100-42-5	0.0E+00	4.9E-08	1.1E-07	0.0E+00	1.9E-07	5.7E-07
Non-Field-Related Chemicals							
Benzene	71-43-2	0.0E+00	5.2E-07	4.5E-07	3.2E-07	1.3E-06	2.3E-06
Benzene, 1,4-dichloro	106-46-7	0.0E+00	1.4E-08	3.4E-08	0.0E+00	1.0E-07	1.0E-07
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	0.0E+00	4.7E-07	5.3E-07	1.8E-07	1.6E-06	1.7E-06
Ethylbenzene	100-41-4	0.0E+00	1.5E-07	2.6E-07	0.0E+00	6.6E-07	1.1E-06
Tetrachloroethylene	127-18-4	0.0E+00	4.0E-08	9.4E-08	0.0E+00	2.7E-07	3.5E-07

[a] 35 field-specific $LADD_{inh\text{-}field}$ are included in the table. $LADD_{inh\text{-}field}$ was calculated from field-specific average concentration ($C_{air\text{-}field}$) of a chemical detected in air off an individual field.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-414. Field-Specific Inhalation **Off-Field** Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{inh}$, mg per kg BW per day) of Chemicals—Combined Gender **Spectators 40<50 Years**

Chemical	CASRN	$LADD_{inh\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals							
Aniline	62-53-3	0.0E+00	5.8E-09	1.2E-08	0.0E+00	2.2E-08	5.1E-08
Benzo[a]pyrene	50-32-8	0.0E+00	1.1E-09	1.8E-09	4.8E-10	3.9E-09	8.5E-09
Benzo[b]fluoranthene	205-99-2	0.0E+00	3.1E-11	1.0E-10	0.0E+00	3.6E-10	3.6E-10
Benzo[k]fluoranthene	207-08-9	0.0E+00	2.5E-11	8.4E-11	0.0E+00	3.0E-10	3.0E-10
Chrysene	218-01-9	0.0E+00	8.5E-11	1.8E-10	0.0E+00	3.6E-10	7.9E-10
Cyclopenta[cd]pyrene	27208-37-3	0.0E+00	5.1E-11	6.9E-11	2.3E-11	1.9E-10	2.2E-10
Dibenz[a,h]anthracene	53-70-3	0.0E+00	7.2E-11	1.7E-10	0.0E+00	4.7E-10	6.2E-10
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	5.9E-11	2.5E-10	0.0E+00	3.1E-10	1.0E-09
Methyl Isobutyl Ketone	108-10-1	0.0E+00	3.0E-09	1.8E-08	0.0E+00	0.0E+00	1.0E-07
Naphthalene	91-20-3	0.0E+00	2.4E-08	4.9E-08	0.0E+00	1.1E-07	2.2E-07
Styrene	100-42-5	0.0E+00	5.0E-08	1.1E-07	0.0E+00	1.9E-07	5.7E-07
Non-Field-Related Chemicals							
Benzene	71-43-2	0.0E+00	5.3E-07	4.6E-07	3.3E-07	1.3E-06	2.3E-06
Benzene, 1,4-dichloro	106-46-7	0.0E+00	1.4E-08	3.4E-08	0.0E+00	1.0E-07	1.0E-07
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	0.0E+00	4.8E-07	5.4E-07	1.8E-07	1.6E-06	1.7E-06
Ethylbenzene	100-41-4	0.0E+00	1.5E-07	2.6E-07	0.0E+00	6.7E-07	1.1E-06
Tetrachloroethylene	127-18-4	0.0E+00	4.1E-08	9.5E-08	0.0E+00	2.7E-07	3.6E-07

[a] 35 field-specific $LADD_{inh\text{-}field}$ are included in the table. $LADD_{inh\text{-}field}$ was calculated from field-specific average concentration ($C_{air\text{-}field}$) of a chemical detected in air off an individual field.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-415. Field-Specific Inhalation **Off-Field** Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{inh}$, mg per kg BW per day) of Chemicals—Combined Gender **Spectators 50<70 Year**

Chemical	CASRN	$LADD_{inh\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Chemicals							
Aniline	62-53-3	0.0E+00	1.2E-08	2.4E-08	0.0E+00	4.3E-08	1.0E-07
Benzo[a]pyrene	50-32-8	0.0E+00	2.3E-09	3.6E-09	9.6E-10	7.7E-09	1.7E-08
Benzo[b]fluoranthene	205-99-2	0.0E+00	6.1E-11	2.0E-10	0.0E+00	7.2E-10	7.2E-10
Benzo[k]fluoranthene	207-08-9	0.0E+00	5.1E-11	1.7E-10	0.0E+00	5.9E-10	5.9E-10
Chrysene	218-01-9	0.0E+00	1.7E-10	3.7E-10	0.0E+00	7.2E-10	1.6E-09
Cyclopenta[cd]pyrene	27208-37-3	0.0E+00	1.0E-10	1.4E-10	4.6E-11	3.8E-10	4.5E-10
Dibenz[a,h]anthracene	53-70-3	0.0E+00	1.5E-10	3.4E-10	0.0E+00	9.5E-10	1.3E-09
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	1.2E-10	4.9E-10	0.0E+00	6.3E-10	2.1E-09
Methyl Isobutyl Ketone	108-10-1	0.0E+00	6.0E-09	3.5E-08	0.0E+00	0.0E+00	2.1E-07
Naphthalene	91-20-3	0.0E+00	4.9E-08	9.9E-08	0.0E+00	2.2E-07	4.4E-07
Styrene	100-42-5	0.0E+00	1.0E-07	2.2E-07	0.0E+00	3.8E-07	1.1E-06
Non-Field-Related Chemicals							
Benzene	71-43-2	0.0E+00	1.1E-06	9.2E-07	6.6E-07	2.6E-06	4.7E-06
Benzene, 1,4-dichloro	106-46-7	0.0E+00	2.9E-08	6.8E-08	0.0E+00	2.0E-07	2.0E-07
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	0.0E+00	9.6E-07	1.1E-06	3.6E-07	3.3E-06	3.4E-06
Ethylbenzene	100-41-4	0.0E+00	3.0E-07	5.3E-07	0.0E+00	1.3E-06	2.2E-06
Tetrachloroethylene	127-18-4	0.0E+00	8.2E-08	1.9E-07	0.0E+00	5.5E-07	7.2E-07

[a] 35 field-specific $LADD_{inh\text{-}field}$ are included in the table. $LADD_{inh\text{-}field}$ was calculated from field-specific average concentration ($C_{air\text{-}field}$) of a chemical detected in air off an individual field.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

F.6.2. Dermal Lifetime Average Daily Dose ($LADD_{der}$) for Lifetime Cancer Risk Assessment of Carcinogens

Table F-416. Dermal Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{der}$, mg per kg BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Athletes**

Chemical	CASRN[a]	$LADD_{der}$							
		2<6 years	6<11 years	11<16 years	16<30 years	30<40 years	40<50 years	50<70 years	Lifetime
Aniline	62-53-3	3.2E-10	3.2E-10	3.4E-10	4.0E-10	2.0E-10	1.7E-10	3.4E-10	2.1E-09

Chemical	CASRN[a]	$LADD_{der}$							
		2<6 years	6<11 years	11<16 years	16<30 years	30<40 years	40<50 years	50<70 years	Lifetime
Benz[a]anthracene	56-55-3	4.4E-11	4.3E-11	4.6E-11	5.4E-11	2.7E-11	2.3E-11	4.7E-11	2.8E-10
Benzo[a]pyrene	50-32-8	6.0E-11	6.0E-11	6.3E-11	7.4E-11	3.7E-11	3.2E-11	6.4E-11	3.9E-10
Benzo[b]fluoranthene	205-99-2	4.5E-11	4.5E-11	4.7E-11	5.6E-11	2.8E-11	2.4E-11	4.8E-11	2.9E-10
Benzo[k]fluoranthene	207-08-9	8.5E-11	8.4E-11	8.9E-11	1.0E-10	5.3E-11	4.5E-11	9.1E-11	5.5E-10
1,3-Benzothiazole-2-thiol	149-30-4	3.7E-11	3.7E-11	3.9E-11	4.6E-11	2.3E-11	2.0E-11	4.0E-11	2.4E-10
Chrysene	218-01-9	3.9E-10	3.8E-10	4.1E-10	4.8E-10	2.4E-10	2.1E-10	4.1E-10	2.5E-09
Cyclopenta[cd]pyrene	27208-37-3	6.9E-11	6.9E-11	7.2E-11	8.5E-11	4.3E-11	3.7E-11	7.4E-11	4.5E-10
Dibenz[a,h]anthracene	53-70-3	2.2E-11	2.2E-11	2.3E-11	2.7E-11	1.4E-11	1.2E-11	2.4E-11	1.4E-10
Indeno[1,2,3-cd]pyrene	193-39-5	4.5E-11	4.4E-11	4.6E-11	5.5E-11	2.8E-11	2.4E-11	4.7E-11	2.9E-10
Naphthalene	91-20-3	2.9E-12	2.8E-12	3.0E-12	3.5E-12	1.8E-12	1.5E-12	3.1E-12	1.9E-11

[a] $LADD_{der}$ was calculated from the mean of 35 individual field average concentrations ($C_{der\text{-}crumb\ rubber}$) of a chemical detected in artificial sweat extracts of crumb rubber samples and is the sum across all age groups in a receptor category.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

Table F-417. Dermal Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{der}$, mg per kg BW per day) of **Field-Related Carcinogens**[b]— Combined Gender **Coaches**

Chemical	CASRN[a]	$LADD_{der}$				
		16<30 years	30<40 years	40<50 years	50<70 years	Lifetime
Aniline	62-53-3	2.0E-10	1.3E-10	1.3E-10	2.7E-10	7.3E-10
Benz[a]anthracene	56-55-3	2.7E-11	1.8E-11	1.8E-11	3.6E-11	9.9E-11
Benzo[a]pyrene	50-32-8	3.7E-11	2.4E-11	2.5E-11	5.0E-11	1.4E-10
Benzo[b]fluoranthene	205-99-2	2.8E-11	1.8E-11	1.9E-11	3.7E-11	1.0E-10
Benzo[k]fluoranthene	207-08-9	5.2E-11	3.5E-11	3.5E-11	7.0E-11	1.9E-10
1,3-Benzothiazole-2-thiol	149-30-4	2.3E-11	1.5E-11	1.5E-11	3.1E-11	8.4E-11
Chrysene	218-01-9	2.4E-10	1.6E-10	1.6E-10	3.2E-10	8.7E-10
Cyclopenta[cd]pyrene	27208-37-3	4.2E-11	2.8E-11	2.9E-11	5.7E-11	1.6E-10
Dibenz[a,h]anthracene	53-70-3	1.3E-11	9.0E-12	9.1E-12	1.8E-11	5.0E-11
Indeno[1,2,3-cd]pyrene	193-39-5	2.7E-11	1.8E-11	1.8E-11	3.7E-11	1.0E-10
Naphthalene	91-20-3	1.7E-12	1.2E-12	1.2E-12	2.4E-12	6.4E-12

[a] $LADD_{der}$ was calculated from the mean of 35 individual field average concentrations ($C_{der\text{-}crumb\ rubber}$) of a chemical detected in artificial sweat extracts of crumb rubber samples and is the sum across all age groups in a receptor category.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-

Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

Table F-418. Dermal Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{der}$, mg per kg BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Referees**

Chemical	CASRN[a]	$LADD_{der}$				
		16<30 years	30<40 years	40<50 years	50<70 years	Lifetime
Aniline	62-53-3	5.3E-11	7.9E-11	5.3E-11	1.1E-10	2.9E-10
Benz[a]anthracene	56-55-3	7.2E-12	1.1E-11	7.3E-12	1.5E-11	4.0E-11
Benzo[a]pyrene	50-32-8	9.8E-12	1.5E-11	9.9E-12	2.0E-11	5.4E-11
Benzo[b]fluoranthene	205-99-2	7.4E-12	1.1E-11	7.5E-12	1.5E-11	4.1E-11
Benzo[k]fluoranthene	207-08-9	1.4E-11	2.1E-11	1.4E-11	2.8E-11	7.7E-11
1,3-Benzothiazole-2-thiol	149-30-4	6.1E-12	9.1E-12	6.2E-12	1.2E-11	3.4E-11
Chrysene	218-01-9	6.3E-11	9.5E-11	6.4E-11	1.3E-10	3.5E-10
Cyclopenta[cd]pyrene	27208-37-3	1.1E-11	1.7E-11	1.1E-11	2.3E-11	6.3E-11
Dibenz[a,h]anthracene	53-70-3	3.6E-12	5.4E-12	3.7E-12	7.3E-12	2.0E-11
Indeno[1,2,3-cd]pyrene	193-39-5	7.3E-12	1.1E-11	7.4E-12	1.5E-11	4.0E-11
Naphthalene	91-20-3	4.7E-13	7.0E-13	4.7E-13	9.5E-13	2.6E-12

[a] $LADD_{der}$ was calculated from the mean of 35 individual field average concentrations ($C_{der\text{-}crumb\ rubber}$) of a chemical detected in artificial sweat extracts of crumb rubber samples and is the sum across all age groups in a receptor category.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

Table F-419. Dermal Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{der}$, mg per kg BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Spectators**

Chemical	CASRN[a]	$LADD_{der}$									
		Third trimester fetus	0<2 years	2<6 years	6<11 years	11<16 years	16<30 years	30<40 years	40<50 years	50<70 years	Life time
Aniline	62-53-3	2.0E-11	8.5E-10	3.8E-10	4.3E-10	3.6E-10	1.5E-10	9.2E-11	9.3E-11	1.8E-10	2.5E-09
Benz[a]anthracene	56-55-3	2.7E-12	1.2E-10	5.1E-11	5.8E-11	5.0E-11	2.0E-11	1.2E-11	1.3E-11	2.4E-11	3.5E-10
Benzo[a]pyrene	50-32-8	3.7E-12	1.6E-10	7.0E-11	7.9E-11	6.8E-11	2.8E-11	1.7E-11	1.7E-11	3.3E-11	4.7E-10
Benzo[b]fluoranthene	205-99-2	2.8E-12	1.2E-10	5.3E-11	6.0E-11	5.1E-11	2.1E-11	1.3E-11	1.3E-11	2.5E-11	3.6E-10
Benzo[k]fluoranthene	207-08-9	5.2E-12	2.3E-10	9.9E-11	1.1E-10	9.6E-11	3.9E-11	2.4E-11	2.5E-11	4.6E-11	6.7E-10

