

Appendix G

OEHHA Synthetic Turf Study

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Appendix G. Calculation Examples, Results of Non-Cancer Hazard and Lifetime Incremental Cancer Risk

G.1. Calculation Examples

This section presents step-by-step sample calculations for hazard and risk as described in the Main Report. For simplicity, hazard calculations are shown for a single receptor group, combined gender athletes ages 16<30 years, except where hazard calculations are independent of age or receptor group. Risk calculations are shown in detail for a single receptor group, combined gender athletes ages 16<30 years, and the lifetime summation is shown for all athlete age groups. Three chemicals were selected as examples for the reasons listed as follows.

Styrene (CASRN 100-42-5), the only field-related chemical with available toxicity criterion for acute exposure (Acute TC_{inh}), is used as an example for acute inhalation hazard quotient (Acute HQ_{inh}) calculation. Styrene is also a sensory irritant and is used as a calculation example of chronic inhalation hazard quotient for sensory irritants (Chronic HQ_{inh-sensory}).

Benzo[a]pyrene (CASRN 50-32-8), a field-related developmental and reproductive toxicant (DART), was present in air and crumb rubber samples extracted with GI biofluids and artificial sweat. It is used for example calculations of hazard quotients for one-day inhalation, dermal, and ingestion exposures (One-Day HQ_{inh-DART}, One-day HQ_{der-DART}, and One-Day HQ_{ing-DART}). Also a carcinogen, this chemical is used for example inhalation, dermal, and ingestion risk (Risk_{inh}, Risk_{der}, and Risk_{ing}) calculations.

Acenaphthylene (CASRN 208-96-8), a field-related general chemical, was present in air and crumb rubber samples extracted with GI biofluids and artificial sweat. It is used an example for chronic inhalation, dermal, and ingestion hazard quotients (Chronic HQ_{inh}, Chronic HQ_{der}, and Chronic HQ_{ing}) calculations.

G.1.1. Non-Cancer Hazard Calculation Examples

G.1.1.1. Inhalation

G.1.1.1.1. Acute Inhalation Hazard Quotient Example: Styrene

To calculate the acute on-field inhalation hazard quotient (Acute HQ_{inh}) of styrene for all receptor groups, combined gender, and all age groups, Equation 5-1 from Main Report Section 5.4.1 and Equation B-26 from Appendix Section B.6.1.1 are used with the following parameters:



$$\text{Acute } C_{inh} = C_{air-max}$$

Main Report Section 5.4.1
Equation 5-1

$$\text{Acute HQ}_{inh} = \frac{\text{Acute } C_{inh}}{\text{Acute TC}_{inh}}$$

Appendix Section B.6.1.1
Equation B-26

where,

Acute C_{inh} = $C_{air-max}$ = 1600 nanograms per cubic meter (Appendix Section F.4.1, Table F-96)

Acute TC_{inh} = 21000000 nanograms per cubic meter (Main Report Section 4.4.1, Table 4-3)

Therefore,

$$\text{Acute HQ}_{inh} = \frac{1600 \text{ nanograms per cubic meter}}{21000000 \text{ nanograms per cubic meter}} = 0.000077 \text{ or } 7.7 \times 10^{-5} \text{ (unitless)}$$

G.1.1.1.2. Developmental and Reproductive Toxicant One-Day Inhalation Hazard Quotient Example: Benzo[a]pyrene

To calculate the field-specific one-day inhalation hazard quotient (One-Day $HQ_{inh-DART-field}$) of benzo[a]pyrene, a chemical with DART endpoints, for combined gender athletes ages 16<30 years, Equation 5-2 from Main Report Section 5.4.2.1 and Equation B-28 from Appendix Section B.6.1.3.1 are used with the following parameters:

$$C_{inh-DART-field} = C_{inh-DART-field} \times AF_{inh-DART}$$

Main Report Section 5.4.2.1
Equation 5-2

$$\text{One - Day } HQ_{inh-DART-field} = \frac{C_{inh-DART-field}}{DART \text{ } TC}_{inh}$$

Appendix Section B.6.1.3.1
Equation B-28

where,

$C_{air-field}$ = 4.7 nanograms per cubic meter (Appendix Section F.4.4, Tables F-107 to F-139)

$AF_{inh-DART}$ = 0.68 (Appendix Section F.4.2, Table F-97)

DART TC_{inh} = 400 nanograms per cubic meter (Main Report Tables 4-4 and 4-5)

Therefore,

$$C_{inh-DART-field} = 4.7 \text{ nanograms per cubic meter} \times 0.68 = 3.2 \text{ nanograms per cubic meter}$$



$$\text{One - Day } HQ_{inh-DART-field} = \frac{3.2 \text{ nanograms per cubic meter}}{400 \text{ nanograms per cubic meter}} \\ = 0.008 \text{ or } 8.0 \times 10^{-3} \text{ (unitless)}$$

G.1.1.1.3. Sensory Irritant Chronic Inhalation Hazard Quotient Example: Styrene

To calculate the chronic inhalation hazard quotient (Chronic $HQ_{inh-sensory}$) of styrene for all receptor groups, combined gender, and all age groups, a sensory irritant with central nervous system endpoints, Equation 5-5 from Chapter 5 of the Main Report and Equation B-29 from Appendix Section B.6.1.3.2 are used with the following parameters:

$$\text{Chronic } C_{inh-sensory} = C_{air-avg}$$

Chapter 5
Equation 5-5

$$\text{Chronic } HQ_{inh-sensory} = \frac{\text{Chronic } C_{inh-sensory}}{\text{Sensory } TC_{inh}}$$

Appendix Section B.6.1.3.2
Equation B-29

where,

$$\text{Chronic } C_{inh-sensory} = C_{air-avg} = 59 \text{ nanograms per cubic meter (Appendix Section F.4.5, Table F-140)}$$

$$\text{Sensory } TC_{inh} = 900000 \text{ nanograms per cubic meter (Main Report Section 4.4.2, Table 4-6)}$$

Therefore,

$$\text{Chronic } HQ_{inh-sensory} = \frac{59 \text{ nanograms per cubic meter}}{900000 \text{ nanograms per cubic meter}} \\ = 0.000065 \text{ or } 6.5 \times 10^{-5} \text{ (unitless)}$$

G.1.1.1.4. General Chemical Chronic Inhalation Hazard Quotient Example: Acenaphthylene

To calculate the chronic inhalation hazard quotient (Chronic HQ_{inh}) of acenaphthylene (CASRN 534-22-5) for combined gender athletes, ages 16<30 years, Equation 5-6 from Chapter 5 of the Main Report and Equation B-30 from Appendix B of the Main Report are used with the following parameters:

$$\text{Chronic } C_{inh} = C_{air-avg} \times AF_{inh}$$

Main Report Chapter 5
Equation 5-5/6

$$\text{Chronic } HQ_{inh} = \frac{\text{Chronic } C_{inh}}{\text{Chronic } TC_{inh}}$$

Appendix Section B.6.1.3.3
Equation B-30

where,



$C_{air\text{-avg}} = 1.0$ nanograms per cubic meter (Main Report Section 3.4.6, Table 3-10)

$AF_{inh} = 0.37$ (Appendix Section F.4.3, Table F-102)

$Chronic\ TC_{inh} = 210000$ nanograms per cubic meter (Main Report Section 4.4.4, Tables 4-7 and 4-8)

Therefore,

$$Chronic\ C_{inh} = 1.0 \text{ nanograms per cubic meter} \times 0.37 = 0.37 \text{ or } 3.7 \times 10^{-1}$$

$$Chronic\ HQ_{inh} = \frac{0.37 \text{ nanograms per cubic meter}}{210000 \text{ nanograms per cubic meter}} = 0.0000018 \text{ or } 1.8 \times 10^{-6} \text{ (unitless)}$$

G.1.1.2. Dermal

G.1.1.2.1. DART One-Day Dermal Hazard Quotient Example: Benzo[a]pyrene

To calculate the field-specific dermal average one-day dose ($AD_{der\text{-DART-field}}$) for benzo[a]pyrene for combined gender athletes ages 16<30 years, OEHHA used, Equation 5-3 from Main Report Section 5.4.2.2, with the $C_{der\text{-crumb rubber-field}}$ and EV_{DART} discussed in Appendix Section B.4.4, and the following parameters:

$$AD_{der\text{-DART-field}} = \frac{DL \times C_{der\text{-crumb rubber-field}} \times ABS \times EV_{DART} \times CF}{BW}$$

where,

$DL = 0.168$ grams crumb rubber per event (Appendix Section B.4.1, Tables B-82 to B-85)

$C_{der\text{-crumb rubber-field}} = 0.76$ nanograms per gram crumb rubber (Appendix Section D.4.1.3.3, Table D-32)

$ABS =$ default value of 1 (Appendix Section B.4.3)

$EV_{DART} = 1$ event per day (Appendix Section B.4.4)

$CF = 1$ milligram per 1000000 nanograms

$BW = 65.8$ kilograms (Main Report Table 5-5)

Therefore,

$$\begin{aligned} AD_{der\text{-DART-field}} &= \frac{0.168 \text{ grams crumb rubber per event} \times 0.76 \text{ nanograms per gram crumb rubber} \times 1 \times 1 \text{ event per day}}{65.8 \text{ kilograms}} \\ &\quad \times 1 \text{ milligram per 1000000 nanograms} \\ &= 0.0000000019 \text{ milligram per kilogram bodyweight per day} \\ &\quad \text{or } 1.9 \times 10^{-9} \text{ milligram per kilogram bodyweight per day} \end{aligned}$$

To calculate the field-specific dermal one-day hazard quotient (One-Day $HQ_{der\text{-DART}}$) for



benzo[a]pyrene for combined gender athletes ages 16<30 years, Equation B-34 from Appendix Section B.6.1.4.1 is used with the following parameters:

$$\text{One - Day HQ}_{\text{der-DART-field}} = \frac{\text{AD}_{\text{der-DART-field}}}{\text{DART TC}_{\text{oral}}}$$

where,

$$\text{AD}_{\text{der-DART-field}} = 1.9\text{E-09} \text{ milligram per kilograms bodyweight per day}$$

$$\text{DART TC}_{\text{oral}} = 0.0003 \text{ milligrams per kilogram bodyweight per day (Main Report Tables 4-10 and 4-11)}$$

Therefore,

$$\begin{aligned}\text{One - Day HQ}_{\text{der-DART-field}} &= \frac{1.9 \times 10^{-9} \text{ milligrams per kilogram bodyweight per day}}{0.0003 \text{ milligrams per kilogram bodyweight per day}} \\ &= 0.0000064 \text{ or } 6.4 \times 10^{-6} \text{ (unitless)}\end{aligned}$$

G.1.1.2.2. General Chemical Chronic Dermal Hazard Quotient Example: Acenaphthylene

To calculate the dermal average daily dose (ADD_{der}) of acenaphthylene for combined gender athletes ages 16<30 years, Equation 5-7 from Main Report Section 5.4.4.2 is used with following parameters:

$$\text{ADD}_{\text{der}} = \frac{\text{DL} \times \text{C}_{\text{der-crumb rubber}} \times \text{ABS} \times \text{EV} \times \text{CF1} \times \text{CF2}}{\text{BW}}$$

where,

$$\text{DL} = 0.168 \text{ grams crumb rubber per event (Appendix Section B.4.1, Tables B-82 to B-85)}$$

$$\text{C}_{\text{der-crumb rubber}} = 0.01 \text{ nanograms per gram crumb rubber (Main Report Table 3-7)}$$

$$\text{ABS} = \text{default value of 1 (Appendix Section B.4.3)}$$

$$\text{EV} = 215 \text{ events per year (Appendix Section B.2.3, Tables B-8 to B-17)}$$

$$\text{CF1} = 1 \text{ milligram per 1000000 nanograms}$$

$$\text{CF2} = 1 \text{ year per 365 days}$$

$$\text{BW} = 65.8 \text{ kilograms (Main Report Table 5-5)}$$

Therefore,

$$\begin{aligned}\text{ADD}_{\text{der}} &= \frac{0.168 \text{ grams crumb rubber per event} \times 0.01 \text{ nanogram per grams crumb rubber} \times 1 \times 215 \text{ events per year} \times}{1 \text{ milligram per 1000000 nanograms} \times 1 \text{ year per 365 days}} \\ &\quad 65.8 \text{ kilograms} \\ &= 0.000000000084 \text{ milligrams per kilogram bodyweight per day} \\ &\quad \text{or } 8.4 \times 10^{-12} \text{ milligrams per kilogram bodyweight per day}\end{aligned}$$



To calculate the dermal chronic hazard quotient (Chronic HQ_{der}) for acenaphthylene for combined gender athletes, ages 16<30 years, Equation B-35 from Appendix Section B.6.1.4.2 is used with the following parameters:

$$\text{Chronic HQ}_{\text{der}} = \frac{\text{ADD}_{\text{der}}}{\text{Chronic TC}_{\text{oral}}}$$

where,

$$\text{ADD}_{\text{der}} = 8.4 \times 10^{-12} \text{ milligrams per kilogram bodyweight per day}$$

$$\text{Chronic TC}_{\text{oral}} = 0.06 \text{ milligrams per kilogram bodyweight per day} \text{ (Main Report Tables 4-12 and 4-13)}$$

Therefore,

$$\begin{aligned}\text{Chronic HQ}_{\text{der}} &= \frac{8.4 \times 10^{-12} \text{ milligrams per kilogram bodyweight per day}}{0.06 \text{ milligrams per kilogram bodyweight per day}} \\ &= 0.0000000014 \text{ or } 1.4 \times 10^{-10} \text{ (unitless)}\end{aligned}$$

G.1.1.3. Ingestion

G.1.1.3.1. DART One-Day Ingestion Hazard Quotient Example: Benzo[a]pyrene

To calculate the field-specific ingestion average one-day dose (AD_{ing-DART-field}) for benzo[a]pyrene, for combined gender athletes ages 16<30 years, Equation 5-4 from Main Report Section 5.4.2.3 and Equation B-38 from Appendix Section B.6.1.5.1 are used with the following parameters:

$$\text{AD}_{\text{ing-DART-field}} = \frac{C_{\text{GI-crumb rubber-field}} \times \text{GRAF} \times \text{IR}_{\text{daily-DART}} \times \text{CF}}{\text{BW}}$$

where,

$$C_{\text{GI-crumb rubber-field}} = 7 \text{ nanograms per gram crumb rubber} \text{ (Main Report Table 2-10)}$$

$$\text{GRAF} = \text{default value of 1 (unitless, Appendix Section B.5.2)}$$

$$\text{IR}_{\text{daily-DART}} = 0.315 \text{ grams crumb rubber per day} \text{ (Main Report Table 5-6)}$$

$$\text{CF} = 1 \text{ milligram per 1000000 nanograms}$$

$$\text{BW} = 65.8 \text{ kilograms} \text{ (Main Report Table 5-5)}$$

Therefore,

$$\begin{aligned}\text{AD}_{\text{ing-DART-field}} &= 7 \text{ nanograms per gram crumb rubber} \times 1 \\ &\times 0.315 \text{ gram crumb rubber per day} \times 1 \text{ milligram per 1000000 nanogram} \\ &\div 65.8 \text{ kilograms} \\ &= 0.000000033 \text{ milligrams per kilogram bodyweight per day} \\ &\text{or } 3.3 \times 10^{-8} \text{ milligrams per kilogram bodyweight per day}\end{aligned}$$



To calculate the field-specific ingestion hazard quotient (One-Day HQ_{ing-DART-field}) for benzo[a]pyrene, for combined gender athletes ages 16<30 years, Equation 5-14 from Section 5 of the Main Report is used with the following parameters:

$$\text{One - Day HQ}_{\text{ing-DART-field}} = \frac{\text{AD}_{\text{ing-DART-field}}}{\text{DART TC}_{\text{oral}}}$$

where,

$$\text{AD}_{\text{ing-DART-field}} = 3.3\text{E-}08 \text{ milligrams per kilogram bodyweight per day}$$

$$\text{DART TC}_{\text{oral}} = 0.0003 \text{ milligrams per kilogram bodyweight per day (Main Report Tables 4-10 and 4-11)}$$

Therefore,

$$\begin{aligned}\text{One - Day HQ}_{\text{ing-DART-field}} \\ &= 3.3 \times 10^{-8} \text{ milligrams per kilogram bodyweight per day} \div \\ &\quad 0.0003 \text{ milligrams per kilogram bodyweight per day} \\ &= 0.00011 \text{ or } 1.1 \times 10^{-4} \text{ (unitless)}\end{aligned}$$

G.1.1.3.2. General Chemical Chronic Ingestion Hazard Quotient Example: Acenaphthylene

To calculate the ingestion average daily dose (ADD_{ing-general}) of acenaphthylene, for combined gender athletes ages 16<30 years, Equation 5-8 from Main Report Section 5.4.4.3 with the following parameters:

$$\text{ADD}_{\text{ing}} = \frac{\text{C}_{\text{GI-crumb rubber}} \times \text{GRAF} \times \text{IR}_{\text{daily-ing}} \times \text{CF}}{\text{BW}}$$

where,

$$\text{C}_{\text{GI-crumb rubber}} = 0.32 \text{ ng per grams crumb rubber (Main Report Table 3-2)}$$

$$\text{GRAF} = \text{default value of 1 (unitless, Appendix Section B.5.2)}$$

$$\text{IR}_{\text{daily-ing}} = 0.176 \text{ grams crumb rubber per day (Main Report Table 5-10)}$$

$$\text{CF} = 1 \text{ milligram per 1000000 nanograms}$$

$$\text{BW} = 65.8 \text{ kilograms (Main Report Table 5-5)}$$

Therefore,

$$\begin{aligned}\text{ADD}_{\text{ing}} &= 0.32 \text{ nanogram per gram crumb rubber} \times 1 \times \\ &\quad 0.176 \text{ gram crumb rubber per day} \times 1 \text{ milligram per 1000000 nanograms} \div \\ &\quad 65.8 \text{ kilogram} | \\ &= 0.0000000085 \text{ milligrams per kilogram bodyweight per day} \\ &\quad \text{or } 8.5 \times 10^{-10} \text{ milligrams per kilogram bodyweight per day}\end{aligned}$$



To calculate the ingestion chronic hazard quotient (Chronic HQ_{ing}) for acenaphthylene, for combined gender athletes ages 16<30 years, Equation B-39 from Appendix Section B.6.5.1.2 is used with the following parameters:

$$\text{Chronic HQ}_{\text{ing}} = \frac{\text{ADD}_{\text{ing}}}{\text{Chronic TC}_{\text{oral}}}$$

where,

$$\text{ADD}_{\text{ing}} = 8.5 \times 10^{-10} \text{ milligrams per kilogram bodyweight per day}$$

$$\text{Chronic TC}_{\text{oral}} = 0.06 \text{ milligrams per kilogram bodyweight per day (Main Report Tables 4-12 and 4-13)}$$

Therefore,

$$\begin{aligned}\text{Chronic HQ}_{\text{ing}} &= \frac{8.5 \times 10^{-10} \text{ milligrams per kilogram kg bodyweight per day}}{0.06 \text{ milligrams per kilogram bodyweight per day}} \\ &= 0.000000014 = 1.4 \times 10^{-8}\end{aligned}$$

G.1.2. Lifetime Cancer Risk Calculation Examples

G.1.2.1. Inhalation Lifetime Cancer Risk Example: Benzo[a]pyrene

To calculate the inhalation lifetime cancer risk (Risk_{inh}) of benzo[a]pyrene for the athlete receptor category, the inhalation average daily dose (ADD_{inh}) is first calculated for each age group using Equations 5-9 and 5-10 from Main Report Section 5.4.5.1 with the parameters in Table G-1 as shown below.

$$\text{ADD}_{\text{inh}} = \frac{C_{\text{air-avg}} \times \sum_{\text{event type}} (\text{BR}_{\text{TW}} \times \text{AET}) \times \text{A}_{\text{chem}} \times \text{CF1} \times \text{CF2}}{\text{BW}}$$

Table G-1. Parameter Values for the Calculation of the Average Daily Dose of Benzo[a]pyrene for Athletes Exposed Through the Inhalation Route (ADD_{inh}, milligrams per kilogram bodyweight per day)

Parameter	2<6 years	6<11 years	11<16 years	16<30 years	30<40 years	40<50 years	50<70 years
C _{air-avg} (nanograms per cubic meter, Main Report Table 3-10)	1.1	1.1	1.1	1.1	1.1	1.1	1.1
BR _{TW-practice} (cubic meters per hour, Main Report Table 5-12)	1.4	2.3	2.8	4.2	3.6	3.9	4.1



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Parameter	2<6 years	6<11 years	11<16 years	16<30 years	30<40 years	40<50 years	50<70 years
AET _{practice} (hours per year, Appendix Section B.2.5, Table B-28)	126	156	223	354	343	256	187
BR _{TW-game} (cubic meters per hour, Main Report Table 5-12)	1.5	2.3	2.9	4.4	4.0	4.0	4.4
AET _{game} (hours per year, Appendix Section B.2.5, Table B-32)	104	137	129	241	167	214	239
A _{chem} (unitless, Appendix Section B.3.3)	1	1	1	1	1	1	1
CF1 (milligram per nanograms)	1 / 1000000	1 / 1000000	1 / 1000000	1 / 1000000	1 / 1000000	1 / 1000000	1 / 1000000
CF2 (year per days)	1 / 365	1 / 365	1 / 365	1 / 365	1 / 365	1 / 365	1 / 365
BW (kilograms, Main Report Table 5-5)	20.5	32.0	48.7	65.8	75.3	74.5	74.3
ADD _{inh} (milligrams per kilogram bodyweight per day)	5.1E-08	6.6E-08	6.4E-08	1.2E-07	7.9E-08	7.8E-08	7.6E-08

For a single age group (e.g., combined gender athletes, ages 16<30 years), a sample calculation is:

$$\begin{aligned} \text{ADD}_{\text{inh}-16<30 \text{ years}} &= 1.1 \text{ nanograms per cubic meter} \times \left[\begin{array}{l} (4.2 \text{ cubic meters per hour} \times 354 \text{ hours per year}) \\ + (4.4 \text{ cubic meters per hour} \times 241 \text{ hours per year}) \end{array} \right] \\ &\quad \times 1 \times 1 \text{ year per 365 days} \times 1 \text{ milligram per 1000000 nanograms} \div 65.8 \text{ kilograms} \\ &= 1.1 \text{ nanograms per cubic meter} \times \left[\begin{array}{l} 1486.8 \text{ cubic meters per year} \\ + 1060.4 \text{ cubic meters per year} \end{array} \right] \\ &\quad \times 1 \times 1 \text{ year per 365 days} \times 1 \text{ milligram per 1000000 nanograms} \div 65.8 \text{ kilograms} \\ &= 1.1 \text{ nanograms per cubic meter} \times 2547.2 \text{ cubic meters per year} \times 1 \\ &\quad \times 1 \text{ year per 365 days} \times 1 \text{ milligram per 1000000 nanograms} \div 65.8 \text{ kilograms} \\ &= 0.00000012 \text{ milligrams per kilogram bodyweight per day} \\ &\quad \text{or } 1.2 \times 10^{-7} \text{ milligrams per kilogram bodyweight per day} \end{aligned}$$

Next, the inhalation lifetime average daily dose (LADD_{inh}) of benzo[a]pyrene is calculated using Equation 5-11 from Main Report Section 5.4.5.1 with the parameters in Table G-2 for each age group as shown below.



$$\text{LADD}_{\text{inh}} = \sum_{\text{age}} \frac{\text{ADD}_{\text{inh}} \times \text{ASF} \times \text{ED}}{\text{AT}}$$

Table G-2. Parameter Values for the Calculation of the Lifetime Average Daily Dose of Benzo[a]pyrene for Athletes Exposed Through the Inhalation Route (LADD_{inh} , milligrams per kilogram bodyweight per day)

Parameter	2<6 years	6<11 years	11<16 years	16<30 years	30<40 years	40<50 years	50<70 years
ADD _{inh} (milligrams per kilogram bodyweight per day)	5.1E-08	6.6E-08	6.4E-08	1.2E-07	7.9E-08	7.8E-08	7.6E-08
ASF (unitless, Main Report Table 5-14)	3	3	3	1	1	1	1
ED (years, Main Report Table 5-14)	4	5	5	14	10	10	20
AT (years)	70	70	70	70	70	70	70
LADD _{inh} (milligrams per kilogram bodyweight per day)	8.7E-09	1.4E-08	1.4E-08	2.4E-08	1.1E-08	1.1E-08	2.2E-08

For a single age group (e.g., combined gender athletes, ages 16<30 years), a sample calculation is:

$$\begin{aligned}\text{LADD}_{\text{inh-16<30 years}} \\ &= \frac{1.2 \times 10^{-7} \text{ milligrams per kilogram bodyweight per day} \times 1 \times 14 \text{ years}}{70 \text{ years}} \\ &= 2.4 \times 10^{-8} \text{ milligrams per kilogram bodyweight per day}\end{aligned}$$

For the LADD_{inh} of benzo[a]pyrene for combined gender athletes of all ages, the LADD_{inh} of each age group are summed together:

$$\begin{aligned}\text{LADD}_{\text{inh}} &= 8.7 \times 10^{-9} \text{ milligrams per kilogram bodyweight per day} \\ &\quad + 1.4 \times 10^{-8} \text{ milligrams per kilogram bodyweight per day} \\ &\quad + 1.4 \times 10^{-8} \text{ milligrams per kilogram bodyweight per day} \\ &\quad + 2.4 \times 10^{-8} \text{ milligrams per kilogram bodyweight per day} \\ &\quad + 1.1 \times 10^{-8} \text{ milligrams per kilogram bodyweight per day} \\ &\quad + 1.1 \times 10^{-8} \text{ milligrams per kilogram bodyweight per day} \\ &\quad + 2.2 \times 10^{-8} \text{ milligrams per kilogram bodyweight per day} \\ &= 1.0 \times 10^{-7} \text{ milligrams per kilogram bodyweight per day}\end{aligned}$$