Chemical	CASRN[a]	$LADD_{der}$									
		Third trimester fetus	0<2 years	2<6 years	6<11 years	11<16 years	16<30 years	30<40 years	40<50 years	50<70 years	Life time
1,3-Benzothiazole-2-thiol	149-30-4	2.3E-12	9.8E-11	4.3E-11	4.9E-11	4.2E-11	1.7E-11	1.1E-11	1.1E-11	2.0E-11	2.9E-10
Chrysene	218-01-9	2.4E-11	1.0E-09	4.5E-10	5.1E-10	4.4E-10	1.8E-10	1.1E-10	1.1E-10	2.1E-10	3.1E-09
Cyclopenta[cd]pyrene	27208-37-3	4.3E-12	1.8E-10	8.1E-11	9.2E-11	7.8E-11	3.2E-11	2.0E-11	2.0E-11	3.8E-11	5.5E-10
Dibenz[a,h]anthracene	53-70-3	1.4E-12	5.8E-11	2.6E-11	2.9E-11	2.5E-11	1.0E-11	6.3E-12	6.4E-12	1.2E-11	1.7E-10
Indeno[1,2,3-cd]pyrene	193-39-5	2.7E-12	1.2E-10	5.2E-11	5.9E-11	5.0E-11	2.1E-11	1.3E-11	1.3E-11	2.4E-11	3.5E-10
Naphthalene	91-20-3	1.8E-13	7.6E-12	3.3E-12	3.8E-12	3.2E-12	1.3E-12	8.1E-13	8.2E-13	1.6E-12	2.3E-11

[a] $LADD_{der}$ was calculated from the mean of 35 individual field average concentrations ($C_{der\text{-}crumb\ rubber}$) of a chemical detected in artificial sweat extracts of crumb rubber samples and is the sum across all age groups in a receptor category.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

INDIVIDUAL FIELD ASSESSMENT (Table F-420 to Table F-443)

Table F-420. Field-Specific Dermal Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{der\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Athletes 2<6 Years**

Chemical Name	CASRN	$LADD_{der\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	0.0E+00	4.4E-11	1.4E-10	0.0E+00	3.4E-10	6.5E-10
Benz[a]anthracene	56-55-3	0.0E+00	6.0E-11	7.0E-11	3.2E-11	1.7E-10	3.2E-10
Benzo[a]pyrene	50-32-8	0.0E+00	4.5E-11	4.5E-11	3.0E-11	1.2E-10	1.9E-10
Benzo[b]fluoranthene	205-99-2	0.0E+00	8.5E-11	7.5E-11	6.7E-11	2.1E-10	3.3E-10
Benzo[k]fluoranthene	207-08-9	0.0E+00	3.7E-11	3.9E-11	2.3E-11	1.2E-10	1.5E-10
1,3-Benzothiazole-2-thiol	149-30-4	0.0E+00	3.2E-10	1.9E-09	0.0E+00	0.0E+00	1.1E-08
Chrysene	218-01-9	4.2E-11	3.9E-10	2.5E-10	3.9E-10	7.8E-10	8.8E-10
Cyclopenta[cd]pyrene	27208-37-3	7.1E-12	6.9E-11	4.2E-11	6.7E-11	1.3E-10	1.6E-10
Dibenz[a,h]anthracene	53-70-3	0.0E+00	2.2E-11	4.1E-11	0.0E+00	1.1E-10	1.7E-10
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	4.5E-11	3.7E-11	3.9E-11	1.0E-10	1.6E-10
Naphthalene	91-20-3	0.0E+00	2.9E-12	1.2E-11	0.0E+00	1.4E-11	5.2E-11

[a] 35 field-specific $LADD_{der\text{-}field}$ are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.

CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-421. Field-Specific Dermal Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{der\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Athletes 6<11 Years**

Chemical Name	CASRN	$LADD_{der\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	0.0E+00	4.3E-11	1.3E-10	0.0E+00	3.3E-10	6.5E-10
Benz[a]anthracene	56-55-3	0.0E+00	6.0E-11	6.9E-11	3.1E-11	1.7E-10	3.2E-10
Benzo[a]pyrene	50-32-8	0.0E+00	4.5E-11	4.4E-11	2.9E-11	1.2E-10	1.8E-10
Benzo[b]fluoranthene	205-99-2	0.0E+00	8.4E-11	7.5E-11	6.7E-11	2.1E-10	3.3E-10
Benzo[k]fluoranthene	207-08-9	0.0E+00	3.7E-11	3.9E-11	2.2E-11	1.2E-10	1.5E-10
1,3-Benzothiazole-2-thiol	149-30-4	0.0E+00	3.2E-10	1.9E-09	0.0E+00	0.0E+00	1.1E-08
Chrysene	218-01-9	4.2E-11	3.8E-10	2.5E-10	3.8E-10	7.7E-10	8.7E-10
Cyclopenta[cd]pyrene	27208-37-3	7.0E-12	6.9E-11	4.1E-11	6.6E-11	1.3E-10	1.6E-10
Dibenz[a,h]anthracene	53-70-3	0.0E+00	2.2E-11	4.0E-11	0.0E+00	1.1E-10	1.7E-10
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	4.4E-11	3.7E-11	3.9E-11	1.0E-10	1.6E-10
Naphthalene	91-20-3	0.0E+00	2.8E-12	1.2E-11	0.0E+00	1.4E-11	5.1E-11

[a] 35 field-specific $LADD_{der\text{-}field}$ are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-422. Field-Specific Dermal Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{der\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Athletes 11<16 Years**

Chemical Name	CASRN	$LADD_{der\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	0.0E+00	4.6E-11	1.4E-10	0.0E+00	3.5E-10	6.8E-10
Benz[a]anthracene	56-55-3	0.0E+00	6.3E-11	7.3E-11	3.3E-11	1.8E-10	3.3E-10
Benzo[a]pyrene	50-32-8	0.0E+00	4.7E-11	4.7E-11	3.1E-11	1.2E-10	1.9E-10
Benzo[b]fluoranthene	205-99-2	0.0E+00	8.9E-11	7.9E-11	7.0E-11	2.2E-10	3.5E-10
Benzo[k]fluoranthene	207-08-9	0.0E+00	3.9E-11	4.1E-11	2.4E-11	1.3E-10	1.6E-10
1,3-Benzothiazole-2-thiol	149-30-4	0.0E+00	3.4E-10	2.0E-09	0.0E+00	0.0E+00	1.2E-08
Chrysene	218-01-9	4.4E-11	4.1E-10	2.6E-10	4.1E-10	8.2E-10	9.2E-10
Cyclopenta[cd]pyrene	27208-37-3	7.4E-12	7.2E-11	4.3E-11	7.0E-11	1.4E-10	1.7E-10
Dibenz[a,h]anthracene	53-70-3	0.0E+00	2.3E-11	4.2E-11	0.0E+00	1.1E-10	1.8E-10
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	4.6E-11	3.9E-11	4.1E-11	1.1E-10	1.7E-10
Naphthalene	91-20-3	0.0E+00	3.0E-12	1.2E-11	0.0E+00	1.5E-11	5.4E-11

[a] 35 field-specific $LADD_{der\text{-}field}$ are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-423. Field-Specific Dermal Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{der\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Athletes 16<30 Years**

Chemical Name	CASRN	$LADD_{der\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	0.0E+00	5.4E-11	1.7E-10	0.0E+00	4.1E-10	8.0E-10
Benz[a]anthracene	56-55-3	0.0E+00	7.4E-11	8.5E-11	3.9E-11	2.1E-10	3.9E-10
Benzo[a]pyrene	50-32-8	0.0E+00	5.6E-11	5.5E-11	3.7E-11	1.5E-10	2.3E-10
Benzo[b]fluoranthene	205-99-2	0.0E+00	1.0E-10	9.3E-11	8.3E-11	2.6E-10	4.1E-10
Benzo[k]fluoranthene	207-08-9	0.0E+00	4.6E-11	4.8E-11	2.8E-11	1.5E-10	1.8E-10
1,3-Benzothiazole-2-thiol	149-30-4	0.0E+00	4.0E-10	2.3E-09	0.0E+00	0.0E+00	1.4E-08
Chrysene	218-01-9	5.2E-11	4.8E-10	3.1E-10	4.8E-10	9.6E-10	1.1E-09
Cyclopenta[cd]pyrene	27208-37-3	8.7E-12	8.5E-11	5.1E-11	8.2E-11	1.6E-10	2.0E-10
Dibenz[a,h]anthracene	53-70-3	0.0E+00	2.7E-11	5.0E-11	0.0E+00	1.3E-10	2.1E-10
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	5.5E-11	4.6E-11	4.8E-11	1.3E-10	2.0E-10
Naphthalene	91-20-3	0.0E+00	3.5E-12	1.5E-11	0.0E+00	1.8E-11	6.4E-11

[a] 35 field-specific $LADD_{der\text{-}field}$ are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-424. Field-Specific Dermal Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{der\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Athletes 30<40 Years**

Chemical Name	CASRN	$LADD_{der\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	0.0E+00	2.7E-11	8.5E-11	0.0E+00	2.1E-10	4.1E-10
Benz[a]anthracene	56-55-3	0.0E+00	3.7E-11	4.3E-11	2.0E-11	1.1E-10	2.0E-10
Benzo[a]pyrene	50-32-8	0.0E+00	2.8E-11	2.8E-11	1.9E-11	7.4E-11	1.2E-10
Benzo[b]fluoranthene	205-99-2	0.0E+00	5.3E-11	4.7E-11	4.2E-11	1.3E-10	2.1E-10
Benzo[k]fluoranthene	207-08-9	0.0E+00	2.3E-11	2.5E-11	1.4E-11	7.6E-11	9.4E-11
1,3-Benzothiazole-2-thiol	149-30-4	0.0E+00	2.0E-10	1.2E-09	0.0E+00	0.0E+00	7.0E-09
Chrysene	218-01-9	2.6E-11	2.4E-10	1.6E-10	2.4E-10	4.9E-10	5.5E-10
Cyclopenta[cd]pyrene	27208-37-3	4.4E-12	4.3E-11	2.6E-11	4.2E-11	8.3E-11	9.9E-11

Chemical Name	CASRN	$LADD_{der\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Dibenz[a,h]anthracene	53-70-3	0.0E+00	1.4E-11	2.5E-11	0.0E+00	6.7E-11	1.1E-10
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	2.8E-11	2.3E-11	2.5E-11	6.5E-11	1.0E-10
Naphthalene	91-20-3	0.0E+00	1.8E-12	7.4E-12	0.0E+00	9.0E-12	3.2E-11

[a] 35 field-specific $LADD_{der\text{-}field}$ are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-425. Field-Specific Dermal Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{der\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Athletes 40<50 Years**

Chemical Name	CASRN	$LADD_{der\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	0.0E+00	2.3E-11	7.2E-11	0.0E+00	1.8E-10	3.5E-10
Benz[a]anthracene	56-55-3	0.0E+00	3.2E-11	3.7E-11	1.7E-11	8.9E-11	1.7E-10
Benzo[a]pyrene	50-32-8	0.0E+00	2.4E-11	2.4E-11	1.6E-11	6.3E-11	9.8E-11
Benzo[b]fluoranthene	205-99-2	0.0E+00	4.5E-11	4.0E-11	3.6E-11	1.1E-10	1.7E-10
Benzo[k]fluoranthene	207-08-9	0.0E+00	2.0E-11	2.1E-11	1.2E-11	6.4E-11	8.0E-11
1,3-Benzothiazole-2-thiol	149-30-4	0.0E+00	1.7E-10	1.0E-09	0.0E+00	0.0E+00	6.0E-09
Chrysene	218-01-9	2.2E-11	2.1E-10	1.3E-10	2.1E-10	4.1E-10	4.7E-10
Cyclopenta[cd]pyrene	27208-37-3	3.7E-12	3.7E-11	2.2E-11	3.5E-11	7.0E-11	8.4E-11
Dibenz[a,h]anthracene	53-70-3	0.0E+00	1.2E-11	2.1E-11	0.0E+00	5.7E-11	8.9E-11
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	2.4E-11	2.0E-11	2.1E-11	5.5E-11	8.6E-11
Naphthalene	91-20-3	0.0E+00	1.5E-12	6.2E-12	0.0E+00	7.6E-12	2.8E-11

[a] 35 field-specific $LADD_{der\text{-}field}$ are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-426. Field-Specific Dermal Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{der\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Athletes 50<70 Years**

Chemical Name	CASRN	$LADD_{der\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	0.0E+00	4.7E-11	1.5E-10	0.0E+00	3.6E-10	7.0E-10
Benz[a]anthracene	56-55-3	0.0E+00	6.4E-11	7.4E-11	3.4E-11	1.8E-10	3.4E-10
Benzo[a]pyrene	50-32-8	0.0E+00	4.8E-11	4.8E-11	3.2E-11	1.3E-10	2.0E-10
Benzo[b]fluoranthene	205-99-2	0.0E+00	9.1E-11	8.0E-11	7.2E-11	2.3E-10	3.5E-10

Chemical Name	CASRN	$LADD_{der\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Benzo[k]fluoranthene	207-08-9	0.0E+00	4.0E-11	4.2E-11	2.4E-11	1.3E-10	1.6E-10
1,3-Benzothiazole-2-thiol	149-30-4	0.0E+00	3.4E-10	2.0E-09	0.0E+00	0.0E+00	1.2E-08
Chrysene	218-01-9	4.5E-11	4.1E-10	2.7E-10	4.1E-10	8.3E-10	9.4E-10
Cyclopenta[cd]pyrene	27208-37-3	7.6E-12	7.4E-11	4.4E-11	7.1E-11	1.4E-10	1.7E-10
Dibenz[a,h]anthracene	53-70-3	0.0E+00	2.4E-11	4.3E-11	0.0E+00	1.2E-10	1.8E-10
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	4.7E-11	4.0E-11	4.2E-11	1.1E-10	1.7E-10
Naphthalene	91-20-3	0.0E+00	3.1E-12	1.3E-11	0.0E+00	1.5E-11	5.5E-11

[a] 35 field-specific $LADD_{der\text{-}field}$ are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-427. Field-Specific Dermal Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{der\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Coaches 16<30 Years**

Chemical Name	CASRN	$LADD_{der\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	0.0E+00	2.7E-11	8.3E-11	0.0E+00	2.0E-10	4.0E-10
Benz[a]anthracene	56-55-3	0.0E+00	3.7E-11	4.2E-11	1.9E-11	1.0E-10	1.9E-10
Benzo[a]pyrene	50-32-8	0.0E+00	2.8E-11	2.7E-11	1.8E-11	7.2E-11	1.1E-10
Benzo[b]fluoranthene	205-99-2	0.0E+00	5.2E-11	4.6E-11	4.1E-11	1.3E-10	2.0E-10
Benzo[k]fluoranthene	207-08-9	0.0E+00	2.3E-11	2.4E-11	1.4E-11	7.4E-11	9.1E-11
1,3-Benzothiazole-2-thiol	149-30-4	0.0E+00	2.0E-10	1.2E-09	0.0E+00	0.0E+00	6.9E-09
Chrysene	218-01-9	2.6E-11	2.4E-10	1.5E-10	2.4E-10	4.7E-10	5.4E-10
Cyclopenta[cd]pyrene	27208-37-3	4.3E-12	4.2E-11	2.5E-11	4.1E-11	8.1E-11	9.7E-11
Dibenz[a,h]anthracene	53-70-3	0.0E+00	1.3E-11	2.5E-11	0.0E+00	6.6E-11	1.0E-10
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	2.7E-11	2.3E-11	2.4E-11	6.3E-11	9.9E-11
Naphthalene	91-20-3	0.0E+00	1.7E-12	7.2E-12	0.0E+00	8.8E-12	3.2E-11

[a] 35 field-specific $LADD_{der\text{-}field}$ are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-428. Field-Specific Dermal Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{der\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related Carcinogens[b]**—Combined Gender **Coaches 30<40 Years**

Chemical Name	CASRN	$LADD_{der\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	0.0E+00	1.8E-11	5.5E-11	0.0E+00	1.4E-10	2.7E-10
Benz[a]anthracene	56-55-3	0.0E+00	2.4E-11	2.8E-11	1.3E-11	6.9E-11	1.3E-10
Benzo[a]pyrene	50-32-8	0.0E+00	1.8E-11	1.8E-11	1.2E-11	4.8E-11	7.5E-11
Benzo[b]fluoranthene	205-99-2	0.0E+00	3.5E-11	3.1E-11	2.7E-11	8.7E-11	1.3E-10
Benzo[k]fluoranthene	207-08-9	0.0E+00	1.5E-11	1.6E-11	9.2E-12	4.9E-11	6.1E-11
1,3-Benzothiazole-2-thiol	149-30-4	0.0E+00	1.3E-10	7.8E-10	0.0E+00	0.0E+00	4.6E-09
Chrysene	218-01-9	1.7E-11	1.6E-10	1.0E-10	1.6E-10	3.2E-10	3.6E-10
Cyclopenta[cd]pyrene	27208-37-3	2.9E-12	2.8E-11	1.7E-11	2.7E-11	5.4E-11	6.5E-11
Dibenz[a,h]anthracene	53-70-3	0.0E+00	9.0E-12	1.6E-11	0.0E+00	4.4E-11	6.9E-11
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	1.8E-11	1.5E-11	1.6E-11	4.2E-11	6.6E-11
Naphthalene	91-20-3	0.0E+00	1.2E-12	4.8E-12	0.0E+00	5.9E-12	2.1E-11

[a] 35 field-specific $LADD_{der\text{-}field}$ are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-429. Field-Specific Dermal Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{der\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related Carcinogens[b]**—Combined Gender **Coaches 40<50 Years**

Chemical Name	CASRN	$LADD_{der\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	0.0E+00	1.8E-11	5.6E-11	0.0E+00	1.4E-10	2.7E-10
Benz[a]anthracene	56-55-3	0.0E+00	2.5E-11	2.9E-11	1.3E-11	6.9E-11	1.3E-10
Benzo[a]pyrene	50-32-8	0.0E+00	1.9E-11	1.8E-11	1.2E-11	4.9E-11	7.6E-11
Benzo[b]fluoranthene	205-99-2	0.0E+00	3.5E-11	3.1E-11	2.8E-11	8.8E-11	1.4E-10
Benzo[k]fluoranthene	207-08-9	0.0E+00	1.5E-11	1.6E-11	9.3E-12	5.0E-11	6.2E-11
1,3-Benzothiazole-2-thiol	149-30-4	0.0E+00	1.3E-10	7.8E-10	0.0E+00	0.0E+00	4.6E-09
Chrysene	218-01-9	1.7E-11	1.6E-10	1.0E-10	1.6E-10	3.2E-10	3.6E-10
Cyclopenta[cd]pyrene	27208-37-3	2.9E-12	2.9E-11	1.7E-11	2.8E-11	5.5E-11	6.5E-11
Dibenz[a,h]anthracene	53-70-3	0.0E+00	9.1E-12	1.7E-11	0.0E+00	4.4E-11	6.9E-11
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	1.8E-11	1.5E-11	1.6E-11	4.3E-11	6.7E-11
Naphthalene	91-20-3	0.0E+00	1.2E-12	4.8E-12	0.0E+00	5.9E-12	2.1E-11

[a] 35 field-specific $LADD_{der\text{-}field}$ are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.

CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-430. Field-Specific Dermal Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{der\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Coaches 50<70 Years**

Chemical Name	CASRN	$LADD_{der\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	0.0E+00	3.6E-11	1.1E-10	0.0E+00	2.8E-10	5.4E-10
Benz[a]anthracene	56-55-3	0.0E+00	5.0E-11	5.7E-11	2.6E-11	1.4E-10	2.6E-10
Benzo[a]pyrene	50-32-8	0.0E+00	3.7E-11	3.7E-11	2.4E-11	9.7E-11	1.5E-10
Benzo[b]fluoranthene	205-99-2	0.0E+00	7.0E-11	6.2E-11	5.5E-11	1.8E-10	2.7E-10
Benzo[k]fluoranthene	207-08-9	0.0E+00	3.1E-11	3.2E-11	1.9E-11	1.0E-10	1.2E-10
1,3-Benzothiazole-2-thiol	149-30-4	0.0E+00	2.7E-10	1.6E-09	0.0E+00	0.0E+00	9.3E-09
Chrysene	218-01-9	3.5E-11	3.2E-10	2.1E-10	3.2E-10	6.4E-10	7.3E-10
Cyclopenta[cd]pyrene	27208-37-3	5.8E-12	5.7E-11	3.4E-11	5.5E-11	1.1E-10	1.3E-10
Dibenz[a,h]anthracene	53-70-3	0.0E+00	1.8E-11	3.3E-11	0.0E+00	8.9E-11	1.4E-10
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	3.7E-11	3.1E-11	3.2E-11	8.5E-11	1.3E-10
Naphthalene	91-20-3	0.0E+00	2.4E-12	9.7E-12	0.0E+00	1.2E-11	4.3E-11

[a] 35 field-specific $LADD_{der\text{-}field}$ are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-431. Field-Specific Dermal Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{der\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Referees 16<30 Years**

Chemical Name	CASRN	$LADD_{der\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	0.0E+00	1.1E-11	3.3E-11	0.0E+00	8.2E-11	1.6E-10
Benz[a]anthracene	56-55-3	0.0E+00	1.5E-11	1.7E-11	7.8E-12	4.1E-11	7.8E-11
Benzo[a]pyrene	50-32-8	0.0E+00	1.1E-11	1.1E-11	7.3E-12	2.9E-11	4.5E-11
Benzo[b]fluoranthene	205-99-2	0.0E+00	2.1E-11	1.8E-11	1.6E-11	5.2E-11	8.1E-11
Benzo[k]fluoranthene	207-08-9	0.0E+00	9.1E-12	9.6E-12	5.5E-12	3.0E-11	3.7E-11
1,3-Benzothiazole-2-thiol	149-30-4	0.0E+00	7.9E-11	4.7E-10	0.0E+00	0.0E+00	2.8E-09
Chrysene	218-01-9	1.0E-11	9.5E-11	6.1E-11	9.5E-11	1.9E-10	2.2E-10
Cyclopenta[cd]pyrene	27208-37-3	1.7E-12	1.7E-11	1.0E-11	1.6E-11	3.2E-11	3.9E-11
Dibenz[a,h]anthracene	53-70-3	0.0E+00	5.4E-12	9.9E-12	0.0E+00	2.6E-11	4.1E-11
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	1.1E-11	9.1E-12	9.6E-12	2.5E-11	4.0E-11
Naphthalene	91-20-3	0.0E+00	7.0E-13	2.9E-12	0.0E+00	3.5E-12	1.3E-11

[a] 35 field-specific $LADD_{der\text{-}field}$ are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-432. Field-Specific Dermal Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{der\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Referees 30<40 Years**

Chemical Name	CASRN	$LADD_{der\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	0.0E+00	7.2E-12	2.2E-11	0.0E+00	5.5E-11	1.1E-10
Benz[a]anthracene	56-55-3	0.0E+00	9.8E-12	1.1E-11	5.2E-12	2.8E-11	5.2E-11
Benzo[a]pyrene	50-32-8	0.0E+00	7.4E-12	7.3E-12	4.9E-12	1.9E-11	3.0E-11
Benzo[b]fluoranthene	205-99-2	0.0E+00	1.4E-11	1.2E-11	1.1E-11	3.5E-11	5.4E-11
Benzo[k]fluoranthene	207-08-9	0.0E+00	6.1E-12	6.4E-12	3.7E-12	2.0E-11	2.5E-11
1,3-Benzothiazole-2-thiol	149-30-4	0.0E+00	5.3E-11	3.1E-10	0.0E+00	0.0E+00	1.8E-09
Chrysene	218-01-9	6.9E-12	6.3E-11	4.1E-11	6.3E-11	1.3E-10	1.4E-10
Cyclopenta[cd]pyrene	27208-37-3	1.2E-12	1.1E-11	6.8E-12	1.1E-11	2.2E-11	2.6E-11
Dibenz[a,h]anthracene	53-70-3	0.0E+00	3.6E-12	6.6E-12	0.0E+00	1.8E-11	2.8E-11
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	7.3E-12	6.1E-12	6.4E-12	1.7E-11	2.7E-11
Naphthalene	91-20-3	0.0E+00	4.7E-13	1.9E-12	0.0E+00	2.4E-12	8.5E-12

[a] 35 field-specific $LADD_{der\text{-}field}$ are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-433. Field-Specific Dermal Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{der\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Referees 40<50 Years**

Chemical Name	CASRN	$LADD_{der\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	0.0E+00	7.3E-12	2.3E-11	0.0E+00	5.5E-11	1.1E-10
Benz[a]anthracene	56-55-3	0.0E+00	9.9E-12	1.1E-11	5.3E-12	2.8E-11	5.3E-11
Benzo[a]pyrene	50-32-8	0.0E+00	7.5E-12	7.4E-12	4.9E-12	2.0E-11	3.1E-11
Benzo[b]fluoranthene	205-99-2	0.0E+00	1.4E-11	1.2E-11	1.1E-11	3.5E-11	5.5E-11
Benzo[k]fluoranthene	207-08-9	0.0E+00	6.2E-12	6.5E-12	3.7E-12	2.0E-11	2.5E-11
1,3-Benzothiazole-2-thiol	149-30-4	0.0E+00	5.3E-11	3.2E-10	0.0E+00	0.0E+00	1.9E-09
Chrysene	218-01-9	7.0E-12	6.4E-11	4.1E-11	6.4E-11	1.3E-10	1.5E-10
Cyclopenta[cd]pyrene	27208-37-3	1.2E-12	1.1E-11	6.9E-12	1.1E-11	2.2E-11	2.6E-11

Chemical Name	CASRN	$LADD_{der\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Dibenz[a,h]anthracene	53-70-3	0.0E+00	3.7E-12	6.7E-12	0.0E+00	1.8E-11	2.8E-11
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	7.4E-12	6.1E-12	6.5E-12	1.7E-11	2.7E-11
Naphthalene	91-20-3	0.0E+00	4.7E-13	2.0E-12	0.0E+00	2.4E-12	8.6E-12

[a] 35 field-specific $LADD_{der\text{-}field}$ are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-434. Field-Specific Dermal Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{der\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Referees 50<70 Years**

Chemical Name	CASRN	$LADD_{der\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	0.0E+00	1.5E-11	4.5E-11	0.0E+00	1.1E-10	2.2E-10
Benz[a]anthracene	56-55-3	0.0E+00	2.0E-11	2.3E-11	1.1E-11	5.6E-11	1.1E-10
Benzo[a]pyrene	50-32-8	0.0E+00	1.5E-11	1.5E-11	9.9E-12	3.9E-11	6.1E-11
Benzo[b]fluoranthene	205-99-2	0.0E+00	2.8E-11	2.5E-11	2.2E-11	7.1E-11	1.1E-10
Benzo[k]fluoranthene	207-08-9	0.0E+00	1.2E-11	1.3E-11	7.5E-12	4.0E-11	5.0E-11
1,3-Benzothiazole-2-thiol	149-30-4	0.0E+00	1.1E-10	6.3E-10	0.0E+00	0.0E+00	3.7E-09
Chrysene	218-01-9	1.4E-11	1.3E-10	8.3E-11	1.3E-10	2.6E-10	2.9E-10
Cyclopenta[cd]pyrene	27208-37-3	2.3E-12	2.3E-11	1.4E-11	2.2E-11	4.4E-11	5.3E-11
Dibenz[a,h]anthracene	53-70-3	0.0E+00	7.3E-12	1.3E-11	0.0E+00	3.6E-11	5.6E-11
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	1.5E-11	1.2E-11	1.3E-11	3.4E-11	5.4E-11
Naphthalene	91-20-3	0.0E+00	9.5E-13	3.9E-12	0.0E+00	4.8E-12	1.7E-11

[a] 35 field-specific $LADD_{der\text{-}field}$ are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-435. Field-Specific Dermal Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{der\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Spectators Third Trimester Fetus**

Chemical Name	CASRN	$LADD_{der\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	0.0E+00	2.7E-12	8.4E-12	0.0E+00	2.1E-11	4.0E-11
Benz[a]anthracene	56-55-3	0.0E+00	3.7E-12	4.3E-12	2.0E-12	1.0E-11	2.0E-11
Benzo[a]pyrene	50-32-8	0.0E+00	2.8E-12	2.7E-12	1.8E-12	7.3E-12	1.1E-11
Benzo[b]fluoranthene	205-99-2	0.0E+00	5.2E-12	4.6E-12	4.1E-12	1.3E-11	2.0E-11

Chemical Name	CASRN	$LADD_{der\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Benzo[k]fluoranthene	207-08-9	0.0E+00	2.3E-12	2.4E-12	1.4E-12	7.5E-12	9.3E-12
1,3-Benzothiazole-2-thiol	149-30-4	0.0E+00	2.0E-11	1.2E-10	0.0E+00	0.0E+00	6.9E-10
Chrysene	218-01-9	2.6E-12	2.4E-11	1.5E-11	2.4E-11	4.8E-11	5.4E-11
Cyclopenta[cd]pyrene	27208-37-3	4.4E-13	4.3E-12	2.6E-12	4.1E-12	8.2E-12	9.8E-12
Dibenz[a,h]anthracene	53-70-3	0.0E+00	1.4E-12	2.5E-12	0.0E+00	6.6E-12	1.0E-11
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	2.7E-12	2.3E-12	2.4E-12	6.4E-12	1.0E-11
Naphthalene	91-20-3	0.0E+00	1.8E-13	7.3E-13	0.0E+00	8.9E-13	3.2E-12