Lastly, to calculate the inhalation lifetime risk (Risk_{inh}) for benzo[a]pyrene, Equation B-



45 from Appendix Section B.6.2.1 is used with the parameters in Table G-3 for each age group.

$$\text{Risk}_{\text{inh-sum}} = \sum_{\text{chem}} [\text{LADD}_{\text{inh}} \times \text{CSF}_{\text{inh}}]$$

Table G-3. Parameter Values For The Calculation Of the Risk Of Benzo[a]pyrene Exposed Through the Inhalation Route (Risk_{inh}, unitless)

Parameter	2<6 years	6<11 years	11<16 years	16<30 years	30<40 years	40<50 years	50<70 years
LADD _{inh} (milligrams per kilogram bodyweight per day)	8.7E-09	1.4E-08	1.4E-08	2.4E-08	1.1E-08	1.1E-08	2.2E-08
CSF _{inh} ((milligrams per kilogram bodyweight per day) ⁻¹ , Main Report Table 4-9)	3.9	3.9	3.9	3.9	3.9	3.9	3.9
Risk _{inh} (unitless)	3.4E-08	5.5E-08	5.4E-08	9.4E-08	4.4E-08	4.3E-08	8.5E-08

For a single age group (e.g., combined gender athletes, ages 16<30 years), a sample calculation is:

$$\begin{aligned}\text{Risk}_{\text{inh-}16<30 \text{ years}} &= 2.4 \times 10^{-8} \text{ milligrams per kilogram bodyweight per day} \\ &\times 3.9 \text{ (milligrams per kilogram bodyweight per day)}^{-1} \\ &= 9.4 \times 10^{-8} \text{ (unitless)}\end{aligned}$$

For the lifetime Risk_{inh} of benzo[a]pyrene for combined gender athletes, the Risk_{inh} of each age group are summed together:

$$\begin{aligned}\text{Risk}_{\text{inh-sum}} &= 3.4 \times 10^{-8} + 5.5 \times 10^{-8} + 5.4 \times 10^{-8} + 9.4 \times 10^{-8} \\ &+ 4.4 \times 10^{-8} + 4.3 \times 10^{-8} + 8.5 \times 10^{-8} = 4.1 \times 10^{-7} \text{ (unitless)}\end{aligned}$$

G.1.2.2. Dermal Lifetime Cancer Risk Example: Benzo[a]pyrene

To calculate the dermal lifetime cancer risk (Risk_{der}) of benzo[a]pyrene for the athlete receptor category, the dermal average daily dose (ADD_{der}), is first calculated for each age group using Equation 5-7 from Main Report Section 5.4.4.2 with the parameters in Table G-4 for each age group as shown below.

$$\text{ADD}_{\text{der}} = \frac{\text{DL} \times \text{C}_{\text{der-crumb rubber}} \times \text{ABS} \times \text{EV} \times \text{CF1} \times \text{CF2}}{\text{BW}}$$



Table G-1. Parameter Values for The Calculation Of The Average Daily Dose Of Benzo[a]pyrene for Athletes Exposed Through The Dermal Route (ADD_{der} , milligrams per kilogram bodyweight per day)

Parameter	2<6 years	6<11 years	11<16 years	16<30 years	30<40 years	40<50 years	50<70 years
DL (grams crumb rubber per event, Appendix Section B.4.1, Table B-82)	0.077	0.109	0.142	0.168	0.180	0.179	0.179
Cder-crumb rubber (nanogram per gram crumb rubber, Main Report Table 3-3)	0.19	0.19	0.19	0.19	0.19	0.19	0.19
ABS (unitless, Appendix B, Section B.4.3)	1	1	1	1	1	1	1
EV (events per year, Appendix Section B.2.3.1, Table B-8)	139	121	149	215	163	137	138
CF1 (milligram per nanograms)	1 / 1000000	1 / 1000000	1 / 1000000	1 / 1000000	1 / 1000000	1 / 1000000	1 / 1000000
CF2 (year per days)	1 / 365	1 / 365	1 / 365	1 / 365	1 / 365	1 / 365	1 / 365
BW (kilograms, Main Report Table 5-5)	20.5	32.0	48.7	65.8	75.3	74.5	74.3
ADD_{der} (milligrams per kilogram bodyweight per day)	2.6E-10	2.1E-10	2.2E-10	2.8E-10	2.0E-10	1.7E-10	1.7E-10

For a single age group (e.g., combined gender athletes, ages 16<30 years), a sample calculation is:

$$\begin{aligned} ADD_{der,16<30} \\ = & 0.168 \text{ grams crumb rubber per event} \times 0.19 \text{ nanograms per gram crumb rubber} \times 1 \times 215 \text{ events per year} \\ & \times 1 \text{ year per 365 days} \times 1 \text{ milligram per 1000000 nanograms} \div 65.8 \text{ kilograms} \\ & = 0.0000000028 \text{ milligrams per kilogram bodyweight per day} \\ & \text{or } 2.8 \times 10^{-10} \text{ milligrams per kilogram bodyweight per day} \end{aligned}$$

Next, the dermal lifetime average daily dose ($LADD_{der}$) of benzo[a]pyrene is calculated using Equation 5-12 from Main Report Section 5.4.5.2 with the parameters in Table G-5 for each age group as shown below.

$$LADD_{der} = \sum_{age} \frac{ADD_{der} \times ASF \times ED}{AT}$$



Table G-2. Parameter Values for the Calculation of the Lifetime Average Daily Dose of Benzo[a]pyrene for Athletes Exposed Through the Dermal Route ($LADD_{der}$, milligrams per kilogram bodyweight per day)

Parameter	2<6 years	6<11 years	11<16 years	16<30 years	30<40 years	40<50 years	50<70 years
ADD _{der} (milligrams per kilogram bodyweight per day)	2.6E-10	2.1E-10	2.2E-10	2.8E-10	2.0E-10	1.7E-10	1.7E-10
ASF (unitless, Table 5-14)	3	3	3	1	1	1	1
ED (years, Table 5-14)	4	5	5	14	10	10	20
AT (years)	70	70	70	70	70	70	70
LADD _{der} (milligrams per kilogram bodyweight per day)	4.5E-11	4.5E-11	4.7E-11	5.6E-11	2.8E-11	2.4E-11	4.8E-11

For a single age group (e.g., combined gender athletes, ages 16<30 years), a sample calculation is:

$$\begin{aligned} LADD_{der-16<30 \text{ years}} \\ = \frac{2.8 \times 10^{-10} \text{ milligrams per kilogram bodyweight per day} \times 1 \times 14 \text{ years}}{70 \text{ years}} \\ = 5.6 \times 10^{-11} \text{ milligrams per kilogram bodyweight per day} \end{aligned}$$

For the LADD_{der} of benzo[a]pyrene for combined gender athletes, the LADD_{der} of each age group are summed together:

$$\begin{aligned} LADD_{der} &= 4.5 \times 10^{-11} \text{ milligrams per kilogram bodyweight per day} \\ &+ 4.5 \times 10^{-11} \text{ milligrams per kilogram bodyweight per day} \\ &+ 4.7 \times 10^{-11} \text{ milligrams per kilogram bodyweight per day} \\ &+ 5.6 \times 10^{-11} \text{ milligrams per kilogram bodyweight per day} \\ &+ 2.8 \times 10^{-11} \text{ milligrams per kilogram bodyweight per day} \\ &+ 2.4 \times 10^{-11} \text{ milligrams per kilogram bodyweight per day} \\ &+ 4.8 \times 10^{-11} \text{ milligrams per kilogram bodyweight per day} \\ &= 2.9 \times 10^{-10} \text{ milligrams per kilogram bodyweight per day} \end{aligned}$$

Lastly, to calculate the dermal lifetime risk ($Risk_{der}$) of benzo[a]pyrene, Equation B-47 from Appendix Section B.6.2.2 is used with the parameters in Table G-6 for each age group as shown below.

$$Risk_{der-sum} = \sum_{chem} [LADD_{der} \times CSF_{oral}]$$



Table G-3. Parameter Values for the Calculation Of the Risk Of Benzo[a]pyrene for Athletes Exposed Through the Dermal Route (Risk_{der}, unitless)

Parameter	2<6 years	6<11 years	11<16 years	16<30 years	30<40 years	40<50 years	50<70 years
LADD _{der} (milligrams per kilogram bodyweight per day)	4.5E-11	4.5E-11	4.7E-11	5.6E-11	2.8E-11	2.4E-11	4.8E-11
CSF _{oral} ((milligrams per kilogram bodyweight per day) ⁻¹ , Main Report Section 4.5.3, Table 4-14)	12	12	12	12	12	12	12
Risk _{der} (unitless)	5.4E-10	5.4E-10	5.7E-10	6.7E-10	3.4E-10	2.9E-10	5.8E-10

For a single age group (combined gender athletes, ages 16<30 years), the following equation and parameters are used:

$$\begin{aligned} \text{Risk}_{\text{der}-16<30 \text{ years}} &= 5.6 \times 10^{-11} \text{ milligrams per kilogram bodyweight per day} \\ &\quad \times 12 \text{ (milligrams per kilogram bodyweight per day)}^{-1} \\ &= 9.0 \times 10^{-10} \text{ (unitless)} \end{aligned}$$

For the lifetime RISK_{der} of benzo[a]pyrene for combined gender athletes, the RISK_{der} of each age group are summed together:

$$\begin{aligned} \text{Risk}_{\text{der}} &= 5.4 \times 10^{-10} + 5.4 \times 10^{-10} + 5.7 \times 10^{-10} + 6.7 \times 10^{-10} + 3.4 \times 10^{-10} \\ &\quad + 2.9 \times 10^{-10} + 5.8 \times 10^{-10} \\ &= 3.5 \times 10^{-9} \text{ (unitless)} \end{aligned}$$

G.1.2.3. Ingestion Lifetime Cancer Risk Example: Benzo[a]pyrene

To calculate the ingestion lifetime cancer risk (Risk_{ing}) of benzo[a]pyrene for the athlete receptor category, the ingestion average daily dose (ADD_{ing}) is first calculated for each age group within the athlete receptor category using Equation 5-8 from Main Report Section 5.4.4.3 with the parameters in Table G-7 for each age group.

$$\text{ADD}_{\text{ing}} = \frac{\text{C}_{\text{GI-crumb rubber}} \times \text{GRAF} \times \text{IR}_{\text{daily}} \times \text{CF1}}{\text{BW}}$$



Table G-1. Parameter Values for the Calculation of the Average Daily Dose of Benzo[a]pyrene for Athletes Exposed Through the Ingestion Route (ADD_{ing} , milligrams per kilogram bodyweight per day)

Parameter	2<6 years	6<11 years	11<16 years	16<30 years	30<40 years	40<50 years	50<70 years
CGI-crumb rubber (nanograms per gram crumb rubber, Main Report Table 3-2)	2.4	2.4	2.4	2.4	2.4	2.4	2.4
GRAF (unitless, Appendix Section B.5.2)	1	1	1	1	1	1	1
IR _{daily} (grams crumb rubber per day, Main Report Table 5-10)	0.095	0.099	0.117	0.176	0.135	0.113	0.115
CF1 (milligram per nanograms)	1 / 1000000	1 / 1000000	1 / 1000000	1 / 1000000	1 / 1000000	1 / 1000000	1 / 1000000
BW (kilograms, Main Report Table 5-5)	20.5	32.0	48.7	65.8	75.3	74.5	74.3
ADD _{ing} (milligrams per kilogram bodyweight per day)	1.1E-08	7.4E-09	5.7E-09	6.4E-09	4.3E-09	3.6E-09	3.7E-09

For a single age group (e.g., combined gender athletes, ages 16<30 years), a sample calculation is:

$$\begin{aligned} ADD_{ing,16<30} &= 2.4 \text{ nanograms per gram crumb rubber} \times 1 \\ &\quad \times 0.176 \text{ gram crumb rubber per day} \\ &\quad \times 1 \text{ milligram per 1000000 nanograms} \div 65.8 \text{ kilograms} \\ &= 0.0000000064 \text{ milligrams per kilogram bodyweight per day} \\ &= 6.4 \times 10^{-9} \text{ milligrams per kilogram bodyweight per day} \end{aligned}$$

Next, to calculate the ingestion lifetime average daily dose (LADD_{ing}) of benzo[a]pyrene, Equation 5-13 from Main Report Section 5.4.5.3 is used with the parameters in Table G-8 for each age group as shown below.

$$LADD_{ing} = \sum_{age} \frac{ADD_{ing} \times ASF \times ED}{AT}$$



Table G-2. Parameter Values for the Calculation of the Lifetime Average Daily Dose of Benzo[a]pyrene for Athletes Exposed Through the Ingestion Route (LADD_{ing}, milligrams per kilogram bodyweight per day)

Parameter	2<6 years	6<11 years	11<16 years	16<30 years	30<40 years	40<50 years	50<70 years
ADD _{ing} (milligrams per kilogram bodyweight per day)	1.1E-08	7.4E-09	5.7E-09	6.4E-09	4.3E-09	3.6E-09	3.7E-09
ASF (unitless, Main Report Table 5-14)	3	3	3	1	1	1	1
ED (years, Main Report Table 5-14)	4	5	5	14	10	10	20
AT (years)	70	70	70	70	70	70	70
LADD _{ing} (milligrams per kilogram bodyweight per day)	1.9E-09	1.6E-09	1.2E-09	1.3E-09	6.1E-10	5.2E-10	1.1E-09

For a single age group (e.g., combined gender athletes, ages 16<30 years), a sample calculation is:

$$\text{LADD}_{\text{ing}-16<30 \text{ years}} = \frac{6.4 \times 10^{-9} \text{ milligrams per kilogram per day} \times 1 \times 14 \text{ years}}{70 \text{ years}} \\ = 1.3 \times 10^{-9} \text{ milligrams per kilogram per day}$$

For the LADD_{ing} of benzo[a]pyrene for combined gender athletes of all ages, the LADD_{ing} of each age group are summed together:

$$\text{LADD}_{\text{ing}} = 1.9 \times 10^{-9} \text{ milligrams per kilogram bodyweight per day} \\ + 1.6 \times 10^{-9} \text{ milligrams per kilogram bodyweight per day} \\ + 1.2 \times 10^{-9} \text{ milligrams per kilogram bodyweight per day} \\ + 1.3 \times 10^{-9} \text{ milligrams per kilogram bodyweight per day} \\ + 6.1 \times 10^{-10} \text{ milligrams per kilogram bodyweight per day} \\ + 5.2 \times 10^{-10} \text{ milligrams per kilogram bodyweight per day} \\ + 1.1 \times 10^{-9} \text{ milligrams per kilogram bodyweight per day} \\ = 8.2 \times 10^{-9} \text{ milligrams per kilogram bodyweight per day}$$

Lastly, to calculate the ingestion lifetime risk (Risk_{ing}) of benzo[a]pyrene, Equation B-49 from Appendix Section B.6.2.3 is used with the parameters in Table G-9 for each age group as shown below.

$$\text{Risk}_{\text{ing-sum}} = \sum_{\text{chem}} [\text{LADD}_{\text{ing}} \times \text{CSF}_{\text{oral}}]$$



Table G-3. Parameter Values For The Calculation Of The Risk Of Benzo[a]pyrene for Athletes Exposed Through The Ingestion Route (Risk_{ing}, unitless)

Parameter	2<6 years	6<11 years	11<16 years	16<30 years	30<40 years	40<50 years	50<70 years
LADD _{ing} (mg per kg bodyweight per day)	1.9E-09	1.6E-09	1.2E-09	1.3E-09	6.1E-10	5.2E-10	1.1E-09
CSF _{oral} ((milligrams per kilogram bodyweight per day) ⁻¹ , Main Report Table 4-14)	12	12	12	12	12	12	12
Risk _{ing} (unitless)	2.3E-08	1.9E-08	1.5E-08	1.5E-08	7.3E-09	6.2E-09	1.3E-08

For a single age group (e.g. combined gender athletes, ages 16<30 years), the following equation and parameters are used:

$$\begin{aligned} \text{Risk}_{\text{ing}-16<30 \text{ years}} &= 1.3 \times 10^{-9} \text{ milligrams per kilogram bodyweight per day} \\ &\quad \times 12 \text{ (milligrams per kilogram bodyweight per day)}^{-1} \\ &= 1.5 \times 10^{-8} \text{ (unitless)} \end{aligned}$$

For the lifetime RISK_{ing} of benzo[a]pyrene for combined gender athletes, the RISK_{ing} of each age group are summed together:

$$\begin{aligned} \text{Risk}_{\text{ing-sum}} &= 2.3 \times 10^{-8} + 1.9 \times 10^{-8} + 1.5 \times 10^{-8} + 1.5 \times 10^{-8} + 7.3 \times 10^{-9} \\ &\quad + 6.2 \times 10^{-9} + 1.3 \times 10^{-8} \\ &= 9.8 \times 10^{-8} \text{ (unitless)} \end{aligned}$$

G.2. Non-Cancer Hazard Quotient (HQ) and Hazard Index (HI)

This section presents the hazard quotient (HQ) of all detected chemicals on synthetic turf fields for the inhalation, dermal, and ingestion routes when toxicity criteria (TC) are available and the multi-route non-cancer hazard index (HI). Both acute and chronic HQs are calculated for the inhalation route. Based on the chemical type, HQs are calculated for chemicals with regular endpoints (general chemicals), chemicals with developmental and/or reproductive endpoints (DARTs), and chemicals that cause sensory irritation (sensory irritants). Details of each exposure route and how to calculate the HQ are presented in Main Report Chapter 5. An example calculation hazards each for acute and chronic inhalation (acute, one-day, and chronic exposures) and ingestion (one-day exposure and chronic) and dermal (one-day and chronic exposures) is presented in Section G.1.1.



G.2.1. Acute Inhalation Hazard Quotient (Acute HQ_{inh}) and Acute Inhalation Hazard Index (Acute HI)

Acute exposure to chemicals via inhalation is the only acute exposure route assessed in the Study. Acute exposures of chemicals via dermal or oral route are not included because Acute TCs of the detected chemicals for these two routes are not available. More importantly, toxicity of chemicals exposed chronically via these non-inhalation routes usually occurred at lower levels than acute exposures that the chronic hazard assessment (or one-day exposure for DARTs) can be applied to protect the hazards from acute exposure. Table G-10 lists the Acute HQ_{inh} for individual chemicals detected in air on- or off-field. It also summarizes the inhalation route total of the Acute HQ_{inh-sum} of three groups of chemicals (field-related, non-field-related, and all chemicals). Since inhalation route is the only exposure included in the acute hazard assessment, the Acute HQ_{inh-sum} equals to the Acute Hazard Index (Acute HI) for each group of chemicals.

Table G-1. Acute Inhalation Hazard Quotients by Chemicals (Acute HQ_{inh}, unitless), Route Total Acute Inhalation Hazard Quotients (Acute HQ_{inh-sum}, unitless), and Acute Inhalation Hazard Indices (Acute HI, unitless)—All Receptors

Chemical	CASRN	On-Field Acute HQ _{inh}	Off-Field Acute HQ _{inh}
Styrene ^a	100-42-5	7.7E-05	6.6E-05
Field-Related Acute HQ _{inh-sum} or Field-Related Acute HI		7.7E-05	6.6E-05
Acetaldehyde	75-07-0	2.1E-02	Not assessed
Benzene	71-43-2	1.4E-01	1.3E-01
2-Butanone	78-93-3	1.5E-04	Not assessed
2-Butoxyethanol	111-76-2	2.2E-04	1.0E-04
Formaldehyde	50-00-0	3.1E-01	Not assessed
Phenol	108-95-2	3.6E-05	3.6E-05
Tetrachloroethylene	127-18-4	2.1E-05	2.1E-05
Toluene	108-88-3	2.4E-03	2.0E-03
m/p-Xylene	106-42-3	2.4E-04	2.3E-04
o-Xylene	95-47-6	1.0E-04	1.0E-04
Non-Field Related Acute HQ _{inh-sum} or Non-Field Related Acute HI		4.7E-01	1.3E-01



Chemical	CASRN	On-Field Acute HQ _{inh}	Off-Field Acute HQ _{inh}
All Chemical Acute HI ^b		4.7E-01	1.3E-01

^a Styrene was designated as field-related chemical in this Study. All the other chemicals listed in this table were designated as non-field-related chemicals (see Section D.4.3 of Appendix D).

^b Acute exposure is only assessed for inhalation to chemicals. The acute hazard index (Acute HI) equals the sum of acute hazard quotients (Acute HQ_{inh-sum}) assessed.

G.2.2. One-Day Inhalation Hazard Quotient for Developmental and Reproductive Toxicants (One-Day HQ_{inh-DART}, unitless)

Except for lead, the Study assesses non-cancer hazard quotient from one-day exposure to DARTs (One-Day HQ_{inh-DART}, listed in Table G-11). Because of the single day exposure assumption, the field-specific One-Day HQ_{inh-DART} (One-Day HQ_{inh-DART-field}) is derived from field-specific concentration of each DART in the air on- or off-field (Cair-field) and One-Day HQ_{inh-DART-field} is summed across chemicals detected in each field to obtain the field-specific inhalation route total (One-Day HQ_{inh-DART-sum-field}).

Although lead is considered as a DART based on its developmental endpoint, the metal is assessed in chronic exposure and chronic non-cancer hazard (see explanation in Section 4.6.1 of Chapter 4 and Chronic HQ results in Section G.1.1.3.2 of Appendix G).

Table G-1. List of Developmental and Reproductive Toxicants (DARTs) Included in the One-Day Inhalation Hazard Quotients (One-Day HQ_{inh-DART}) Assessment

Chemical	CASRN	Number of Field Sampled		Type of Sample
		On-Field	Off-Field	
Non-Field-Related				
2-Butanone	78-93-3	34	0	ALD
Field-Related				
Benzo[a]pyrene	50-32-8	34	33	SVOC
Benzo[e]pyrene	192-97-2	34	33	SVOC
Benzo[g,h,i]perylene	191-24-2	34	33	SVOC
Bis(2-Ethylhexyl)adipate	103-23-1	34	33	SVOC
n-Caproic acid vinyl ester	3050-69-9	34	33	SVOC
Chrysene	218-01-9	34	33	SVOC
Coronene	191-07-1	34	33	SVOC



Chemical	CASRN	Number of Field Sampled		Type of Sample
		On-Field	Off-Field	
Cyclohexanamine, N-cyclohexyl-	101-83-7	34	33	SVOC
Cyclohexylamine	108-91-8	34	33	SVOC
Cyclopenta[cd]pyrene	27208-37-3	34	33	SVOC
N,N-Dicyclohexylmethylamine	7560-83-0	34	33	SVOC
Dimethyl phthalate	131-11-3	34	33	SVOC
Indeno[1,2,3-cd]pyrene	193-39-5	34	33	SVOC
Methyl stearate	112-61-8	34	33	SVOC
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	34	33	SVOC
Phenol, 4-(1-phenylethyl)-	1988-89-2	34	33	SVOC
4-tert-Octylphenol	140-66-9	34	33	SVOC

ALD: Carbonyl samples collected with 2,4-dinitrophenylhydrazine cartridges; and SVOC: semivolatile organic chemical (SVOC) samples collected with SVOC sample trains

Table G-2. **On-Field** Field-Specific^a One-Day Inhalation Route Total Hazard Quotients for Individual **Field-Related DARTs** (One-Day HQ_{inh-DART-field}, unitless)— Combined Gender **Athletes 2<6 years**

Chemical	CASRN	OneDayHQ _{inh-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Benzo[a]pyrene	50-32-8	0.0E+00	2.1E-03	2.2E-03	1.1E-03	5.6E-03	8.6E-03
Benzo[e]pyrene	192-97-2	0.0E+00	3.4E-05	7.8E-05	0.0E+00	2.3E-04	2.3E-04
Benzo[g,h,i]perylene	191-24-2	0.0E+00	2.4E-04	3.5E-04	9.1E-05	9.4E-04	1.4E-03
Bis(2-Ethylhexyl)adipate	103-23-1	0.0E+00	1.6E-04	9.4E-04	0.0E+00	0.0E+00	5.5E-03
n-Caproic acid vinyl ester	3050-69-9	0.0E+00	5.0E-05	2.9E-04	0.0E+00	0.0E+00	1.7E-03
Chrysene	218-01-9	0.0E+00	3.7E-04	5.8E-04	0.0E+00	1.4E-03	2.4E-03
Coronene	191-07-1	0.0E+00	1.6E-04	2.9E-04	0.0E+00	5.5E-04	1.3E-03
Cyclohexanamine, N-cyclohexyl-	101-83-7	0.0E+00	3.5E-07	5.9E-07	2.4E-07	1.1E-06	3.2E-06



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Chemical	CASRN	OneDayHQ _{inh-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Cyclohexylamine	108-91-8	0.0E+00	2.4E-06	7.0E-06	0.0E+00	1.6E-05	3.2E-05
Cyclopenta[cd]pyrene	27208-37-3	0.0E+00	1.3E-04	1.6E-04	4.9E-05	3.8E-04	7.5E-04
N,N-Dicyclohexylmethylamine	7560-83-0	0.0E+00	3.5E-07	4.9E-07	2.6E-07	1.4E-06	2.1E-06
Dimethyl phthalate	131-11-3	0.0E+00	6.6E-06	2.2E-05	0.0E+00	4.4E-05	1.1E-04
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	2.0E-04	6.4E-04	0.0E+00	2.2E-03	2.2E-03
Methyl stearate	112-61-8	0.0E+00	4.1E-05	8.7E-05	0.0E+00	2.8E-04	3.3E-04
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	0.0E+00	9.3E-08	3.8E-07	0.0E+00	5.5E-07	1.6E-06
Phenol, 4-(1-phenylethyl)-	1988-89-2	0.0E+00	2.3E-06	6.2E-06	0.0E+00	1.1E-05	3.3E-05
4-tert-Octylphenol	140-66-9	0.0E+00	9.5E-06	2.0E-05	0.0E+00	5.4E-05	7.3E-05

^a 35 field-specific One-Day HQ_{inh-DART-field} are included in this table.