[a] 35 field-specific $LADD_{der\text{-}field}$ are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-436. Field-Specific Dermal Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{der\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Spectators 0<2 Years**

Chemical Name	CASRN	$LADD_{der\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	0.0E+00	1.2E-10	3.6E-10	0.0E+00	8.9E-10	1.7E-09
Benz[a]anthracene	56-55-3	0.0E+00	1.6E-10	1.8E-10	8.4E-11	4.5E-10	8.5E-10
Benzo[a]pyrene	50-32-8	0.0E+00	1.2E-10	1.2E-10	7.8E-11	3.1E-10	4.9E-10
Benzo[b]fluoranthene	205-99-2	0.0E+00	2.3E-10	2.0E-10	1.8E-10	5.6E-10	8.7E-10
Benzo[k]fluoranthene	207-08-9	0.0E+00	9.8E-11	1.0E-10	6.0E-11	3.2E-10	4.0E-10
1,3-Benzothiazole-2-thiol	149-30-4	0.0E+00	8.5E-10	5.0E-09	0.0E+00	0.0E+00	3.0E-08
Chrysene	218-01-9	1.1E-10	1.0E-09	6.6E-10	1.0E-09	2.1E-09	2.3E-09
Cyclopenta[cd]pyrene	27208-37-3	1.9E-11	1.8E-10	1.1E-10	1.8E-10	3.5E-10	4.2E-10
Dibenz[a,h]anthracene	53-70-3	0.0E+00	5.8E-11	1.1E-10	0.0E+00	2.9E-10	4.5E-10
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	1.2E-10	9.8E-11	1.0E-10	2.7E-10	4.3E-10
Naphthalene	91-20-3	0.0E+00	7.6E-12	3.1E-11	0.0E+00	3.8E-11	1.4E-10

[a] 35 field-specific $LADD_{der\text{-}field}$ are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-437. Field-Specific Dermal Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{der\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Spectators 2<6 Years**

Chemical Name	CASRN	$LADD_{der\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	0.0E+00	5.1E-11	1.6E-10	0.0E+00	3.9E-10	7.6E-10
Benz[a]anthracene	56-55-3	0.0E+00	7.0E-11	8.1E-11	3.7E-11	2.0E-10	3.7E-10
Benzo[a]pyrene	50-32-8	0.0E+00	5.3E-11	5.2E-11	3.5E-11	1.4E-10	2.2E-10
Benzo[b]fluoranthene	205-99-2	0.0E+00	9.9E-11	8.8E-11	7.8E-11	2.5E-10	3.8E-10
Benzo[k]fluoranthene	207-08-9	0.0E+00	4.3E-11	4.6E-11	2.6E-11	1.4E-10	1.8E-10
1,3-Benzothiazole-2-thiol	149-30-4	0.0E+00	3.8E-10	2.2E-09	0.0E+00	0.0E+00	1.3E-08
Chrysene	218-01-9	4.9E-11	4.5E-10	2.9E-10	4.5E-10	9.1E-10	1.0E-09
Cyclopenta[cd]pyrene	27208-37-3	8.2E-12	8.1E-11	4.8E-11	7.8E-11	1.5E-10	1.9E-10
Dibenz[a,h]anthracene	53-70-3	0.0E+00	2.6E-11	4.7E-11	0.0E+00	1.3E-10	2.0E-10
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	5.2E-11	4.3E-11	4.6E-11	1.2E-10	1.9E-10
Naphthalene	91-20-3	0.0E+00	3.3E-12	1.4E-11	0.0E+00	1.7E-11	6.1E-11

[a] 35 field-specific $LADD_{der\text{-}field}$ are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-438. Field-Specific Dermal Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{der\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Spectators 6<11 Years**

Chemical Name	CASRN	$LADD_{der\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	0.0E+00	5.8E-11	1.8E-10	0.0E+00	4.4E-10	8.6E-10
Benz[a]anthracene	56-55-3	0.0E+00	7.9E-11	9.2E-11	4.2E-11	2.2E-10	4.2E-10
Benzo[a]pyrene	50-32-8	0.0E+00	6.0E-11	5.9E-11	3.9E-11	1.6E-10	2.4E-10
Benzo[b]fluoranthene	205-99-2	0.0E+00	1.1E-10	9.9E-11	8.9E-11	2.8E-10	4.4E-10
Benzo[k]fluoranthene	207-08-9	0.0E+00	4.9E-11	5.2E-11	3.0E-11	1.6E-10	2.0E-10
1,3-Benzothiazole-2-thiol	149-30-4	0.0E+00	4.3E-10	2.5E-09	0.0E+00	0.0E+00	1.5E-08
Chrysene	218-01-9	5.6E-11	5.1E-10	3.3E-10	5.1E-10	1.0E-09	1.2E-09
Cyclopenta[cd]pyrene	27208-37-3	9.3E-12	9.2E-11	5.5E-11	8.8E-11	1.8E-10	2.1E-10
Dibenz[a,h]anthracene	53-70-3	0.0E+00	2.9E-11	5.3E-11	0.0E+00	1.4E-10	2.2E-10
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	5.9E-11	4.9E-11	5.2E-11	1.4E-10	2.1E-10
Naphthalene	91-20-3	0.0E+00	3.8E-12	1.6E-11	0.0E+00	1.9E-11	6.9E-11

[a] 35 field-specific $LADD_{der\text{-}field}$ are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.

CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-439. Field-Specific Dermal Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{der\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Spectators 11<16 Years**

Chemical Name	CASRN	$LADD_{der\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	0.0E+00	5.0E-11	1.5E-10	0.0E+00	3.8E-10	7.4E-10
Benz[a]anthracene	56-55-3	0.0E+00	6.8E-11	7.9E-11	3.6E-11	1.9E-10	3.6E-10
Benzo[a]pyrene	50-32-8	0.0E+00	5.1E-11	5.0E-11	3.4E-11	1.3E-10	2.1E-10
Benzo[b]fluoranthene	205-99-2	0.0E+00	9.6E-11	8.5E-11	7.6E-11	2.4E-10	3.7E-10
Benzo[k]fluoranthene	207-08-9	0.0E+00	4.2E-11	4.5E-11	2.6E-11	1.4E-10	1.7E-10
1,3-Benzothiazole-2-thiol	149-30-4	0.0E+00	3.6E-10	2.2E-09	0.0E+00	0.0E+00	1.3E-08
Chrysene	218-01-9	4.8E-11	4.4E-10	2.8E-10	4.4E-10	8.8E-10	1.0E-09
Cyclopenta[cd]pyrene	27208-37-3	8.0E-12	7.8E-11	4.7E-11	7.6E-11	1.5E-10	1.8E-10
Dibenz[a,h]anthracene	53-70-3	0.0E+00	2.5E-11	4.6E-11	0.0E+00	1.2E-10	1.9E-10
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	5.0E-11	4.2E-11	4.4E-11	1.2E-10	1.8E-10
Naphthalene	91-20-3	0.0E+00	3.2E-12	1.3E-11	0.0E+00	1.6E-11	5.9E-11

[a] 35 field-specific $LADD_{der\text{-}field}$ are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-440. Field-Specific Dermal Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{der\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Spectators 16<30 Years**

Chemical Name	CASRN	$LADD_{der\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	0.0E+00	2.0E-11	6.3E-11	0.0E+00	1.6E-10	3.0E-10
Benz[a]anthracene	56-55-3	0.0E+00	2.8E-11	3.2E-11	1.5E-11	7.8E-11	1.5E-10
Benzo[a]pyrene	50-32-8	0.0E+00	2.1E-11	2.1E-11	1.4E-11	5.5E-11	8.5E-11
Benzo[b]fluoranthene	205-99-2	0.0E+00	3.9E-11	3.5E-11	3.1E-11	9.8E-11	1.5E-10
Benzo[k]fluoranthene	207-08-9	0.0E+00	1.7E-11	1.8E-11	1.0E-11	5.6E-11	6.9E-11
1,3-Benzothiazole-2-thiol	149-30-4	0.0E+00	1.5E-10	8.8E-10	0.0E+00	0.0E+00	5.2E-09
Chrysene	218-01-9	2.0E-11	1.8E-10	1.2E-10	1.8E-10	3.6E-10	4.1E-10
Cyclopenta[cd]pyrene	27208-37-3	3.3E-12	3.2E-11	1.9E-11	3.1E-11	6.1E-11	7.3E-11
Dibenz[a,h]anthracene	53-70-3	0.0E+00	1.0E-11	1.9E-11	0.0E+00	5.0E-11	7.8E-11
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	2.1E-11	1.7E-11	1.8E-11	4.8E-11	7.5E-11
Naphthalene	91-20-3	0.0E+00	1.3E-12	5.4E-12	0.0E+00	6.7E-12	2.4E-11

[a] 35 field-specific $LADD_{der\text{-}field}$ are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-441. Field-Specific Dermal Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{der\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Spectators 30<40 Years**

Chemical Name	CASRN	$LADD_{der\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	0.0E+00	1.2E-11	3.9E-11	0.0E+00	9.6E-11	1.9E-10
Benz[a]anthracene	56-55-3	0.0E+00	1.7E-11	2.0E-11	9.0E-12	4.8E-11	9.1E-11
Benzo[a]pyrene	50-32-8	0.0E+00	1.3E-11	1.3E-11	8.5E-12	3.4E-11	5.3E-11
Benzo[b]fluoranthene	205-99-2	0.0E+00	2.4E-11	2.1E-11	1.9E-11	6.1E-11	9.4E-11
Benzo[k]fluoranthene	207-08-9	0.0E+00	1.1E-11	1.1E-11	6.4E-12	3.5E-11	4.3E-11
1,3-Benzothiazole-2-thiol	149-30-4	0.0E+00	9.2E-11	5.4E-10	0.0E+00	0.0E+00	3.2E-09
Chrysene	218-01-9	1.2E-11	1.1E-10	7.1E-11	1.1E-10	2.2E-10	2.5E-10
Cyclopenta[cd]pyrene	27208-37-3	2.0E-12	2.0E-11	1.2E-11	1.9E-11	3.8E-11	4.5E-11
Dibenz[a,h]anthracene	53-70-3	0.0E+00	6.3E-12	1.2E-11	0.0E+00	3.1E-11	4.8E-11
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	1.3E-11	1.1E-11	1.1E-11	3.0E-11	4.6E-11
Naphthalene	91-20-3	0.0E+00	8.1E-13	3.4E-12	0.0E+00	4.1E-12	1.5E-11

[a] 35 field-specific $LADD_{der\text{-}field}$ are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-442. Field-Specific Dermal Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{der\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Spectators 40<50 Years**

Chemical Name	CASRN	$LADD_{der\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	0.0E+00	1.3E-11	3.9E-11	0.0E+00	9.7E-11	1.9E-10
Benz[a]anthracene	56-55-3	0.0E+00	1.7E-11	2.0E-11	9.1E-12	4.9E-11	9.2E-11
Benzo[a]pyrene	50-32-8	0.0E+00	1.3E-11	1.3E-11	8.6E-12	3.4E-11	5.3E-11
Benzo[b]fluoranthene	205-99-2	0.0E+00	2.5E-11	2.2E-11	1.9E-11	6.1E-11	9.5E-11
Benzo[k]fluoranthene	207-08-9	0.0E+00	1.1E-11	1.1E-11	6.5E-12	3.5E-11	4.3E-11
1,3-Benzothiazole-2-thiol	149-30-4	0.0E+00	9.3E-11	5.5E-10	0.0E+00	0.0E+00	3.3E-09
Chrysene	218-01-9	1.2E-11	1.1E-10	7.2E-11	1.1E-10	2.2E-10	2.5E-10
Cyclopenta[cd]pyrene	27208-37-3	2.0E-12	2.0E-11	1.2E-11	1.9E-11	3.8E-11	4.6E-11

Chemical Name	CASRN	$LADD_{der\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Dibenz[a,h]anthracene	53-70-3	0.0E+00	6.4E-12	1.2E-11	0.0E+00	3.1E-11	4.9E-11
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	1.3E-11	1.1E-11	1.1E-11	3.0E-11	4.7E-11
Naphthalene	91-20-3	0.0E+00	8.2E-13	3.4E-12	0.0E+00	4.2E-12	1.5E-11

[a] 35 field-specific $LADD_{der\text{-}field}$ are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

Table F-443. Field-Specific Dermal Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{der\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Spectators 50<70 Years**

Chemical Name	CASRN	$LADD_{der\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	0.0E+00	2.4E-11	7.4E-11	0.0E+00	1.8E-10	3.5E-10
Benz[a]anthracene	56-55-3	0.0E+00	3.3E-11	3.8E-11	1.7E-11	9.2E-11	1.7E-10
Benzo[a]pyrene	50-32-8	0.0E+00	2.5E-11	2.4E-11	1.6E-11	6.4E-11	1.0E-10
Benzo[b]fluoranthene	205-99-2	0.0E+00	4.6E-11	4.1E-11	3.6E-11	1.2E-10	1.8E-10
Benzo[k]fluoranthene	207-08-9	0.0E+00	2.0E-11	2.1E-11	1.2E-11	6.6E-11	8.2E-11
1,3-Benzothiazole-2-thiol	149-30-4	0.0E+00	1.8E-10	1.0E-09	0.0E+00	0.0E+00	6.1E-09
Chrysene	218-01-9	2.3E-11	2.1E-10	1.4E-10	2.1E-10	4.2E-10	4.8E-10
Cyclopenta[cd]pyrene	27208-37-3	3.8E-12	3.8E-11	2.2E-11	3.6E-11	7.2E-11	8.6E-11
Dibenz[a,h]anthracene	53-70-3	0.0E+00	1.2E-11	2.2E-11	0.0E+00	5.9E-11	9.2E-11
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	2.4E-11	2.0E-11	2.1E-11	5.6E-11	8.8E-11
Naphthalene	91-20-3	0.0E+00	1.6E-12	6.4E-12	0.0E+00	7.8E-12	2.8E-11

[a] 35 field-specific $LADD_{der\text{-}field}$ are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
CASRN: Chemical Abstracts Service Registry Number
Values are rounded to two significant figures.

F.6.3. Ingestion Lifetime Average Daily Dose ($LADD_{ing}$) for Lifetime Cancer Risk Assessment of Carcinogens

Table F-444. Ingestion Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{ing}$, mg per kg BW per day) of **Field-Related Carcinogens**[b]— Combined Gender **Athletes**

Chemical	CASRN[a]	$LADD_{ing}$							
		2<6 years	6<11 years	11<16 years	16<30 years	30<40 years	40<50 years	50<70 years	Lifetime
Aniline	62-53-3	1.4E-09	1.2E-09	9.1E-10	9.4E-10	4.5E-10	3.8E-10	7.8E-10	6.0E-09
Arsenic		8.2E-09	6.8E-09	5.3E-09	5.5E-09	2.6E-09	2.2E-09	4.5E-09	3.5E-08
Benz[a]anthracene	56-55-3	2.3E-09	1.9E-09	1.5E-09	1.6E-09	7.4E-10	6.3E-10	1.3E-09	9.9E-09
Benzo[a]pyrene	50-32-8	1.9E-09	1.6E-09	1.2E-09	1.3E-09	6.1E-10	5.2E-10	1.1E-09	8.2E-09
Benzo[b]fluoranthene	205-99-2	3.2E-09	2.6E-09	2.1E-09	2.1E-09	1.0E-09	8.6E-10	1.8E-09	1.4E-08
Benzo[k]fluoranthene	207-08-9	1.0E-09	8.6E-10	6.7E-10	6.9E-10	3.3E-10	2.8E-10	5.7E-10	4.4E-09
Chromium		3.8E-08	3.2E-08	2.4E-08	2.5E-08	1.2E-08	1.0E-08	2.1E-08	1.6E-07
Chrysene	218-01-9	1.0E-08	8.6E-09	6.7E-09	6.9E-09	3.3E-09	2.8E-09	5.7E-09	4.4E-08
Cyclopenta[cd]pyrene	27208-37-3	2.2E-09	1.8E-09	1.4E-09	1.5E-09	7.1E-10	6.0E-10	1.2E-09	9.5E-09
Dibenz[a,h]anthracene	53-70-3	1.4E-10	1.1E-10	8.8E-11	9.2E-11	4.4E-11	3.7E-11	7.6E-11	5.9E-10
Indeno[1,2,3-cd]pyrene	193-39-5	3.9E-10	3.2E-10	2.5E-10	2.6E-10	1.2E-10	1.0E-10	2.1E-10	1.7E-09
Lead		7.9E-07	6.6E-07	5.1E-07	5.3E-07	2.5E-07	2.2E-07	4.4E-07	3.4E-06
Naphthalene	91-20-3	4.2E-11	3.5E-11	2.7E-11	2.8E-11	1.3E-11	1.1E-11	2.3E-11	1.8E-10

[a] $LADD_{ing}$ was calculated from the mean of 35 individual field average concentrations ($C_{GI\text{-}crumb\ rubber}$) of a chemical detected in artificial gastrointestinal fluids extracts of crumb rubber samples.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

Table F-445. Ingestion Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{ing}$, mg per kg BW per day) of **Field-Related Carcinogens**[b]— Combined Gender **Coaches**

Chemical	CASRN[a]	$LADD_{ing}$				
		16<30 years	30<40 years	40<50 years	50<70 years	Lifetime
Aniline	62-53-3	2.4E-10	1.6E-10	1.6E-10	3.1E-10	8.7E-10
Arsenic		1.4E-09	9.3E-10	9.1E-10	1.8E-09	5.0E-09
Benz[a]anthracene	56-55-3	3.9E-10	2.6E-10	2.6E-10	5.2E-10	1.4E-09
Benzo[a]pyrene	50-32-8	3.2E-10	2.2E-10	2.1E-10	4.2E-10	1.2E-09
Benzo[b]fluoranthene	205-99-2	5.4E-10	3.6E-10	3.5E-10	7.1E-10	2.0E-09
Benzo[k]fluoranthene	207-08-9	1.7E-10	1.2E-10	1.1E-10	2.3E-10	6.4E-10
Chromium		6.4E-09	4.3E-09	4.2E-09	8.5E-09	2.3E-08
Chrysene	218-01-9	1.7E-09	1.2E-09	1.1E-09	2.3E-09	6.4E-09

Chemical	CASRN[a]	$LADD_{ing}$				
		16<30 years	30<40 years	40<50 years	50<70 years	Lifetime
Cyclopenta[cd]pyrene	27208-37-3	3.7E-10	2.5E-10	2.5E-10	4.9E-10	1.4E-09
Dibenz[a,h]anthracene	53-70-3	2.3E-11	1.6E-11	1.5E-11	3.1E-11	8.4E-11
Indeno[1,2,3-cd]pyrene	193-39-5	6.6E-11	4.4E-11	4.3E-11	8.6E-11	2.4E-10
Lead		1.3E-07	9.0E-08	8.8E-08	1.8E-07	4.9E-07
Naphthalene	91-20-3	7.1E-12	4.8E-12	4.7E-12	9.3E-12	2.6E-11

[a] $LADD_{ing}$ was calculated from the mean of 35 individual field average concentrations ($C_{GI\text{-}crumb\ rubber}$) of a chemical detected in artificial gastrointestinal fluids extracts of crumb rubber samples.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

Table F-446. Ingestion Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{ing}$, mg per kg BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Referees**

Chemical	CASRN[a]	$LADD_{ing}$				
		16<30 years	30<40 years	40<50 years	50<70 years	Lifetime
Aniline	62-53-3	1.0E-10	7.0E-11	6.9E-11	1.4E-10	3.8E-10
Arsenic		6.1E-10	4.1E-10	4.0E-10	8.0E-10	2.2E-09
Benz[a]anthracene	56-55-3	1.7E-10	1.2E-10	1.1E-10	2.3E-10	6.3E-10
Benzo[a]pyrene	50-32-8	1.4E-10	9.5E-11	9.3E-11	1.9E-10	5.1E-10
Benzo[b]fluoranthene	205-99-2	2.4E-10	1.6E-10	1.6E-10	3.1E-10	8.6E-10
Benzo[k]fluoranthene	207-08-9	7.7E-11	5.1E-11	5.0E-11	1.0E-10	2.8E-10
Chromium		2.8E-09	1.9E-09	1.9E-09	3.7E-09	1.0E-08
Chrysene	218-01-9	7.7E-10	5.1E-10	5.0E-10	1.0E-09	2.8E-09
Cyclopenta[cd]pyrene	27208-37-3	1.6E-10	1.1E-10	1.1E-10	2.2E-10	6.0E-10
Dibenz[a,h]anthracene	53-70-3	1.0E-11	6.8E-12	6.7E-12	1.3E-11	3.7E-11
Indeno[1,2,3-cd]pyrene	193-39-5	2.9E-11	1.9E-11	1.9E-11	3.8E-11	1.0E-10
Lead		5.9E-08	4.0E-08	3.9E-08	7.8E-08	2.2E-07
Naphthalene	91-20-3	3.1E-12	2.1E-12	2.0E-12	4.1E-12	1.1E-11

[a] $LADD_{ing}$ was calculated from the mean of 35 individual field average concentrations ($C_{GI\text{-}crumb\ rubber}$) of a chemical detected in artificial gastrointestinal fluids extracts of crumb rubber samples.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

Table F-447. Ingestion Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{ing}$, mg per kg BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Spectators**

Chemical	CASRN[a]	$LADD_{ing}$									
		Third trimester fetus	0<2 years	2<6 years	6<11 years	11<16 years	16<30 years	30<40 years	40<50 years	50<70 years	Life time
Aniline	62-53-3	1.5E-11	8.2E-09	2.3E-09	2.0E-09	1.6E-10	8.5E-11	5.7E-11	5.4E-11	1.1E-10	1.3E-08
Arsenic		8.6E-11	4.8E-08	1.4E-08	1.2E-08	9.3E-10	4.9E-10	3.3E-10	3.2E-10	6.3E-10	7.6E-08
Benz[a]anthracene	56-55-3	2.4E-11	1.3E-08	3.8E-09	3.4E-09	2.6E-10	1.4E-10	9.4E-11	8.9E-11	1.8E-10	2.1E-08
Benzo[a]pyrene	50-32-8	2.0E-11	1.1E-08	3.1E-09	2.8E-09	2.2E-10	1.1E-10	7.8E-11	7.3E-11	1.5E-10	1.8E-08
Benzo[b]fluoranthene	205-99-2	3.3E-11	1.9E-08	5.3E-09	4.6E-09	3.6E-10	1.9E-10	1.3E-10	1.2E-10	2.5E-10	2.9E-08
Benzo[k]fluoranthene	207-08-9	1.1E-11	6.0E-09	1.7E-09	1.5E-09	1.2E-10	6.2E-11	4.2E-11	4.0E-11	8.0E-11	9.6E-09
Chromium		4.0E-10	2.2E-07	6.3E-08	5.5E-08	4.3E-09	2.3E-09	1.5E-09	1.5E-09	2.9E-09	3.5E-07
Chrysene	218-01-9	1.1E-10	6.0E-08	1.7E-08	1.5E-08	1.2E-09	6.2E-10	4.2E-10	4.0E-10	8.0E-10	9.6E-08
Cyclopenta[cd]pyrene	27208-37-3	2.3E-11	1.3E-08	3.7E-09	3.2E-09	2.5E-10	1.3E-10	9.0E-11	8.5E-11	1.7E-10	2.1E-08
Dibenz[a,h]anthracene	53-70-3	1.4E-12	8.0E-10	2.3E-10	2.0E-10	1.6E-11	8.3E-12	5.6E-12	5.3E-12	1.1E-11	1.3E-09
Indeno[1,2,3-cd]pyrene	193-39-5	4.1E-12	2.3E-09	6.4E-10	5.6E-10	4.4E-11	2.3E-11	1.6E-11	1.5E-11	3.0E-11	3.6E-09
Lead		8.3E-09	4.6E-06	1.3E-06	1.2E-06	9.1E-08	4.8E-08	3.2E-08	3.1E-08	6.2E-08	7.4E-06
Naphthalene	91-20-3	4.4E-13	2.4E-10	6.9E-11	6.1E-11	4.8E-12	2.5E-12	1.7E-12	1.6E-12	3.2E-12	3.9E-10

[a] $LADD_{ing}$ was calculated from the mean of 35 individual field average concentrations ($C_{GI\text{-}crumb\ rubber}$) of a chemical detected in artificial gastrointestinal fluids extracts of crumb rubber samples.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

INDIVIDUAL FIELD ASSESSMENT (Table F-448 to Table F-471)

Table F-448. Field-Specific Ingestion Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{ing\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Athletes 2<6 Years**

Chemical	CASRN[c]	$LADD_{ing\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	0.0E+00	1.4E-09	3.2E-09	0.0E+00	7.8E-09	1.4E-08
Arsenic		9.6E-10	8.2E-09	5.8E-09	7.4E-09	1.5E-08	3.1E-08
Benz[a]anthracene	56-55-3	1.5E-10	2.3E-09	2.5E-09	1.1E-09	7.2E-09	1.0E-08

Chemical	CASRN[c]	$LADD_{ing\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Benzo[a]pyrene	50-32-8	3.7E-10	1.9E-09	1.6E-09	1.4E-09	5.2E-09	5.6E-09
Benzo[b]fluoranthene	205-99-2	6.5E-10	3.2E-09	2.4E-09	2.1E-09	7.7E-09	9.3E-09
Benzo[k]fluoranthene	207-08-9	8.7E-11	1.0E-09	9.7E-10	6.5E-10	3.0E-09	3.9E-09
Chromium		7.0E-09	3.8E-08	3.7E-08	2.5E-08	8.3E-08	2.1E-07
Chrysene	218-01-9	2.6E-09	1.0E-08	5.5E-09	1.0E-08	1.8E-08	2.8E-08
Cyclopenta[cd]pyrene	27208-37-3	3.9E-10	2.2E-09	2.0E-09	1.9E-09	5.8E-09	1.0E-08
Dibenz[a,h]anthracene	53-70-3	0.0E+00	1.4E-10	3.4E-10	0.0E+00	6.2E-10	1.7E-09
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	3.9E-10	6.7E-10	0.0E+00	1.6E-09	2.6E-09
Lead		1.5E-07	7.9E-07	6.9E-07	6.0E-07	2.0E-06	3.6E-06
Naphthalene	91-20-3	0.0E+00	4.2E-11	2.5E-10	0.0E+00	0.0E+00	1.5E-09

[a] 35 field-specific $LADD_{ing\text{-}field}$ are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

Table F-449. Field-Specific Ingestion Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{ing\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Athletes 6<11 Years**

Chemical	CASRN[c]	$LADD_{ing\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	0.0E+00	1.2E-09	2.7E-09	0.0E+00	6.5E-09	1.2E-08
Arsenic		8.0E-10	6.8E-09	4.8E-09	6.1E-09	1.2E-08	2.6E-08
Benz[a]anthracene	56-55-3	1.3E-10	1.9E-09	2.1E-09	9.2E-10	6.0E-09	8.4E-09
Benzo[a]pyrene	50-32-8	3.1E-10	1.6E-09	1.3E-09	1.1E-09	4.4E-09	4.6E-09
Benzo[b]fluoranthene	205-99-2	5.4E-10	2.6E-09	2.0E-09	1.8E-09	6.4E-09	7.8E-09
Benzo[k]fluoranthene	207-08-9	7.2E-11	8.6E-10	8.1E-10	5.4E-10	2.5E-09	3.2E-09
Chromium		5.8E-09	3.2E-08	3.1E-08	2.1E-08	6.9E-08	1.7E-07
Chrysene	218-01-9	2.2E-09	8.6E-09	4.6E-09	8.6E-09	1.5E-08	2.4E-08
Cyclopenta[cd]pyrene	27208-37-3	3.2E-10	1.8E-09	1.7E-09	1.6E-09	4.9E-09	8.7E-09
Dibenz[a,h]anthracene	53-70-3	0.0E+00	1.1E-10	2.8E-10	0.0E+00	5.2E-10	1.4E-09
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	3.2E-10	5.6E-10	0.0E+00	1.4E-09	2.2E-09
Lead		1.3E-07	6.6E-07	5.7E-07	5.0E-07	1.7E-06	3.0E-06
Naphthalene	91-20-3	0.0E+00	3.5E-11	2.1E-10	0.0E+00	0.0E+00	1.2E-09

[a] 35 field-specific $LADD_{ing\text{-}field}$ are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

Table F-450. Field-Specific Ingestion Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{ing\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Athletes 11<16 Years**