Table G-3. On-Field Field-Specific^a One-Day Inhalation Route Total Hazard Quotients for Individual Field-Related DARTs (One-Day HQ_{inh-DART-field}, unitless)— Combined Gender Athletes 6<11 years

Chemical	CASRN	OneDayHQ _{inh-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Benzo[a]pyrene	50-32-8	0.0E+00	1.6E-03	1.7E-03	8.4E-04	4.2E-03	6.5E-03
Benzo[e]pyrene	192-97-2	0.0E+00	2.6E-05	5.9E-05	0.0E+00	1.8E-04	1.8E-04
Benzo[g,h,i]perylene	191-24-2	0.0E+00	1.8E-04	2.7E-04	6.9E-05	7.1E-04	1.0E-03
Bis(2-Ethylhexyl)adipate	103-23-1	0.0E+00	1.2E-04	7.1E-04	0.0E+00	0.0E+00	4.1E-03
n-Caproic acid vinyl ester	3050-69-9	0.0E+00	3.8E-05	2.2E-04	0.0E+00	0.0E+00	1.3E-03
Chrysene	218-01-9	0.0E+00	2.8E-04	4.4E-04	0.0E+00	1.1E-03	1.8E-03
Coronene	191-07-1	0.0E+00	1.2E-04	2.2E-04	0.0E+00	4.2E-04	1.0E-03
Cyclohexanamine, N-cyclohexyl-	101-83-7	0.0E+00	2.7E-07	4.5E-07	1.8E-07	8.1E-07	2.4E-06
Cyclohexylamine	108-91-8	0.0E+00	1.8E-06	5.3E-06	0.0E+00	1.2E-05	2.4E-05
Cyclopenta[cd]pyrene	27208-37-3	0.0E+00	1.0E-04	1.2E-04	3.7E-05	2.9E-04	5.7E-04



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Chemical	CASRN	OneDayHQ _{inh-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
N,N-Dicyclohexylmethylamine	7560-83-0	0.0E+00	2.6E-07	3.7E-07	2.0E-07	1.1E-06	1.6E-06
Dimethyl phthalate	131-11-3	0.0E+00	5.0E-06	1.7E-05	0.0E+00	3.4E-05	8.6E-05
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	1.5E-04	4.9E-04	0.0E+00	1.7E-03	1.7E-03
Methyl stearate	112-61-8	0.0E+00	3.1E-05	6.6E-05	0.0E+00	2.1E-04	2.5E-04
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	0.0E+00	7.0E-08	2.8E-07	0.0E+00	4.2E-07	1.2E-06
Phenol, 4-(1-phenylethyl)-	1988-89-2	0.0E+00	1.7E-06	4.7E-06	0.0E+00	8.1E-06	2.5E-05
4-tert-Octylphenol	140-66-9	0.0E+00	7.2E-06	1.5E-05	0.0E+00	4.1E-05	5.5E-05

^a 35 field-specific One-Day HQ_{inh-DART-field} are included in this table.

Table G-4. On-Field Field-Specific^a One-Day Inhalation Route Total Hazard Quotients for Individual Field-Related DARTs (One-Day HQ_{inh-DART-field}, unitless)— Combined Gender Athletes 11<16 years

Chemical	CASRN	OneDayHQ _{inh-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Benzo[a]pyrene	50-32-8	0.0E+00	2.6E-01	2.8E-01	1.4E-01	7.1E-01	1.1E+00
Benzo[e]pyrene	192-97-2	0.0E+00	4.3E-03	9.9E-03	0.0E+00	2.9E-02	2.9E-02
Benzo[g,h,i]perylene	191-24-2	0.0E+00	3.0E-02	4.4E-02	1.1E-02	1.2E-01	1.7E-01
Bis(2-Ethylhexyl)adipate	103-23-1	0.0E+00	1.0E-04	5.9E-04	0.0E+00	0.0E+00	3.5E-03
n-Caproic acid vinyl ester	3050-69-9	0.0E+00	3.2E-05	1.9E-04	0.0E+00	0.0E+00	1.1E-03
Chrysene	218-01-9	0.0E+00	4.7E-02	7.3E-02	0.0E+00	1.8E-01	3.0E-01
Coronene	191-07-1	0.0E+00	2.0E-02	3.7E-02	0.0E+00	6.9E-02	1.7E-01
Cyclohexanamine, N-cyclohexyl-	101-83-7	0.0E+00	2.2E-07	3.7E-07	1.5E-07	6.7E-07	2.0E-06
Cyclohexylamine	108-91-8	0.0E+00	1.5E-06	4.4E-06	0.0E+00	1.0E-05	2.0E-05
Cyclopenta[cd]pyrene	27208-37-3	0.0E+00	1.7E-02	2.0E-02	6.2E-03	4.8E-02	9.5E-02
N,N-Dicyclohexylmethylamine	7560-83-0	0.0E+00	2.2E-07	3.1E-07	1.7E-07	9.1E-07	1.3E-06
Dimethyl phthalate	131-11-3	0.0E+00	4.2E-06	1.4E-05	0.0E+00	2.8E-05	7.1E-05



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Chemical	CASRN	OneDayHQ _{inh-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	2.5E-02	8.1E-02	0.0E+00	2.8E-01	2.8E-01
Methyl stearate	112-61-8	0.0E+00	2.6E-05	5.5E-05	0.0E+00	1.7E-04	2.1E-04
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	0.0E+00	5.8E-08	2.4E-07	0.0E+00	3.5E-07	9.9E-07
Phenol, 4-(1-phenylethyl)-	1988-89-2	0.0E+00	1.5E-06	3.9E-06	0.0E+00	6.8E-06	2.1E-05
4-tert-Octylphenol	140-66-9	0.0E+00	6.0E-06	1.2E-05	0.0E+00	3.4E-05	4.6E-05

^a 35 field-specific One-Day HQ_{inh-DART-field} are included in this table.

Table G-5. On-Field Field-Specific^a One-Day Inhalation Route Total Hazard Quotients for Individual Field-Related DARTs (One-Day HQ_{inh-DART-field}, unitless)— Combined Gender Athletes 16<30 years

Chemical	CASRN	OneDayHQ _{inh-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Benzo[a]pyrene	50-32-8	0.0E+00	3.8E-01	4.1E-01	2.1E-01	1.0E+00	1.6E+00
Benzo[e]pyrene	192-97-2	0.0E+00	6.3E-03	1.5E-02	0.0E+00	4.3E-02	4.3E-02
Benzo[g,h,i]perylene	191-24-2	0.0E+00	4.4E-02	6.5E-02	1.7E-02	1.7E-01	2.6E-01
Bis(2-Ethylhexyl)adipate	103-23-1	0.0E+00	1.5E-04	8.7E-04	0.0E+00	0.0E+00	5.1E-03
n-Caproic acid vinyl ester	3050-69-9	0.0E+00	4.7E-05	2.7E-04	0.0E+00	0.0E+00	1.6E-03
Chrysene	218-01-9	0.0E+00	6.9E-02	1.1E-01	0.0E+00	2.6E-01	4.5E-01
Coronene	191-07-1	0.0E+00	2.9E-02	5.4E-02	0.0E+00	1.0E-01	2.5E-01
Cyclohexanamine, N-cyclohexyl-	101-83-7	0.0E+00	3.3E-07	5.5E-07	2.2E-07	9.9E-07	3.0E-06
Cyclohexylamine	108-91-8	0.0E+00	2.2E-06	6.5E-06	0.0E+00	1.5E-05	3.0E-05
Cyclopenta[cd]pyrene	27208-37-3	0.0E+00	2.5E-02	3.0E-02	9.1E-03	7.1E-02	1.4E-01
N,N-Dicyclohexylmethylamine	7560-83-0	0.0E+00	3.2E-07	4.5E-07	2.4E-07	1.3E-06	1.9E-06
Dimethyl phthalate	131-11-3	0.0E+00	6.1E-06	2.0E-05	0.0E+00	4.1E-05	1.0E-04
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	3.6E-02	1.2E-01	0.0E+00	4.1E-01	4.1E-01
Methyl stearate	112-61-8	0.0E+00	3.8E-05	8.0E-05	0.0E+00	2.6E-04	3.1E-04



Chemical	CASRN	OneDayHQ _{inh-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	0.0E+00	8.6E-08	3.5E-07	0.0E+00	5.1E-07	1.5E-06
Phenol, 4-(1-phenylethyl)-	1988-89-2	0.0E+00	2.1E-06	5.7E-06	0.0E+00	9.9E-06	3.0E-05
4-tert-Octylphenol	140-66-9	0.0E+00	8.8E-06	1.8E-05	0.0E+00	5.0E-05	6.8E-05

^a 35 field-specific One-Day HQ_{inh-DART-field} are included in this table.

Table G-6. **On-Field Field-Specific^a One-Day Inhalation Route Total Hazard Quotients for Individual Field-Related DARTs (One-Day HQ_{inh-DART-field}, unitless)— Combined Gender Athletes 30<40 years**

Chemical	CASRN	OneDayHQ _{inh-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Benzo[a]pyrene	50-32-8	0.0E+00	2.6E-01	2.7E-01	1.4E-01	7.0E-01	1.1E+00
Benzo[e]pyrene	192-97-2	0.0E+00	4.2E-03	9.8E-03	0.0E+00	2.9E-02	2.9E-02
Benzo[g,h,i]perylene	191-24-2	0.0E+00	3.0E-02	4.4E-02	1.1E-02	1.2E-01	1.7E-01
Bis(2-Ethylhexyl)adipate	103-23-1	0.0E+00	1.0E-04	5.8E-04	0.0E+00	0.0E+00	3.4E-03
n-Caproic acid vinyl ester	3050-69-9	0.0E+00	3.1E-05	1.8E-04	0.0E+00	0.0E+00	1.1E-03
Chrysene	218-01-9	0.0E+00	4.7E-02	7.2E-02	0.0E+00	1.7E-01	3.0E-01
Coronene	191-07-1	0.0E+00	1.9E-02	3.7E-02	0.0E+00	6.8E-02	1.7E-01
Cyclohexanamine, N-cyclohexyl-	101-83-7	0.0E+00	2.2E-07	3.7E-07	1.5E-07	6.7E-07	2.0E-06
Cyclohexylamine	108-91-8	0.0E+00	1.5E-06	4.4E-06	0.0E+00	1.0E-05	2.0E-05
Cyclopenta[cd]pyrene	27208-37-3	0.0E+00	1.6E-02	2.0E-02	6.2E-03	4.8E-02	9.4E-02
N,N-Dicyclohexylmethylamine	7560-83-0	0.0E+00	2.2E-07	3.0E-07	1.6E-07	9.0E-07	1.3E-06
Dimethyl phthalate	131-11-3	0.0E+00	4.1E-06	1.4E-05	0.0E+00	2.8E-05	7.0E-05
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	2.4E-02	8.0E-02	0.0E+00	2.8E-01	2.8E-01
Methyl stearate	112-61-8	0.0E+00	2.6E-05	5.4E-05	0.0E+00	1.7E-04	2.1E-04
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	0.0E+00	5.8E-08	2.3E-07	0.0E+00	3.4E-07	9.8E-07
Phenol, 4-(1-phenylethyl)-	1988-89-2	0.0E+00	1.4E-06	3.9E-06	0.0E+00	6.7E-06	2.0E-05



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Chemical	CASRN	OneDayHQ _{inh-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
4-tert-Octylphenol	140-66-9	0.0E+00	5.9E-06	1.2E-05	0.0E+00	3.3E-05	4.5E-05

^a 35 field-specific One-Day HQ_{inh-DART-field} are included in this table.

Table G-7. On-Field Field-Specific^a One-Day Inhalation Route Total Hazard Quotients for Individual Field-Related DARTs (One-Day HQ_{inh-DART-field}, unitless)— Combined Gender Athletes 40<50 years

Chemical	CASRN	OneDayHQ _{inh-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Benzo[a]pyrene	50-32-8	0.0E+00	2.6E-01	2.7E-01	1.4E-01	7.0E-01	1.1E+00
Benzo[e]pyrene	192-97-2	0.0E+00	4.2E-03	9.8E-03	0.0E+00	2.9E-02	2.9E-02
Benzo[g,h,i]perylene	191-24-2	0.0E+00	3.0E-02	4.4E-02	1.1E-02	1.2E-01	1.7E-01
Bis(2-Ethylhexyl)adipate	103-23-1	0.0E+00	1.0E-04	5.8E-04	0.0E+00	0.0E+00	3.4E-03
n-Caproic acid vinyl ester	3050-69-9	0.0E+00	3.1E-05	1.8E-04	0.0E+00	0.0E+00	1.1E-03
Chrysene	218-01-9	0.0E+00	4.7E-02	7.2E-02	0.0E+00	1.7E-01	3.0E-01
Coronene	191-07-1	0.0E+00	1.9E-02	3.7E-02	0.0E+00	6.8E-02	1.7E-01
Cyclohexanamine, N-cyclohexyl-	101-83-7	0.0E+00	2.2E-07	3.7E-07	1.5E-07	6.7E-07	2.0E-06
Cyclohexylamine	108-91-8	0.0E+00	1.5E-06	4.4E-06	0.0E+00	1.0E-05	2.0E-05
Cyclopenta[cd]pyrene	27208-37-3	0.0E+00	1.6E-02	2.0E-02	6.2E-03	4.8E-02	9.4E-02
N,N-Dicyclohexylmethylamine	7560-83-0	0.0E+00	2.2E-07	3.0E-07	1.6E-07	9.0E-07	1.3E-06
Dimethyl phthalate	131-11-3	0.0E+00	4.1E-06	1.4E-05	0.0E+00	2.8E-05	7.0E-05
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	2.4E-02	8.0E-02	0.0E+00	2.8E-01	2.8E-01
Methyl stearate	112-61-8	0.0E+00	2.6E-05	5.4E-05	0.0E+00	1.7E-04	2.1E-04
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	0.0E+00	5.8E-08	2.3E-07	0.0E+00	3.4E-07	9.8E-07
Phenol, 4-(1-phenylethyl)-	1988-89-2	0.0E+00	1.4E-06	3.9E-06	0.0E+00	6.7E-06	2.0E-05
4-tert-Octylphenol	140-66-9	0.0E+00	5.9E-06	1.2E-05	0.0E+00	3.3E-05	4.5E-05

^a 35 field-specific One-Day HQ_{inh-DART-field} are included in this table.