Chemical	CASRN[c]	$LADD_{ing\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	0.0E+00	9.1E-10	2.1E-09	0.0E+00	5.1E-09	9.1E-09
Arsenic		6.2E-10	5.3E-09	3.7E-09	4.8E-09	9.5E-09	2.0E-08
Benz[a]anthracene	56-55-3	9.7E-11	1.5E-09	1.6E-09	7.1E-10	4.6E-09	6.5E-09
Benzo[a]pyrene	50-32-8	2.4E-10	1.2E-09	1.0E-09	8.7E-10	3.4E-09	3.6E-09
Benzo[b]fluoranthene	205-99-2	4.2E-10	2.1E-09	1.5E-09	1.4E-09	5.0E-09	6.0E-09
Benzo[k]fluoranthene	207-08-9	5.6E-11	6.7E-10	6.3E-10	4.2E-10	1.9E-09	2.5E-09
Chromium		4.5E-09	2.4E-08	2.4E-08	1.6E-08	5.3E-08	1.4E-07
Chrysene	218-01-9	1.7E-09	6.7E-09	3.5E-09	6.6E-09	1.1E-08	1.8E-08
Cyclopenta[cd]pyrene	27208-37-3	2.5E-10	1.4E-09	1.3E-09	1.2E-09	3.8E-09	6.7E-09
Dibenz[a,h]anthracene	53-70-3	0.0E+00	8.8E-11	2.2E-10	0.0E+00	4.0E-10	1.1E-09
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	2.5E-10	4.4E-10	0.0E+00	1.1E-09	1.7E-09
Lead		1.0E-07	5.1E-07	4.4E-07	3.9E-07	1.3E-06	2.3E-06
Naphthalene	91-20-3	0.0E+00	2.7E-11	1.6E-10	0.0E+00	0.0E+00	9.5E-10

[a] 35 field-specific $LADD_{ing\text{-}field}$ are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

Table F-451. Field-Specific Ingestion Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{ing\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Athletes 16<30 Years**

Chemical	CASRN[c]	$LADD_{ing\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	0.0E+00	9.4E-10	2.2E-09	0.0E+00	5.2E-09	9.5E-09
Arsenic		6.5E-10	5.5E-09	3.9E-09	5.0E-09	9.9E-09	2.1E-08
Benz[a]anthracene	56-55-3	1.0E-10	1.6E-09	1.7E-09	7.4E-10	4.8E-09	6.8E-09
Benzo[a]pyrene	50-32-8	2.5E-10	1.3E-09	1.0E-09	9.1E-10	3.5E-09	3.7E-09
Benzo[b]fluoranthene	205-99-2	4.4E-10	2.1E-09	1.6E-09	1.4E-09	5.2E-09	6.3E-09
Benzo[k]fluoranthene	207-08-9	5.8E-11	6.9E-10	6.5E-10	4.4E-10	2.0E-09	2.6E-09
Chromium		4.7E-09	2.5E-08	2.5E-08	1.7E-08	5.5E-08	1.4E-07
Chrysene	218-01-9	1.7E-09	6.9E-09	3.7E-09	6.9E-09	1.2E-08	1.9E-08
Cyclopenta[cd]pyrene	27208-37-3	2.6E-10	1.5E-09	1.4E-09	1.3E-09	3.9E-09	7.0E-09
Dibenz[a,h]anthracene	53-70-3	0.0E+00	9.2E-11	2.3E-10	0.0E+00	4.2E-10	1.1E-09
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	2.6E-10	4.5E-10	0.0E+00	1.1E-09	1.8E-09
Lead		1.0E-07	5.3E-07	4.6E-07	4.0E-07	1.3E-06	2.4E-06

Chemical	CASRN[c]	$LADD_{ing\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Naphthalene	91-20-3	0.0E+00	2.8E-11	1.7E-10	0.0E+00	0.0E+00	9.8E-10

[a] 35 field-specific $LADD_{ing\text{-}field}$ are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

Table F-452. Field-Specific Ingestion Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{ing\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related Carcinogens[b]**—Combined Gender **Athletes 30<40 Years**

Chemical	CASRN[c]	$LADD_{ing\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	0.0E+00	4.5E-10	1.0E-09	0.0E+00	2.5E-09	4.5E-09
Arsenic		3.1E-10	2.6E-09	1.9E-09	2.4E-09	4.7E-09	1.0E-08
Benz[a]anthracene	56-55-3	4.8E-11	7.4E-10	8.1E-10	3.5E-10	2.3E-09	3.2E-09
Benzo[a]pyrene	50-32-8	1.2E-10	6.1E-10	5.0E-10	4.3E-10	1.7E-09	1.8E-09
Benzo[b]fluoranthene	205-99-2	2.1E-10	1.0E-09	7.5E-10	6.8E-10	2.5E-09	3.0E-09
Benzo[k]fluoranthene	207-08-9	2.8E-11	3.3E-10	3.1E-10	2.1E-10	9.7E-10	1.2E-09
Chromium		2.2E-09	1.2E-08	1.2E-08	8.0E-09	2.6E-08	6.7E-08
Chrysene	218-01-9	8.3E-10	3.3E-09	1.7E-09	3.3E-09	5.6E-09	9.0E-09
Cyclopenta[cd]pyrene	27208-37-3	1.2E-10	7.1E-10	6.6E-10	6.1E-10	1.9E-09	3.3E-09
Dibenz[a,h]anthracene	53-70-3	0.0E+00	4.4E-11	1.1E-10	0.0E+00	2.0E-10	5.5E-10
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	1.2E-10	2.2E-10	0.0E+00	5.2E-10	8.5E-10
Lead		4.9E-08	2.5E-07	2.2E-07	1.9E-07	6.4E-07	1.2E-06
Naphthalene	91-20-3	0.0E+00	1.3E-11	7.9E-11	0.0E+00	0.0E+00	4.7E-10

[a] 35 field-specific $LADD_{ing\text{-}field}$ are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

Table F-453. Field-Specific Ingestion Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{ing\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related Carcinogens[b]**—Combined Gender **Athletes 40<50 Years**

Chemical	CASRN[c]	$LADD_{ing\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	0.0E+00	3.8E-10	8.7E-10	0.0E+00	2.1E-09	3.8E-09
Arsenic		2.6E-10	2.2E-09	1.6E-09	2.0E-09	4.0E-09	8.5E-09
Benz[a]anthracene	56-55-3	4.1E-11	6.3E-10	6.9E-10	3.0E-10	1.9E-09	2.7E-09

Chemical	CASRN[c]	$LADD_{ing\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Benzo[a]pyrene	50-32-8	1.0E-10	5.2E-10	4.2E-10	3.7E-10	1.4E-09	1.5E-09
Benzo[b]fluoranthene	205-99-2	1.8E-10	8.6E-10	6.4E-10	5.8E-10	2.1E-09	2.5E-09
Benzo[k]fluoranthene	207-08-9	2.3E-11	2.8E-10	2.6E-10	1.8E-10	8.2E-10	1.0E-09
Chromium		1.9E-09	1.0E-08	1.0E-08	6.8E-09	2.2E-08	5.7E-08
Chrysene	218-01-9	7.0E-10	2.8E-09	1.5E-09	2.8E-09	4.8E-09	7.7E-09
Cyclopenta[cd]pyrene	27208-37-3	1.1E-10	6.0E-10	5.6E-10	5.2E-10	1.6E-09	2.8E-09
Dibenz[a,h]anthracene	53-70-3	0.0E+00	3.7E-11	9.3E-11	0.0E+00	1.7E-10	4.6E-10
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	1.0E-10	1.8E-10	0.0E+00	4.4E-10	7.2E-10
Lead		4.2E-08	2.2E-07	1.9E-07	1.6E-07	5.4E-07	9.8E-07
Naphthalene	91-20-3	0.0E+00	1.1E-11	6.7E-11	0.0E+00	0.0E+00	4.0E-10

[a] 35 field-specific $LADD_{ing\text{-}field}$ are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

Table F-454. Field-Specific Ingestion Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{ing\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Athletes 50<70 Years**

Chemical	CASRN[c]	$LADD_{ing\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	0.0E+00	7.8E-10	1.8E-09	0.0E+00	4.3E-09	7.8E-09
Arsenic		5.3E-10	4.5E-09	3.2E-09	4.1E-09	8.2E-09	1.7E-08
Benz[a]anthracene	56-55-3	8.3E-11	1.3E-09	1.4E-09	6.1E-10	4.0E-09	5.6E-09
Benzo[a]pyrene	50-32-8	2.1E-10	1.1E-09	8.6E-10	7.5E-10	2.9E-09	3.1E-09
Benzo[b]fluoranthene	205-99-2	3.6E-10	1.8E-09	1.3E-09	1.2E-09	4.3E-09	5.2E-09
Benzo[k]fluoranthene	207-08-9	4.8E-11	5.7E-10	5.4E-10	3.6E-10	1.7E-09	2.1E-09
Chromium		3.9E-09	2.1E-08	2.1E-08	1.4E-08	4.6E-08	1.2E-07
Chrysene	218-01-9	1.4E-09	5.7E-09	3.0E-09	5.7E-09	9.8E-09	1.6E-08
Cyclopenta[cd]pyrene	27208-37-3	2.2E-10	1.2E-09	1.1E-09	1.1E-09	3.2E-09	5.8E-09
Dibenz[a,h]anthracene	53-70-3	0.0E+00	7.6E-11	1.9E-10	0.0E+00	3.4E-10	9.4E-10
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	2.1E-10	3.7E-10	0.0E+00	9.1E-10	1.5E-09
Lead		8.5E-08	4.4E-07	3.8E-07	3.3E-07	1.1E-06	2.0E-06
Naphthalene	91-20-3	0.0E+00	2.3E-11	1.4E-10	0.0E+00	0.0E+00	8.1E-10

[a] 35 field-specific $LADD_{ing\text{-}field}$ are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

Table F-455. Field-Specific Ingestion Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{ing\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Coaches 16<30 Years**

Chemical	CASRN[c]	$LADD_{ing\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	0.0E+00	2.4E-10	5.4E-10	0.0E+00	1.3E-09	2.4E-09
Arsenic		1.6E-10	1.4E-09	9.8E-10	1.3E-09	2.5E-09	5.3E-09
Benz[a]anthracene	56-55-3	2.6E-11	3.9E-10	4.3E-10	1.9E-10	1.2E-09	1.7E-09
Benzo[a]pyrene	50-32-8	6.3E-11	3.2E-10	2.6E-10	2.3E-10	8.9E-10	9.5E-10
Benzo[b]fluoranthene	205-99-2	1.1E-10	5.4E-10	4.0E-10	3.6E-10	1.3E-09	1.6E-09
Benzo[k]fluoranthene	207-08-9	1.5E-11	1.7E-10	1.6E-10	1.1E-10	5.1E-10	6.6E-10
Chromium		1.2E-09	6.4E-09	6.3E-09	4.2E-09	1.4E-08	3.6E-08
Chrysene	218-01-9	4.4E-10	1.7E-09	9.3E-10	1.7E-09	3.0E-09	4.8E-09
Cyclopenta[cd]pyrene	27208-37-3	6.6E-11	3.7E-10	3.5E-10	3.2E-10	9.9E-10	1.8E-09
Dibenz[a,h]anthracene	53-70-3	0.0E+00	2.3E-11	5.8E-11	0.0E+00	1.0E-10	2.9E-10
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	6.6E-11	1.1E-10	0.0E+00	2.8E-10	4.5E-10
Lead		2.6E-08	1.3E-07	1.2E-07	1.0E-07	3.4E-07	6.1E-07
Naphthalene	91-20-3	0.0E+00	7.1E-12	4.2E-11	0.0E+00	0.0E+00	2.5E-10

[a] 35 field-specific $LADD_{ing\text{-}field}$ are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

Table F-456. Field-Specific Ingestion Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{ing\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Coaches 30<40 Years**

Chemical	CASRN[c]	$LADD_{ing\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	0.0E+00	1.6E-10	3.7E-10	0.0E+00	8.9E-10	1.6E-09
Arsenic		1.1E-10	9.3E-10	6.6E-10	8.4E-10	1.7E-09	3.6E-09
Benz[a]anthracene	56-55-3	1.7E-11	2.6E-10	2.9E-10	1.3E-10	8.2E-10	1.1E-09
Benzo[a]pyrene	50-32-8	4.2E-11	2.2E-10	1.8E-10	1.5E-10	6.0E-10	6.3E-10
Benzo[b]fluoranthene	205-99-2	7.4E-11	3.6E-10	2.7E-10	2.4E-10	8.8E-10	1.1E-09
Benzo[k]fluoranthene	207-08-9	9.8E-12	1.2E-10	1.1E-10	7.4E-11	3.4E-10	4.4E-10
Chromium		8.0E-10	4.3E-09	4.2E-09	2.8E-09	9.4E-09	2.4E-08
Chrysene	218-01-9	2.9E-10	1.2E-09	6.2E-10	1.2E-09	2.0E-09	3.2E-09
Cyclopenta[cd]pyrene	27208-37-3	4.4E-11	2.5E-10	2.3E-10	2.2E-10	6.6E-10	1.2E-09
Dibenz[a,h]anthracene	53-70-3	0.0E+00	1.6E-11	3.9E-11	0.0E+00	7.0E-11	1.9E-10
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	4.4E-11	7.7E-11	0.0E+00	1.9E-10	3.0E-10
Lead		1.8E-08	9.0E-08	7.8E-08	6.8E-08	2.3E-07	4.1E-07

Chemical	CASRN[c]	$LADD_{ing\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Naphthalene	91-20-3	0.0E+00	4.8E-12	2.8E-11	0.0E+00	0.0E+00	1.7E-10

[a] 35 field-specific $LADD_{ing\text{-}field}$ are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

Table F-457. Field-Specific Ingestion Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{ing\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related Carcinogens[b]**—Combined Gender **Coaches 40<50 Years**

Chemical	CASRN[c]	$LADD_{ing\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	0.0E+00	1.6E-10	3.6E-10	0.0E+00	8.7E-10	1.6E-09
Arsenic		1.1E-10	9.1E-10	6.4E-10	8.2E-10	1.6E-09	3.5E-09
Benz[a]anthracene	56-55-3	1.7E-11	2.6E-10	2.8E-10	1.2E-10	8.0E-10	1.1E-09
Benzo[a]pyrene	50-32-8	4.1E-11	2.1E-10	1.7E-10	1.5E-10	5.8E-10	6.2E-10
Benzo[b]fluoranthene	205-99-2	7.2E-11	3.5E-10	2.6E-10	2.4E-10	8.6E-10	1.0E-09
Benzo[k]fluoranthene	207-08-9	9.6E-12	1.1E-10	1.1E-10	7.3E-11	3.4E-10	4.3E-10
Chromium		7.8E-10	4.2E-09	4.1E-09	2.8E-09	9.2E-09	2.3E-08
Chrysene	218-01-9	2.9E-10	1.1E-09	6.1E-10	1.1E-09	2.0E-09	3.1E-09
Cyclopenta[cd]pyrene	27208-37-3	4.3E-11	2.5E-10	2.3E-10	2.1E-10	6.5E-10	1.2E-09
Dibenz[a,h]anthracene	53-70-3	0.0E+00	1.5E-11	3.8E-11	0.0E+00	6.9E-11	1.9E-10
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	4.3E-11	7.5E-11	0.0E+00	1.8E-10	2.9E-10
Lead		1.7E-08	8.8E-08	7.6E-08	6.7E-08	2.2E-07	4.0E-07
Naphthalene	91-20-3	0.0E+00	4.7E-12	2.8E-11	0.0E+00	0.0E+00	1.6E-10

[a] 35 field-specific $LADD_{ing\text{-}field}$ are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

Table F-458. Field-Specific Ingestion Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{ing\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related Carcinogens[b]**—Combined Gender **Coaches 50<70 Years**

Chemical	CASRN[c]	$LADD_{ing\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	0.0E+00	3.1E-10	7.2E-10	0.0E+00	1.7E-09	3.2E-09
Arsenic		2.1E-10	1.8E-09	1.3E-09	1.6E-09	3.3E-09	7.0E-09
Benz[a]anthracene	56-55-3	3.4E-11	5.2E-10	5.7E-10	2.5E-10	1.6E-09	2.2E-09

Chemical	CASRN[c]	$LADD_{ing\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Benzo[a]pyrene	50-32-8	8.3E-11	4.2E-10	3.5E-10	3.0E-10	1.2E-09	1.2E-09
Benzo[b]fluoranthene	205-99-2	1.4E-10	7.1E-10	5.2E-10	4.8E-10	1.7E-09	2.1E-09
Benzo[k]fluoranthene	207-08-9	1.9E-11	2.3E-10	2.2E-10	1.5E-10	6.7E-10	8.6E-10
Chromium		1.6E-09	8.5E-09	8.3E-09	5.6E-09	1.8E-08	4.7E-08
Chrysene	218-01-9	5.8E-10	2.3E-09	1.2E-09	2.3E-09	3.9E-09	6.3E-09
Cyclopenta[cd]pyrene	27208-37-3	8.7E-11	4.9E-10	4.6E-10	4.3E-10	1.3E-09	2.3E-09
Dibenz[a,h]anthracene	53-70-3	0.0E+00	3.1E-11	7.6E-11	0.0E+00	1.4E-10	3.8E-10
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	8.6E-11	1.5E-10	0.0E+00	3.7E-10	5.9E-10
Lead		3.4E-08	1.8E-07	1.5E-07	1.3E-07	4.5E-07	8.0E-07
Naphthalene	91-20-3	0.0E+00	9.3E-12	5.5E-11	0.0E+00	0.0E+00	3.3E-10

[a] 35 field-specific $LADD_{ing\text{-}field}$ are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

Table F-459. Field-Specific Ingestion Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{ing\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Referees 16<30 Years**

Chemical	CASRN[c]	$LADD_{ing\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	0.0E+00	1.0E-10	2.4E-10	0.0E+00	5.8E-10	1.1E-09
Arsenic		7.2E-11	6.1E-10	4.3E-10	5.5E-10	1.1E-09	2.3E-09
Benz[a]anthracene	56-55-3	1.1E-11	1.7E-10	1.9E-10	8.2E-11	5.3E-10	7.5E-10
Benzo[a]pyrene	50-32-8	2.8E-11	1.4E-10	1.2E-10	1.0E-10	3.9E-10	4.2E-10
Benzo[b]fluoranthene	205-99-2	4.8E-11	2.4E-10	1.8E-10	1.6E-10	5.7E-10	6.9E-10
Benzo[k]fluoranthene	207-08-9	6.4E-12	7.7E-11	7.2E-11	4.9E-11	2.2E-10	2.9E-10
Chromium		5.2E-10	2.8E-09	2.8E-09	1.9E-09	6.2E-09	1.6E-08
Chrysene	218-01-9	1.9E-10	7.7E-10	4.1E-10	7.7E-10	1.3E-09	2.1E-09
Cyclopenta[cd]pyrene	27208-37-3	2.9E-11	1.6E-10	1.5E-10	1.4E-10	4.3E-10	7.7E-10
Dibenz[a,h]anthracene	53-70-3	0.0E+00	1.0E-11	2.5E-11	0.0E+00	4.6E-11	1.3E-10
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	2.9E-11	5.0E-11	0.0E+00	1.2E-10	2.0E-10
Lead		1.1E-08	5.9E-08	5.1E-08	4.5E-08	1.5E-07	2.7E-07
Naphthalene	91-20-3	0.0E+00	3.1E-12	1.8E-11	0.0E+00	0.0E+00	1.1E-10

[a] 35 field-specific $LADD_{ing\text{-}field}$ are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

Table F-460. Field-Specific Ingestion Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{ing\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Referees 30<40 Years**

Chemical	CASRN[c]	$LADD_{ing\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	0.0E+00	7.0E-11	1.6E-10	0.0E+00	3.9E-10	7.1E-10
Arsenic		4.8E-11	4.1E-10	2.9E-10	3.7E-10	7.4E-10	1.6E-09
Benz[a]anthracene	56-55-3	7.5E-12	1.2E-10	1.3E-10	5.5E-11	3.6E-10	5.0E-10
Benzo[a]pyrene	50-32-8	1.9E-11	9.5E-11	7.8E-11	6.7E-11	2.6E-10	2.8E-10
Benzo[b]fluoranthene	205-99-2	3.2E-11	1.6E-10	1.2E-10	1.1E-10	3.8E-10	4.7E-10
Benzo[k]fluoranthene	207-08-9	4.3E-12	5.1E-11	4.9E-11	3.3E-11	1.5E-10	1.9E-10
Chromium		3.5E-10	1.9E-09	1.8E-09	1.2E-09	4.1E-09	1.0E-08
Chrysene	218-01-9	1.3E-10	5.1E-10	2.7E-10	5.1E-10	8.8E-10	1.4E-09
Cyclopenta[cd]pyrene	27208-37-3	1.9E-11	1.1E-10	1.0E-10	9.5E-11	2.9E-10	5.2E-10
Dibenz[a,h]anthracene	53-70-3	0.0E+00	6.8E-12	1.7E-11	0.0E+00	3.1E-11	8.5E-11
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	1.9E-11	3.4E-11	0.0E+00	8.2E-11	1.3E-10
Lead		7.7E-09	4.0E-08	3.4E-08	3.0E-08	1.0E-07	1.8E-07
Naphthalene	91-20-3	0.0E+00	2.1E-12	1.2E-11	0.0E+00	0.0E+00	7.3E-11

[a] 35 field-specific $LADD_{ing\text{-}field}$ are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

Table F-461. Field-Specific Ingestion Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{ing\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Referees 40<50 Years**

Chemical	CASRN[c]	$LADD_{ing\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	0.0E+00	6.9E-11	1.6E-10	0.0E+00	3.8E-10	6.9E-10
Arsenic		4.7E-11	4.0E-10	2.8E-10	3.6E-10	7.2E-10	1.5E-09
Benz[a]anthracene	56-55-3	7.4E-12	1.1E-10	1.2E-10	5.4E-11	3.5E-10	4.9E-10
Benzo[a]pyrene	50-32-8	1.8E-11	9.3E-11	7.6E-11	6.6E-11	2.6E-10	2.7E-10
Benzo[b]fluoranthene	205-99-2	3.2E-11	1.6E-10	1.1E-10	1.0E-10	3.8E-10	4.6E-10
Benzo[k]fluoranthene	207-08-9	4.2E-12	5.0E-11	4.8E-11	3.2E-11	1.5E-10	1.9E-10
Chromium		3.4E-10	1.9E-09	1.8E-09	1.2E-09	4.0E-09	1.0E-08
Chrysene	218-01-9	1.3E-10	5.0E-10	2.7E-10	5.0E-10	8.6E-10	1.4E-09
Cyclopenta[cd]pyrene	27208-37-3	1.9E-11	1.1E-10	1.0E-10	9.3E-11	2.8E-10	5.1E-10
Dibenz[a,h]anthracene	53-70-3	0.0E+00	6.7E-12	1.7E-11	0.0E+00	3.0E-11	8.3E-11
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	1.9E-11	3.3E-11	0.0E+00	8.0E-11	1.3E-10
Lead		7.5E-09	3.9E-08	3.4E-08	2.9E-08	9.8E-08	1.8E-07

Chemical	CASRN[c]	$LADD_{ing\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Naphthalene	91-20-3	0.0E+00	2.0E-12	1.2E-11	0.0E+00	0.0E+00	7.2E-11

[a] 35 field-specific $LADD_{ing\text{-}field}$ are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

Table F-462. Field-Specific Ingestion Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{ing\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related Carcinogens[b]**—Combined Gender **Referees 50<70 Years**

Chemical	CASRN[c]	$LADD_{ing\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	0.0E+00	1.4E-10	3.1E-10	0.0E+00	7.7E-10	1.4E-09
Arsenic		9.4E-11	8.0E-10	5.7E-10	7.2E-10	1.4E-09	3.1E-09
Benz[a]anthracene	56-55-3	1.5E-11	2.3E-10	2.5E-10	1.1E-10	7.0E-10	9.9E-10
Benzo[a]pyrene	50-32-8	3.7E-11	1.9E-10	1.5E-10	1.3E-10	5.1E-10	5.5E-10
Benzo[b]fluoranthene	205-99-2	6.4E-11	3.1E-10	2.3E-10	2.1E-10	7.6E-10	9.1E-10
Benzo[k]fluoranthene	207-08-9	8.5E-12	1.0E-10	9.5E-11	6.4E-11	3.0E-10	3.8E-10
Chromium		6.9E-10	3.7E-09	3.6E-09	2.5E-09	8.1E-09	2.1E-08
Chrysene	218-01-9	2.5E-10	1.0E-09	5.4E-10	1.0E-09	1.7E-09	2.8E-09
Cyclopenta[cd]pyrene	27208-37-3	3.8E-11	2.2E-10	2.0E-10	1.9E-10	5.7E-10	1.0E-09
Dibenz[a,h]anthracene	53-70-3	0.0E+00	1.3E-11	3.3E-11	0.0E+00	6.1E-11	1.7E-10
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	3.8E-11	6.6E-11	0.0E+00	1.6E-10	2.6E-10
Lead		1.5E-08	7.8E-08	6.7E-08	5.9E-08	2.0E-07	3.5E-07
Naphthalene	91-20-3	0.0E+00	4.1E-12	2.4E-11	0.0E+00	0.0E+00	1.4E-10

[a] 35 field-specific $LADD_{ing\text{-}field}$ are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

Table F-463. Field-Specific Ingestion Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{ing\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related Carcinogens[b]**—Combined Gender **Spectators Third Trimester Fetus<0 Years**

Chemical	CASRN[c]	$LADD_{ing\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	0.0E+00	1.5E-11	3.4E-11	0.0E+00	8.2E-11	1.5E-10
Arsenic		1.0E-11	8.6E-11	6.1E-11	7.7E-11	1.5E-10	3.3E-10
Benz[a]anthracene	56-55-3	1.6E-12	2.4E-11	2.7E-11	1.2E-11	7.5E-11	1.1E-10

Chemical	CASRN[c]	$LADD_{ing\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Benzo[a]pyrene	50-32-8	3.9E-12	2.0E-11	1.6E-11	1.4E-11	5.5E-11	5.8E-11
Benzo[b]fluoranthene	205-99-2	6.8E-12	3.3E-11	2.5E-11	2.2E-11	8.1E-11	9.8E-11
Benzo[k]fluoranthene	207-08-9	9.1E-13	1.1E-11	1.0E-11	6.9E-12	3.2E-11	4.1E-11
Chromium		7.3E-11	4.0E-10	3.9E-10	2.6E-10	8.7E-10	2.2E-09
Chrysene	218-01-9	2.7E-11	1.1E-10	5.7E-11	1.1E-10	1.8E-10	3.0E-10
Cyclopenta[cd]pyrene	27208-37-3	4.1E-12	2.3E-11	2.1E-11	2.0E-11	6.1E-11	1.1E-10
Dibenz[a,h]anthracene	53-70-3	0.0E+00	1.4E-12	3.6E-12	0.0E+00	6.5E-12	1.8E-11
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	4.1E-12	7.1E-12	0.0E+00	1.7E-11	2.8E-11
Lead		1.6E-09	8.3E-09	7.2E-09	6.3E-09	2.1E-08	3.8E-08
Naphthalene	91-20-3	0.0E+00	4.4E-13	2.6E-12	0.0E+00	0.0E+00	1.5E-11

[a] 35 field-specific $LADD_{ing\text{-}field}$ are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

Table F-464. Field-Specific Ingestion Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{ing\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Spectators 0<2 Years**

Chemical	CASRN[c]	$LADD_{ing\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	0.0E+00	8.2E-09	1.9E-08	0.0E+00	4.6E-08	8.2E-08
Arsenic		5.6E-09	4.8E-08	3.4E-08	4.3E-08	8.6E-08	1.8E-07
Benz[a]anthracene	56-55-3	8.8E-10	1.3E-08	1.5E-08	6.4E-09	4.2E-08	5.9E-08
Benzo[a]pyrene	50-32-8	2.2E-09	1.1E-08	9.1E-09	7.9E-09	3.1E-08	3.3E-08
Benzo[b]fluoranthene	205-99-2	3.8E-09	1.9E-08	1.4E-08	1.2E-08	4.5E-08	5.4E-08
Benzo[k]fluoranthene	207-08-9	5.1E-10	6.0E-09	5.7E-09	3.8E-09	1.8E-08	2.3E-08
Chromium		4.1E-08	2.2E-07	2.2E-07	1.5E-07	4.8E-07	1.2E-06
Chrysene	218-01-9	1.5E-08	6.0E-08	3.2E-08	6.0E-08	1.0E-07	1.6E-07
Cyclopenta[cd]pyrene	27208-37-3	2.3E-09	1.3E-08	1.2E-08	1.1E-08	3.4E-08	6.1E-08
Dibenz[a,h]anthracene	53-70-3	0.0E+00	8.0E-10	2.0E-09	0.0E+00	3.6E-09	9.9E-09
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	2.3E-09	3.9E-09	0.0E+00	9.6E-09	1.5E-08
Lead		9.0E-07	4.6E-06	4.0E-06	3.5E-06	1.2E-05	2.1E-05
Naphthalene	91-20-3	0.0E+00	2.4E-10	1.4E-09	0.0E+00	0.0E+00	8.5E-09