Table G-8. **On-Field** Field-Specific^a One-Day Inhalation Route Total Hazard Quotients for Individual **Field-Related DARTs** (One-Day HQ_{inh-DART-field}, unitless)— Combined Gender **Athletes 50<70 years**

Chemical	CASRN	OneDayHQ _{inh-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Benzo[a]pyrene	50-32-8	0.0E+00	2.8E-01	2.9E-01	1.5E-01	7.5E-01	1.2E+00
Benzo[e]pyrene	192-97-2	0.0E+00	4.6E-03	1.1E-02	0.0E+00	3.1E-02	3.1E-02
Benzo[g,h,i]perylene	191-24-2	0.0E+00	3.2E-02	4.7E-02	1.2E-02	1.3E-01	1.9E-01
Bis(2-Ethylhexyl)adipate	103-23-1	0.0E+00	1.1E-04	6.3E-04	0.0E+00	0.0E+00	3.7E-03
n-Caproic acid vinyl ester	3050-69-9	0.0E+00	3.4E-05	2.0E-04	0.0E+00	0.0E+00	1.2E-03
Chrysene	218-01-9	0.0E+00	5.0E-02	7.8E-02	0.0E+00	1.9E-01	3.2E-01
Coronene	191-07-1	0.0E+00	2.1E-02	4.0E-02	0.0E+00	7.4E-02	1.8E-01
Cyclohexanamine, N-cyclohexyl-	101-83-7	0.0E+00	2.4E-07	4.0E-07	1.6E-07	7.2E-07	2.2E-06
Cyclohexylamine	108-91-8	0.0E+00	1.6E-06	4.7E-06	0.0E+00	1.1E-05	2.2E-05
Cyclopenta[cd]pyrene	27208-37-3	0.0E+00	1.8E-02	2.2E-02	6.7E-03	5.2E-02	1.0E-01
N,N-Dicyclohexylmethylamine	7560-83-0	0.0E+00	2.3E-07	3.3E-07	1.8E-07	9.7E-07	1.4E-06
Dimethyl phthalate	131-11-3	0.0E+00	4.4E-06	1.5E-05	0.0E+00	3.0E-05	7.6E-05
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	2.6E-02	8.6E-02	0.0E+00	3.0E-01	3.0E-01
Methyl stearate	112-61-8	0.0E+00	2.8E-05	5.9E-05	0.0E+00	1.9E-04	2.2E-04
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	0.0E+00	6.2E-08	2.5E-07	0.0E+00	3.7E-07	1.1E-06
Phenol, 4-(1-phenylethyl)-	1988-89-2	0.0E+00	1.6E-06	4.2E-06	0.0E+00	7.2E-06	2.2E-05
4-tert-Octylphenol	140-66-9	0.0E+00	6.4E-06	1.3E-05	0.0E+00	3.6E-05	4.9E-05

^a 35 field-specific One-Day HQ_{inh-DART-field} are included in this table.

Table G-9. **On-Field** Field-Specific^a One-Day Inhalation Route Total Hazard Quotients for Individual **Field-Related DARTs** (One-Day HQ_{inh-DART-field}, unitless)— Combined Gender **Coaches 16<30 years**

Chemical	CASRN	OneDayHQ _{inh-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Benzo[a]pyrene	50-32-8	0.0E+00	1.6E-01	1.7E-01	8.8E-02	4.4E-01	6.8E-01



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Chemical	CASRN	OneDayHQ _{inh-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Benzo[e]pyrene	192-97-2	0.0E+00	2.7E-03	6.2E-03	0.0E+00	1.8E-02	1.8E-02
Benzo[g,h,i]perylene	191-24-2	0.0E+00	1.9E-02	2.8E-02	7.2E-03	7.4E-02	1.1E-01
Bis(2-Ethylhexyl)adipate	103-23-1	0.0E+00	6.3E-05	3.7E-04	0.0E+00	0.0E+00	2.2E-03
n-Caproic acid vinyl ester	3050-69-9	0.0E+00	2.0E-05	1.2E-04	0.0E+00	0.0E+00	6.8E-04
Chrysene	218-01-9	0.0E+00	2.9E-02	4.6E-02	0.0E+00	1.1E-01	1.9E-01
Coronene	191-07-1	0.0E+00	1.2E-02	2.3E-02	0.0E+00	4.3E-02	1.0E-01
Cyclohexanamine, N-cyclohexyl-	101-83-7	0.0E+00	1.4E-07	2.3E-07	9.5E-08	4.2E-07	1.3E-06
Cyclohexylamine	108-91-8	0.0E+00	9.3E-07	2.8E-06	0.0E+00	6.3E-06	1.3E-05
Cyclopenta[cd]pyrene	27208-37-3	0.0E+00	1.0E-02	1.3E-02	3.9E-03	3.0E-02	5.9E-02
N,N-Dicyclohexylmethylamine	7560-83-0	0.0E+00	1.4E-07	1.9E-07	1.0E-07	5.7E-07	8.2E-07
Dimethyl phthalate	131-11-3	0.0E+00	2.6E-06	8.6E-06	0.0E+00	1.8E-05	4.5E-05
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	1.5E-02	5.0E-02	0.0E+00	1.8E-01	1.8E-01
Methyl stearate	112-61-8	0.0E+00	1.6E-05	3.4E-05	0.0E+00	1.1E-04	1.3E-04
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	0.0E+00	3.6E-08	1.5E-07	0.0E+00	2.2E-07	6.2E-07
Phenol, 4-(1-phenylethyl)-	1988-89-2	0.0E+00	9.1E-07	2.4E-06	0.0E+00	4.2E-06	1.3E-05
4-tert-Octylphenol	140-66-9	0.0E+00	3.7E-06	7.8E-06	0.0E+00	2.1E-05	2.9E-05

^a 35 field-specific One-Day HQ_{inh-DART-field} are included in this table.

Table G-10. **On-Field Field-Specific^a One-Day Inhalation Route Total Hazard Quotients for Individual Field-Related DARTs (One-Day HQ_{inh-DART-field}, unitless)— Combined Gender Coaches 30<40 years**

Chemical	CASRN	OneDayHQ _{inh-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Benzo[a]pyrene	50-32-8	0.0E+00	1.4E-01	1.5E-01	7.7E-02	3.9E-01	5.9E-01
Benzo[e]pyrene	192-97-2	0.0E+00	2.4E-03	5.4E-03	0.0E+00	1.6E-02	1.6E-02
Benzo[g,h,i]perylene	191-24-2	0.0E+00	1.6E-02	2.4E-02	6.3E-03	6.5E-02	9.5E-02
Bis(2-Ethylhexyl)adipate	103-23-1	0.0E+00	5.5E-05	3.2E-04	0.0E+00	0.0E+00	1.9E-03



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Chemical	CASRN	OneDayHQ _{inh-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
n-Caproic acid vinyl ester	3050-69-9	0.0E+00	1.7E-05	1.0E-04	0.0E+00	0.0E+00	5.9E-04
Chrysene	218-01-9	0.0E+00	2.6E-02	4.0E-02	0.0E+00	9.6E-02	1.7E-01
Coronene	191-07-1	0.0E+00	1.1E-02	2.0E-02	0.0E+00	3.8E-02	9.2E-02
Cyclohexanamine, N-cyclohexyl-	101-83-7	0.0E+00	1.2E-07	2.0E-07	8.3E-08	3.7E-07	1.1E-06
Cyclohexylamine	108-91-8	0.0E+00	8.2E-07	2.4E-06	0.0E+00	5.5E-06	1.1E-05
Cyclopenta[cd]pyrene	27208-37-3	0.0E+00	9.1E-03	1.1E-02	3.4E-03	2.6E-02	5.2E-02
N,N-Dicyclohexylmethylamine	7560-83-0	0.0E+00	1.2E-07	1.7E-07	9.0E-08	5.0E-07	7.1E-07
Dimethyl phthalate	131-11-3	0.0E+00	2.3E-06	7.5E-06	0.0E+00	1.5E-05	3.9E-05
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	1.4E-02	4.4E-02	0.0E+00	1.5E-01	1.5E-01
Methyl stearate	112-61-8	0.0E+00	1.4E-05	3.0E-05	0.0E+00	9.5E-05	1.1E-04
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	0.0E+00	3.2E-08	1.3E-07	0.0E+00	1.9E-07	5.4E-07
Phenol, 4-(1-phenylethyl)-	1988-89-2	0.0E+00	7.9E-07	2.1E-06	0.0E+00	3.7E-06	1.1E-05
4-tert-Octylphenol	140-66-9	0.0E+00	3.3E-06	6.8E-06	0.0E+00	1.8E-05	2.5E-05

^a 35 field-specific One-Day HQ_{inh-DART-field} are included in this table.

Table G-11. **On-Field Field-Specific^a One-Day Inhalation Route Total Hazard Quotients for Individual Field-Related DARTs (One-Day HQ_{inh-DART-field}, unitless)— Combined Gender Coaches 40<50 years**

Chemical	CASRN	OneDayHQ _{inh-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Benzo[a]pyrene	50-32-8	0.0E+00	1.4E-01	1.5E-01	7.7E-02	3.9E-01	6.0E-01
Benzo[e]pyrene	192-97-2	0.0E+00	2.4E-03	5.5E-03	0.0E+00	1.6E-02	1.6E-02
Benzo[g,h,i]perylene	191-24-2	0.0E+00	1.7E-02	2.5E-02	6.3E-03	6.6E-02	9.6E-02
Bis(2-Ethylhexyl)adipate	103-23-1	0.0E+00	5.6E-05	3.3E-04	0.0E+00	0.0E+00	1.9E-03
n-Caproic acid vinyl ester	3050-69-9	0.0E+00	1.8E-05	1.0E-04	0.0E+00	0.0E+00	6.0E-04
Chrysene	218-01-9	0.0E+00	2.6E-02	4.0E-02	0.0E+00	9.8E-02	1.7E-01
Coronene	191-07-1	0.0E+00	1.1E-02	2.0E-02	0.0E+00	3.8E-02	9.3E-02



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Chemical	CASRN	OneDayHQ _{inh-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Cyclohexanamine, N-cyclohexyl-	101-83-7	0.0E+00	1.2E-07	2.1E-07	8.4E-08	3.7E-07	1.1E-06
Cyclohexylamine	108-91-8	0.0E+00	8.2E-07	2.4E-06	0.0E+00	5.6E-06	1.1E-05
Cyclopenta[cd]pyrene	27208-37-3	0.0E+00	9.2E-03	1.1E-02	3.4E-03	2.7E-02	5.2E-02
N,N-Dicyclohexylmethylamine	7560-83-0	0.0E+00	1.2E-07	1.7E-07	9.1E-08	5.0E-07	7.2E-07
Dimethyl phthalate	131-11-3	0.0E+00	2.3E-06	7.6E-06	0.0E+00	1.5E-05	3.9E-05
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	1.4E-02	4.5E-02	0.0E+00	1.5E-01	1.5E-01
Methyl stearate	112-61-8	0.0E+00	1.4E-05	3.0E-05	0.0E+00	9.6E-05	1.2E-04
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	0.0E+00	3.2E-08	1.3E-07	0.0E+00	1.9E-07	5.5E-07
Phenol, 4-(1-phenylethyl)-	1988-89-2	0.0E+00	8.0E-07	2.2E-06	0.0E+00	3.7E-06	1.1E-05
4-tert-Octylphenol	140-66-9	0.0E+00	3.3E-06	6.9E-06	0.0E+00	1.9E-05	2.5E-05

^a 35 field-specific One-Day HQ_{inh-DART-field} are included in this table.

Table G-12. **On-Field Field-Specific^a One-Day Inhalation Route Total Hazard Quotients for Individual Field-Related DARTs (One-Day HQ_{inh-DART-field}, unitless)— Combined Gender Coaches 50<70 years**

Chemical	CASRN	OneDayHQ _{inh-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Benzo[a]pyrene	50-32-8	0.0E+00	1.5E-01	1.5E-01	7.8E-02	3.9E-01	6.0E-01
Benzo[e]pyrene	192-97-2	0.0E+00	2.4E-03	5.5E-03	0.0E+00	1.6E-02	1.6E-02
Benzo[g,h,i]perylene	191-24-2	0.0E+00	1.7E-02	2.5E-02	6.3E-03	6.6E-02	9.7E-02
Bis(2-Ethylhexyl)adipate	103-23-1	0.0E+00	5.6E-05	3.3E-04	0.0E+00	0.0E+00	1.9E-03
n-Caproic acid vinyl ester	3050-69-9	0.0E+00	1.8E-05	1.0E-04	0.0E+00	0.0E+00	6.0E-04
Chrysene	218-01-9	0.0E+00	2.6E-02	4.1E-02	0.0E+00	9.8E-02	1.7E-01
Coronene	191-07-1	0.0E+00	1.1E-02	2.1E-02	0.0E+00	3.8E-02	9.3E-02
Cyclohexanamine, N-cyclohexyl-	101-83-7	0.0E+00	1.2E-07	2.1E-07	8.4E-08	3.7E-07	1.1E-06
Cyclohexylamine	108-91-8	0.0E+00	8.3E-07	2.4E-06	0.0E+00	5.6E-06	1.1E-05



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Chemical	CASRN	OneDayHQ _{inh-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Cyclopenta[cd]pyrene	27208-37-3	0.0E+00	9.2E-03	1.1E-02	3.5E-03	2.7E-02	5.3E-02
N,N-Dicyclohexylmethylamine	7560-83-0	0.0E+00	1.2E-07	1.7E-07	9.1E-08	5.0E-07	7.2E-07
Dimethyl phthalate	131-11-3	0.0E+00	2.3E-06	7.6E-06	0.0E+00	1.6E-05	3.9E-05
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	1.4E-02	4.5E-02	0.0E+00	1.6E-01	1.6E-01
Methyl stearate	112-61-8	0.0E+00	1.4E-05	3.0E-05	0.0E+00	9.7E-05	1.2E-04
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	0.0E+00	3.2E-08	1.3E-07	0.0E+00	1.9E-07	5.5E-07
Phenol, 4-(1-phenylethyl)-	1988-89-2	0.0E+00	8.0E-07	2.2E-06	0.0E+00	3.7E-06	1.1E-05
4-tert-Octylphenol	140-66-9	0.0E+00	3.3E-06	6.9E-06	0.0E+00	1.9E-05	2.5E-05

^a 35 field-specific One-Day HQ_{inh-DART-field} are included in this table.

Table G-13. **On-Field Field-Specific^a One-Day Inhalation Route Total Hazard Quotients for Individual Field-Related DARTs (One-Day HQ_{inh-DART-field}, unitless)— Combined Gender Referees 16<30 years**

Chemical	CASRN	OneDayHQ _{inh-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Benzo[a]pyrene	50-32-8	0.0E+00	1.5E-01	1.6E-01	8.1E-02	4.1E-01	6.3E-01
Benzo[e]pyrene	192-97-2	0.0E+00	2.5E-03	5.7E-03	0.0E+00	1.7E-02	1.7E-02
Benzo[g,h,i]perylene	191-24-2	0.0E+00	1.7E-02	2.6E-02	6.6E-03	6.9E-02	1.0E-01
Bis(2-Ethylhexyl)adipate	103-23-1	0.0E+00	5.9E-05	3.4E-04	0.0E+00	0.0E+00	2.0E-03
n-Caproic acid vinyl ester	3050-69-9	0.0E+00	1.8E-05	1.1E-04	0.0E+00	0.0E+00	6.3E-04
Chrysene	218-01-9	0.0E+00	2.7E-02	4.2E-02	0.0E+00	1.0E-01	1.8E-01
Coronene	191-07-1	0.0E+00	1.1E-02	2.2E-02	0.0E+00	4.0E-02	9.7E-02
Cyclohexanamine, N-cyclohexyl-	101-83-7	0.0E+00	1.3E-07	2.2E-07	8.8E-08	3.9E-07	1.2E-06
Cyclohexylamine	108-91-8	0.0E+00	8.7E-07	2.6E-06	0.0E+00	5.9E-06	1.2E-05
Cyclopenta[cd]pyrene	27208-37-3	0.0E+00	9.7E-03	1.2E-02	3.6E-03	2.8E-02	5.5E-02
N,N-Dicyclohexylmethylamine	7560-83-0	0.0E+00	1.3E-07	1.8E-07	9.6E-08	5.3E-07	7.6E-07



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Chemical	CASRN	OneDayHQ _{inh-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Dimethyl phthalate	131-11-3	0.0E+00	2.4E-06	8.0E-06	0.0E+00	1.6E-05	4.1E-05
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	1.4E-02	4.7E-02	0.0E+00	1.6E-01	1.6E-01
Methyl stearate	112-61-8	0.0E+00	1.5E-05	3.2E-05	0.0E+00	1.0E-04	1.2E-04
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	0.0E+00	3.4E-08	1.4E-07	0.0E+00	2.0E-07	5.8E-07
Phenol, 4-(1-phenylethyl)-	1988-89-2	0.0E+00	8.4E-07	2.3E-06	0.0E+00	3.9E-06	1.2E-05
4-tert-Octylphenol	140-66-9	0.0E+00	3.5E-06	7.2E-06	0.0E+00	2.0E-05	2.7E-05

^a 35 field-specific One-Day HQ_{inh-DART-field} are included in this table.

Table G-14. On-Field Field-Specific^a One-Day Inhalation Route Total Hazard Quotients for Individual Field-Related DARTs (One-Day HQ_{inh-DART-field}, unitless)— Combined Gender Referees 30<40 years

Chemical	CASRN	OneDayHQ _{inh-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Benzo[a]pyrene	50-32-8	0.0E+00	1.3E-01	1.4E-01	7.1E-02	3.6E-01	5.5E-01
Benzo[e]pyrene	192-97-2	0.0E+00	2.2E-03	5.0E-03	0.0E+00	1.5E-02	1.5E-02
Benzo[g,h,i]perylene	191-24-2	0.0E+00	1.5E-02	2.3E-02	5.8E-03	6.0E-02	8.8E-02
Bis(2-Ethylhexyl)adipate	103-23-1	0.0E+00	5.1E-05	3.0E-04	0.0E+00	0.0E+00	1.7E-03
n-Caproic acid vinyl ester	3050-69-9	0.0E+00	1.6E-05	9.4E-05	0.0E+00	0.0E+00	5.5E-04
Chrysene	218-01-9	0.0E+00	2.4E-02	3.7E-02	0.0E+00	9.0E-02	1.5E-01
Coronene	191-07-1	0.0E+00	9.9E-03	1.9E-02	0.0E+00	3.5E-02	8.5E-02
Cyclohexanamine, N-cyclohexyl-	101-83-7	0.0E+00	1.1E-07	1.9E-07	7.7E-08	3.4E-07	1.0E-06
Cyclohexylamine	108-91-8	0.0E+00	7.6E-07	2.2E-06	0.0E+00	5.2E-06	1.0E-05
Cyclopenta[cd]pyrene	27208-37-3	0.0E+00	8.5E-03	1.0E-02	3.2E-03	2.5E-02	4.8E-02
N,N-Dicyclohexylmethylamine	7560-83-0	0.0E+00	1.1E-07	1.6E-07	8.4E-08	4.6E-07	6.6E-07
Dimethyl phthalate	131-11-3	0.0E+00	2.1E-06	7.0E-06	0.0E+00	1.4E-05	3.6E-05
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	1.3E-02	4.1E-02	0.0E+00	1.4E-01	1.4E-01
Methyl stearate	112-61-8	0.0E+00	1.3E-05	2.8E-05	0.0E+00	8.9E-05	1.1E-04



Chemical	CASRN	OneDayHQ _{inh-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	0.0E+00	3.0E-08	1.2E-07	0.0E+00	1.8E-07	5.0E-07
Phenol, 4-(1-phenylethyl)-	1988-89-2	0.0E+00	7.4E-07	2.0E-06	0.0E+00	3.4E-06	1.0E-05
4-tert-Octylphenol	140-66-9	0.0E+00	3.0E-06	6.3E-06	0.0E+00	1.7E-05	2.3E-05

^a 35 field-specific One-Day HQ_{inh-DART-field} are included in this table.

Table G-15. **On-Field Field-Specific^a One-Day Inhalation Route Total Hazard Quotients for Individual Field-Related DARTs (One-Day HQ_{inh-DART-field}, unitless)— Combined Gender Referees 40<50 years**

Chemical	CASRN	OneDayHQ _{inh-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Benzo[a]pyrene	50-32-8	0.0E+00	1.3E-01	1.4E-01	7.2E-02	3.6E-01	5.6E-01
Benzo[e]pyrene	192-97-2	0.0E+00	2.2E-03	5.1E-03	0.0E+00	1.5E-02	1.5E-02
Benzo[g,h,i]perylene	191-24-2	0.0E+00	1.5E-02	2.3E-02	5.9E-03	6.1E-02	8.9E-02
Bis(2-Ethylhexyl)adipate	103-23-1	0.0E+00	5.2E-05	3.0E-04	0.0E+00	0.0E+00	1.8E-03
n-Caproic acid vinyl ester	3050-69-9	0.0E+00	1.6E-05	9.5E-05	0.0E+00	0.0E+00	5.5E-04
Chrysene	218-01-9	0.0E+00	2.4E-02	3.8E-02	0.0E+00	9.1E-02	1.6E-01
Coronene	191-07-1	0.0E+00	1.0E-02	1.9E-02	0.0E+00	3.5E-02	8.6E-02
Cyclohexanamine, N-cyclohexyl-	101-83-7	0.0E+00	1.1E-07	1.9E-07	7.8E-08	3.5E-07	1.0E-06
Cyclohexylamine	108-91-8	0.0E+00	7.7E-07	2.3E-06	0.0E+00	5.2E-06	1.0E-05
Cyclopenta[cd]pyrene	27208-37-3	0.0E+00	8.6E-03	1.0E-02	3.2E-03	2.5E-02	4.9E-02
N,N-Dicyclohexylmethylamine	7560-83-0	0.0E+00	1.1E-07	1.6E-07	8.5E-08	4.7E-07	6.7E-07
Dimethyl phthalate	131-11-3	0.0E+00	2.1E-06	7.1E-06	0.0E+00	1.4E-05	3.6E-05
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	1.3E-02	4.1E-02	0.0E+00	1.4E-01	1.4E-01
Methyl stearate	112-61-8	0.0E+00	1.3E-05	2.8E-05	0.0E+00	9.0E-05	1.1E-04
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	0.0E+00	3.0E-08	1.2E-07	0.0E+00	1.8E-07	5.1E-07
Phenol, 4-(1-phenylethyl)-	1988-89-2	0.0E+00	7.5E-07	2.0E-06	0.0E+00	3.5E-06	1.1E-05



Chemical	CASRN	OneDayHQ _{inh-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
4-tert-Octylphenol	140-66-9	0.0E+00	3.1E-06	6.4E-06	0.0E+00	1.7E-05	2.4E-05

^a 35 field-specific One-Day HQ_{inh-DART-field} are included in this table.

Table G-16. On-Field Field-Specific^a One-Day Inhalation Route Total Hazard Quotients for Individual Field-Related DARTs (One-Day HQ_{inh-DART-field}, unitless)— Combined Gender Referees 50<70 years

Chemical	CASRN	OneDayHQ _{inh-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Benzo[a]pyrene	50-32-8	0.0E+00	1.3E-01	1.4E-01	7.2E-02	3.6E-01	5.6E-01
Benzo[e]pyrene	192-97-2	0.0E+00	2.2E-03	5.1E-03	0.0E+00	1.5E-02	1.5E-02
Benzo[g,h,i]perylene	191-24-2	0.0E+00	1.5E-02	2.3E-02	5.9E-03	6.1E-02	9.0E-02
Bis(2-Ethylhexyl)adipate	103-23-1	0.0E+00	5.2E-05	3.0E-04	0.0E+00	0.0E+00	1.8E-03
n-Caproic acid vinyl ester	3050-69-9	0.0E+00	1.6E-05	9.5E-05	0.0E+00	0.0E+00	5.6E-04
Chrysene	218-01-9	0.0E+00	2.4E-02	3.8E-02	0.0E+00	9.1E-02	1.6E-01
Coronene	191-07-1	0.0E+00	1.0E-02	1.9E-02	0.0E+00	3.6E-02	8.6E-02
Cyclohexanamine, N-cyclohexyl-	101-83-7	0.0E+00	1.1E-07	1.9E-07	7.8E-08	3.5E-07	1.0E-06
Cyclohexylamine	108-91-8	0.0E+00	7.7E-07	2.3E-06	0.0E+00	5.2E-06	1.0E-05
Cyclopenta[cd]pyrene	27208-37-3	0.0E+00	8.6E-03	1.0E-02	3.2E-03	2.5E-02	4.9E-02
N,N-Dicyclohexylmethylamine	7560-83-0	0.0E+00	1.1E-07	1.6E-07	8.5E-08	4.7E-07	6.7E-07
Dimethyl phthalate	131-11-3	0.0E+00	2.1E-06	7.1E-06	0.0E+00	1.4E-05	3.7E-05
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	1.3E-02	4.1E-02	0.0E+00	1.4E-01	1.4E-01
Methyl stearate	112-61-8	0.0E+00	1.3E-05	2.8E-05	0.0E+00	9.0E-05	1.1E-04
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	0.0E+00	3.0E-08	1.2E-07	0.0E+00	1.8E-07	5.1E-07
Phenol, 4-(1-phenylethyl)-	1988-89-2	0.0E+00	7.5E-07	2.0E-06	0.0E+00	3.5E-06	1.1E-05
4-tert-Octylphenol	140-66-9	0.0E+00	3.1E-06	6.4E-06	0.0E+00	1.7E-05	2.4E-05

^a 35 field-specific One-Day HQ_{inh-DART-field} are included in this table.