[a] 35 field-specific $LADD_{ing\text{-}field}$ are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

Table F-465. Field-Specific Ingestion Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{ing\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related Carcinogens[b]**—Combined Gender **Spectators 2<6 Years**

Chemical	CASRN[c]	$LADD_{ing\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	0.0E+00	2.3E-09	5.3E-09	0.0E+00	1.3E-08	2.3E-08
Arsenic		1.6E-09	1.4E-08	9.6E-09	1.2E-08	2.4E-08	5.2E-08
Benz[a]anthracene	56-55-3	2.5E-10	3.8E-09	4.2E-09	1.8E-09	1.2E-08	1.7E-08
Benzo[a]pyrene	50-32-8	6.2E-10	3.1E-09	2.6E-09	2.2E-09	8.7E-09	9.2E-09
Benzo[b]fluoranthene	205-99-2	1.1E-09	5.3E-09	3.9E-09	3.5E-09	1.3E-08	1.5E-08
Benzo[k]fluoranthene	207-08-9	1.4E-10	1.7E-09	1.6E-09	1.1E-09	5.0E-09	6.4E-09
Chromium		1.2E-08	6.3E-08	6.1E-08	4.1E-08	1.4E-07	3.5E-07
Chrysene	218-01-9	4.3E-09	1.7E-08	9.1E-09	1.7E-08	2.9E-08	4.7E-08
Cyclopenta[cd]pyrene	27208-37-3	6.4E-10	3.7E-09	3.4E-09	3.2E-09	9.7E-09	1.7E-08
Dibenz[a,h]anthracene	53-70-3	0.0E+00	2.3E-10	5.7E-10	0.0E+00	1.0E-09	2.8E-09
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	6.4E-10	1.1E-09	0.0E+00	2.7E-09	4.4E-09
Lead		2.6E-07	1.3E-06	1.1E-06	1.0E-06	3.3E-06	6.0E-06
Naphthalene	91-20-3	0.0E+00	6.9E-11	4.1E-10	0.0E+00	0.0E+00	2.4E-09

[a] 35 field-specific $LADD_{ing\text{-}field}$ are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

Table F-466. Field-Specific Ingestion Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{ing\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related Carcinogens[b]**—Combined Gender **Spectators 6<11 Years**

Chemical	CASRN[c]	$LADD_{ing\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	0.0E+00	2.0E-09	4.7E-09	0.0E+00	1.1E-08	2.1E-08
Arsenic		1.4E-09	1.2E-08	8.4E-09	1.1E-08	2.1E-08	4.6E-08
Benz[a]anthracene	56-55-3	2.2E-10	3.4E-09	3.7E-09	1.6E-09	1.0E-08	1.5E-08
Benzo[a]pyrene	50-32-8	5.4E-10	2.8E-09	2.3E-09	2.0E-09	7.6E-09	8.1E-09
Benzo[b]fluoranthene	205-99-2	9.4E-10	4.6E-09	3.4E-09	3.1E-09	1.1E-08	1.4E-08
Benzo[k]fluoranthene	207-08-9	1.3E-10	1.5E-09	1.4E-09	9.5E-10	4.4E-09	5.6E-09
Chromium		1.0E-08	5.5E-08	5.4E-08	3.6E-08	1.2E-07	3.1E-07
Chrysene	218-01-9	3.8E-09	1.5E-08	7.9E-09	1.5E-08	2.6E-08	4.1E-08
Cyclopenta[cd]pyrene	27208-37-3	5.7E-10	3.2E-09	3.0E-09	2.8E-09	8.5E-09	1.5E-08
Dibenz[a,h]anthracene	53-70-3	0.0E+00	2.0E-10	5.0E-10	0.0E+00	9.0E-10	2.5E-09
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	5.6E-10	9.8E-10	0.0E+00	2.4E-09	3.8E-09
Lead		2.2E-07	1.2E-06	1.0E-06	8.7E-07	2.9E-06	5.2E-06

Chemical	CASRN[c]	$LADD_{ing\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Naphthalene	91-20-3	0.0E+00	6.1E-11	3.6E-10	0.0E+00	0.0E+00	2.1E-09

[a] 35 field-specific $LADD_{ing\text{-}field}$ are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

Table F-467. Field-Specific Ingestion Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{ing\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related Carcinogens[b]**—Combined Gender **Spectators 11<16 Years**

Chemical	CASRN[c]	$LADD_{ing\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	0.0E+00	1.6E-10	3.7E-10	0.0E+00	8.9E-10	1.6E-09
Arsenic		1.1E-10	9.3E-10	6.6E-10	8.4E-10	1.7E-09	3.6E-09
Benz[a]anthracene	56-55-3	1.7E-11	2.6E-10	2.9E-10	1.3E-10	8.2E-10	1.1E-09
Benzo[a]pyrene	50-32-8	4.2E-11	2.2E-10	1.8E-10	1.5E-10	6.0E-10	6.4E-10
Benzo[b]fluoranthene	205-99-2	7.4E-11	3.6E-10	2.7E-10	2.4E-10	8.8E-10	1.1E-09
Benzo[k]fluoranthene	207-08-9	9.9E-12	1.2E-10	1.1E-10	7.4E-11	3.4E-10	4.4E-10
Chromium		8.0E-10	4.3E-09	4.2E-09	2.8E-09	9.4E-09	2.4E-08
Chrysene	218-01-9	3.0E-10	1.2E-09	6.2E-10	1.2E-09	2.0E-09	3.2E-09
Cyclopenta[cd]pyrene	27208-37-3	4.4E-11	2.5E-10	2.3E-10	2.2E-10	6.6E-10	1.2E-09
Dibenz[a,h]anthracene	53-70-3	0.0E+00	1.6E-11	3.9E-11	0.0E+00	7.0E-11	1.9E-10
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	4.4E-11	7.7E-11	0.0E+00	1.9E-10	3.0E-10
Lead		1.8E-08	9.1E-08	7.8E-08	6.9E-08	2.3E-07	4.1E-07
Naphthalene	91-20-3	0.0E+00	4.8E-12	2.8E-11	0.0E+00	0.0E+00	1.7E-10

[a] 35 field-specific $LADD_{ing\text{-}field}$ are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

Table F-468. Field-Specific Ingestion Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{ing\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related Carcinogens[b]**—Combined Gender **Spectators 16<30 Years**

Chemical	CASRN[c]	$LADD_{ing\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	0.0E+00	8.5E-11	1.9E-10	0.0E+00	4.7E-10	8.5E-10
Arsenic		5.8E-11	4.9E-10	3.5E-10	4.5E-10	8.9E-10	1.9E-09
Benz[a]anthracene	56-55-3	9.1E-12	1.4E-10	1.5E-10	6.7E-11	4.3E-10	6.1E-10

Chemical	CASRN[c]	$LADD_{ing\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Benzo[a]pyrene	50-32-8	2.3E-11	1.1E-10	9.4E-11	8.2E-11	3.2E-10	3.4E-10
Benzo[b]fluoranthene	205-99-2	3.9E-11	1.9E-10	1.4E-10	1.3E-10	4.7E-10	5.6E-10
Benzo[k]fluoranthene	207-08-9	5.2E-12	6.2E-11	5.9E-11	4.0E-11	1.8E-10	2.3E-10
Chromium		4.2E-10	2.3E-09	2.2E-09	1.5E-09	5.0E-09	1.3E-08
Chrysene	218-01-9	1.6E-10	6.2E-10	3.3E-10	6.2E-10	1.1E-09	1.7E-09
Cyclopenta[cd]pyrene	27208-37-3	2.4E-11	1.3E-10	1.2E-10	1.2E-10	3.5E-10	6.3E-10
Dibenz[a,h]anthracene	53-70-3	0.0E+00	8.3E-12	2.1E-11	0.0E+00	3.7E-11	1.0E-10
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	2.3E-11	4.1E-11	0.0E+00	9.9E-11	1.6E-10
Lead		9.3E-09	4.8E-08	4.1E-08	3.6E-08	1.2E-07	2.2E-07
Naphthalene	91-20-3	0.0E+00	2.5E-12	1.5E-11	0.0E+00	0.0E+00	8.9E-11

[a] 35 field-specific $LADD_{ing\text{-}field}$ are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

Table F-469. Field-Specific Ingestion Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{ing\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related Carcinogens**[b]—Combined Gender **Spectators 30<40 Years**

Chemical	CASRN[c]	$LADD_{ing\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	0.0E+00	5.7E-11	1.3E-10	0.0E+00	3.2E-10	5.8E-10
Arsenic		3.9E-11	3.3E-10	2.4E-10	3.0E-10	6.0E-10	1.3E-09
Benz[a]anthracene	56-55-3	6.2E-12	9.4E-11	1.0E-10	4.5E-11	2.9E-10	4.1E-10
Benzo[a]pyrene	50-32-8	1.5E-11	7.8E-11	6.4E-11	5.5E-11	2.1E-10	2.3E-10
Benzo[b]fluoranthene	205-99-2	2.6E-11	1.3E-10	9.6E-11	8.7E-11	3.1E-10	3.8E-10
Benzo[k]fluoranthene	207-08-9	3.5E-12	4.2E-11	4.0E-11	2.7E-11	1.2E-10	1.6E-10
Chromium		2.9E-10	1.5E-09	1.5E-09	1.0E-09	3.4E-09	8.6E-09
Chrysene	218-01-9	1.1E-10	4.2E-10	2.2E-10	4.2E-10	7.2E-10	1.2E-09
Cyclopenta[cd]pyrene	27208-37-3	1.6E-11	9.0E-11	8.4E-11	7.8E-11	2.4E-10	4.2E-10
Dibenz[a,h]anthracene	53-70-3	0.0E+00	5.6E-12	1.4E-11	0.0E+00	2.5E-11	7.0E-11
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	1.6E-11	2.8E-11	0.0E+00	6.7E-11	1.1E-10
Lead		6.3E-09	3.2E-08	2.8E-08	2.5E-08	8.2E-08	1.5E-07
Naphthalene	91-20-3	0.0E+00	1.7E-12	1.0E-11	0.0E+00	0.0E+00	6.0E-11

[a] 35 field-specific $LADD_{ing\text{-}field}$ are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

Table F-470. Field-Specific Ingestion Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{ing\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related Carcinogens[b]**—Combined Gender **Spectators 40<50 Years**

Chemical	CASRN[c]	$LADD_{ing\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	0.0E+00	5.4E-11	1.2E-10	0.0E+00	3.0E-10	5.5E-10
Arsenic		3.7E-11	3.2E-10	2.2E-10	2.9E-10	5.7E-10	1.2E-09
Benz[a]anthracene	56-55-3	5.8E-12	8.9E-11	9.8E-11	4.3E-11	2.8E-10	3.9E-10
Benzo[a]pyrene	50-32-8	1.4E-11	7.3E-11	6.0E-11	5.2E-11	2.0E-10	2.2E-10
Benzo[b]fluoranthene	205-99-2	2.5E-11	1.2E-10	9.1E-11	8.3E-11	3.0E-10	3.6E-10
Benzo[k]fluoranthene	207-08-9	3.3E-12	4.0E-11	3.8E-11	2.5E-11	1.2E-10	1.5E-10
Chromium		2.7E-10	1.5E-09	1.4E-09	9.7E-10	3.2E-09	8.1E-09
Chrysene	218-01-9	1.0E-10	4.0E-10	2.1E-10	4.0E-10	6.8E-10	1.1E-09
Cyclopenta[cd]pyrene	27208-37-3	1.5E-11	8.5E-11	7.9E-11	7.4E-11	2.3E-10	4.0E-10
Dibenz[a,h]anthracene	53-70-3	0.0E+00	5.3E-12	1.3E-11	0.0E+00	2.4E-11	6.6E-11
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	1.5E-11	2.6E-11	0.0E+00	6.3E-11	1.0E-10
Lead		6.0E-09	3.1E-08	2.7E-08	2.3E-08	7.7E-08	1.4E-07
Naphthalene	91-20-3	0.0E+00	1.6E-12	9.6E-12	0.0E+00	0.0E+00	5.7E-11

[a] 35 field-specific $LADD_{ing\text{-}field}$ are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.

Table F-471. Field-Specific Ingestion Lifetime Average Daily Dose[a] for Lifetime Cancer Risk Assessment ($LADD_{ing\text{-}field}$, milligrams per kilogram BW per day) of **Field-Related Carcinogens[b]**—Combined Gender **Spectators 50<70 Years**

Chemical	CASRN[c]	$LADD_{ing\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Aniline	62-53-3	0.0E+00	1.1E-10	2.5E-10	0.0E+00	6.1E-10	1.1E-09
Arsenic		7.5E-11	6.3E-10	4.5E-10	5.7E-10	1.1E-09	2.4E-09
Benz[a]anthracene	56-55-3	1.2E-11	1.8E-10	2.0E-10	8.6E-11	5.6E-10	7.8E-10
Benzo[a]pyrene	50-32-8	2.9E-11	1.5E-10	1.2E-10	1.0E-10	4.1E-10	4.3E-10
Benzo[b]fluoranthene	205-99-2	5.0E-11	2.5E-10	1.8E-10	1.7E-10	6.0E-10	7.2E-10
Benzo[k]fluoranthene	207-08-9	6.7E-12	8.0E-11	7.5E-11	5.1E-11	2.3E-10	3.0E-10
Chromium		5.4E-10	2.9E-09	2.9E-09	1.9E-09	6.4E-09	1.6E-08
Chrysene	218-01-9	2.0E-10	8.0E-10	4.2E-10	8.0E-10	1.4E-09	2.2E-09
Cyclopenta[cd]pyrene	27208-37-3	3.0E-11	1.7E-10	1.6E-10	1.5E-10	4.5E-10	8.1E-10
Dibenz[a,h]anthracene	53-70-3	0.0E+00	1.1E-11	2.6E-11	0.0E+00	4.8E-11	1.3E-10
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	3.0E-11	5.2E-11	0.0E+00	1.3E-10	2.1E-10
Lead		1.2E-08	6.2E-08	5.3E-08	4.7E-08	1.5E-07	2.8E-07

Chemical	CASRN[c]	$LADD_{ing\text{-}field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Naphthalene	91-20-3	0.0E+00	3.2E-12	1.9E-11	0.0E+00	0.0E+00	1.1E-10

[a] 35 field-specific $LADD_{ing\text{-}field}$ are included in the table.
[b] All chemicals were included in the targeted analysis of crumb rubber extracts are designated as Field-Related Chemicals.
[c] CASRN: Chemical Abstracts Service Registry Number, CASRN for metals and metalloids are not included as the Study did not speciate the chemicals in the sample analysis.
Values are rounded to two significant figures.