Table G-17. **On-Field** Field-Specific^a One-Day Inhalation Route Total Hazard Quotients for Individual **Field-Related DARTs** (One-Day HQ_{inh-DART-field}, unitless)— Combined Gender **Spectators Third Trimester Fetus**

Chemical	CASRN	OneDayHQ _{inh-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Benzo[a]pyrene	50-32-8	0.0E+00	1.4E-04	1.5E-04	7.5E-05	3.8E-04	5.8E-04
Benzo[e]pyrene	192-97-2	0.0E+00	2.3E-06	5.3E-06	0.0E+00	1.6E-05	1.6E-05
Benzo[g,h,i]perylene	191-24-2	0.0E+00	1.6E-05	2.4E-05	6.1E-06	6.4E-05	9.3E-05
Bis(2-Ethylhexyl)adipate	103-23-1	0.0E+00	1.1E-05	6.3E-05	0.0E+00	0.0E+00	3.7E-04
n-Caproic acid vinyl ester	3050-69-9	0.0E+00	3.4E-06	2.0E-05	0.0E+00	0.0E+00	1.2E-04
Chrysene	218-01-9	0.0E+00	2.5E-05	3.9E-05	0.0E+00	9.5E-05	1.6E-04
Coronene	191-07-1	0.0E+00	1.1E-05	2.0E-05	0.0E+00	3.7E-05	9.0E-05
Cyclohexanamine, N-cyclohexyl-	101-83-7	0.0E+00	2.4E-08	4.0E-08	1.6E-08	7.2E-08	2.2E-07
Cyclohexylamine	108-91-8	0.0E+00	1.6E-07	4.7E-07	0.0E+00	1.1E-06	2.2E-06
Cyclopenta[cd]pyrene	27208-37-3	0.0E+00	9.0E-06	1.1E-05	3.3E-06	2.6E-05	5.1E-05
N,N-Dicyclohexylmethylamine	7560-83-0	0.0E+00	2.3E-08	3.3E-08	1.8E-08	9.7E-08	1.4E-07
Dimethyl phthalate	131-11-3	0.0E+00	4.5E-07	1.5E-06	0.0E+00	3.0E-06	7.6E-06
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	1.3E-05	4.3E-05	0.0E+00	1.5E-04	1.5E-04
Methyl stearate	112-61-8	0.0E+00	2.8E-06	5.9E-06	0.0E+00	1.9E-05	2.2E-05
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	0.0E+00	6.3E-09	2.5E-08	0.0E+00	3.7E-08	1.1E-07
Phenol, 4-(1-phenylethyl)-	1988-89-2	0.0E+00	1.6E-07	4.2E-07	0.0E+00	7.3E-07	2.2E-06
4-tert-Octylphenol	140-66-9	0.0E+00	6.4E-07	1.3E-06	0.0E+00	3.6E-06	4.9E-06

^a 35 field-specific One-Day HQ_{inh-DART-field} are included in this table.

Table G-18. **On-Field** Field-Specific^a One-Day Inhalation Route Total Hazard Quotients for Individual **Field-Related DARTs** (One-Day HQ_{inh-DART-field}, unitless)— Combined Gender **Spectators 0<2 years**

Chemical	CASRN	OneDayHQ _{inh-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Benzo[a]pyrene	50-32-8	0.0E+00	1.1E-03	1.2E-03	6.1E-04	3.0E-03	4.7E-03



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Chemical	CASRN	OneDayHQ _{inh} -DART-field					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Benzo[e]pyrene	192-97-2	0.0E+00	1.9E-05	4.3E-05	0.0E+00	1.3E-04	1.3E-04
Benzo[g,h,i]perylene	191-24-2	0.0E+00	1.3E-04	1.9E-04	4.9E-05	5.1E-04	7.5E-04
Bis(2-Ethylhexyl)adipate	103-23-1	0.0E+00	8.8E-05	5.1E-04	0.0E+00	0.0E+00	3.0E-03
n-Caproic acid vinyl ester	3050-69-9	0.0E+00	2.7E-05	1.6E-04	0.0E+00	0.0E+00	9.3E-04
Chrysene	218-01-9	0.0E+00	2.0E-04	3.2E-04	0.0E+00	7.6E-04	1.3E-03
Coronene	191-07-1	0.0E+00	8.5E-05	1.6E-04	0.0E+00	3.0E-04	7.2E-04
Cyclohexanamine, N-cyclohexyl-	101-83-7	0.0E+00	1.9E-07	3.2E-07	1.3E-07	5.8E-07	1.7E-06
Cyclohexylamine	108-91-8	0.0E+00	1.3E-06	3.8E-06	0.0E+00	8.8E-06	1.8E-05
Cyclopenta[cd]pyrene	27208-37-3	0.0E+00	7.2E-05	8.8E-05	2.7E-05	2.1E-04	4.1E-04
N,N-Dicyclohexylmethylamine	7560-83-0	0.0E+00	1.9E-07	2.7E-07	1.4E-07	7.8E-07	1.1E-06
Dimethyl phthalate	131-11-3	0.0E+00	3.6E-06	1.2E-05	0.0E+00	2.4E-05	6.1E-05
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	1.1E-04	3.5E-04	0.0E+00	1.2E-03	1.2E-03
Methyl stearate	112-61-8	0.0E+00	2.2E-05	4.7E-05	0.0E+00	1.5E-04	1.8E-04
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	0.0E+00	5.0E-08	2.0E-07	0.0E+00	3.0E-07	8.6E-07
Phenol, 4-(1-phenylethyl)-	1988-89-2	0.0E+00	1.3E-06	3.4E-06	0.0E+00	5.8E-06	1.8E-05
4-tert-Octylphenol	140-66-9	0.0E+00	5.2E-06	1.1E-05	0.0E+00	2.9E-05	4.0E-05

^a 35 field-specific One-Day HQ_{inh}-DART-field are included in this table.

Table G-19. **On-Field Field-Specific^a One-Day Inhalation Route Total Hazard Quotients for Individual Field-Related DARTs (One-Day HQ_{inh}-DART-field, unitless)— Combined Gender Spectators 2<6 years**

Chemical	CASRN	OneDayHQ _{inh} -DART-field					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Benzo[a]pyrene	50-32-8	0.0E+00	5.9E-04	6.3E-04	3.2E-04	1.6E-03	2.5E-03
Benzo[e]pyrene	192-97-2	0.0E+00	9.8E-06	2.2E-05	0.0E+00	6.6E-05	6.6E-05
Benzo[g,h,i]perylene	191-24-2	0.0E+00	6.8E-05	1.0E-04	2.6E-05	2.7E-04	4.0E-04
Bis(2-Ethylhexyl)adipate	103-23-1	0.0E+00	4.6E-05	2.7E-04	0.0E+00	0.0E+00	1.6E-03



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Chemical	CASRN	OneDayHQ _{inh-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
n-Caproic acid vinyl ester	3050-69-9	0.0E+00	1.4E-05	8.4E-05	0.0E+00	0.0E+00	4.9E-04
Chrysene	218-01-9	0.0E+00	1.1E-04	1.7E-04	0.0E+00	4.0E-04	6.9E-04
Coronene	191-07-1	0.0E+00	4.4E-05	8.4E-05	0.0E+00	1.6E-04	3.8E-04
Cyclohexanamine, N-cyclohexyl-	101-83-7	0.0E+00	1.0E-07	1.7E-07	6.9E-08	3.1E-07	9.2E-07
Cyclohexylamine	108-91-8	0.0E+00	6.8E-07	2.0E-06	0.0E+00	4.6E-06	9.2E-06
Cyclopenta[cd]pyrene	27208-37-3	0.0E+00	3.8E-05	4.6E-05	1.4E-05	1.1E-04	2.1E-04
N,N-Dicyclohexylmethylamine	7560-83-0	0.0E+00	9.9E-08	1.4E-07	7.5E-08	4.1E-07	5.9E-07
Dimethyl phthalate	131-11-3	0.0E+00	1.9E-06	6.2E-06	0.0E+00	1.3E-05	3.2E-05
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	5.6E-05	1.8E-04	0.0E+00	6.4E-04	6.4E-04
Methyl stearate	112-61-8	0.0E+00	1.2E-05	2.5E-05	0.0E+00	7.9E-05	9.4E-05
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	0.0E+00	2.6E-08	1.1E-07	0.0E+00	1.6E-07	4.5E-07
Phenol, 4-(1-phenylethyl)-	1988-89-2	0.0E+00	6.6E-07	1.8E-06	0.0E+00	3.1E-06	9.4E-06
4-tert-Octylphenol	140-66-9	0.0E+00	2.7E-06	5.7E-06	0.0E+00	1.5E-05	2.1E-05

^a 35 field-specific One-Day HQ_{inh-DART-field} are included in this table.

Table G-20. **On-Field Field-Specific^a One-Day Inhalation Route Total Hazard Quotients for Individual Field-Related DARTs (One-Day HQ_{inh-DART-field}, unitless)— Combined Gender Spectators 6<11 years**

Chemical	CASRN	OneDayHQ _{inh-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Benzo[a]pyrene	50-32-8	0.0E+00	5.7E-04	6.0E-04	3.0E-04	1.5E-03	2.3E-03
Benzo[e]pyrene	192-97-2	0.0E+00	9.3E-06	2.1E-05	0.0E+00	6.3E-05	6.3E-05
Benzo[g,h,i]perylene	191-24-2	0.0E+00	6.5E-05	9.6E-05	2.5E-05	2.6E-04	3.8E-04
Bis(2-Ethylhexyl)adipate	103-23-1	0.0E+00	4.4E-05	2.6E-04	0.0E+00	0.0E+00	1.5E-03
n-Caproic acid vinyl ester	3050-69-9	0.0E+00	1.4E-05	8.0E-05	0.0E+00	0.0E+00	4.7E-04
Chrysene	218-01-9	0.0E+00	1.0E-04	1.6E-04	0.0E+00	3.8E-04	6.6E-04
Coronene	191-07-1	0.0E+00	4.2E-05	8.0E-05	0.0E+00	1.5E-04	3.6E-04



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Chemical	CASRN	OneDayHQ _{inh-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Cyclohexanamine, N-cyclohexyl-	101-83-7	0.0E+00	9.6E-08	1.6E-07	6.6E-08	2.9E-07	8.7E-07
Cyclohexylamine	108-91-8	0.0E+00	6.5E-07	1.9E-06	0.0E+00	4.4E-06	8.8E-06
Cyclopenta[cd]pyrene	27208-37-3	0.0E+00	3.6E-05	4.4E-05	1.3E-05	1.0E-04	2.1E-04
N,N-Dicyclohexylmethylamine	7560-83-0	0.0E+00	9.5E-08	1.3E-07	7.1E-08	3.9E-07	5.7E-07
Dimethyl phthalate	131-11-3	0.0E+00	1.8E-06	6.0E-06	0.0E+00	1.2E-05	3.1E-05
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	5.3E-05	1.7E-04	0.0E+00	6.1E-04	6.1E-04
Methyl stearate	112-61-8	0.0E+00	1.1E-05	2.4E-05	0.0E+00	7.6E-05	9.0E-05
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	0.0E+00	2.5E-08	1.0E-07	0.0E+00	1.5E-07	4.3E-07
Phenol, 4-(1-phenylethyl)-	1988-89-2	0.0E+00	6.3E-07	1.7E-06	0.0E+00	2.9E-06	8.9E-06
4-tert-Octylphenol	140-66-9	0.0E+00	2.6E-06	5.4E-06	0.0E+00	1.5E-05	2.0E-05

^a 35 field-specific One-Day HQ_{inh-DART-field} are included in this table.

Table G-21. **On-Field Field-Specific^a One-Day Inhalation Route Total Hazard Quotients for Individual Field-Related DARTs (One-Day HQ_{inh-DART-field}, unitless)— Combined Gender Spectators 11<16 years**

Chemical	CASRN	OneDayHQ _{inh-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Benzo[a]pyrene	50-32-8	0.0E+00	4.9E-02	5.2E-02	2.6E-02	1.3E-01	2.0E-01
Benzo[e]pyrene	192-97-2	0.0E+00	8.0E-04	1.8E-03	0.0E+00	5.5E-03	5.5E-03
Benzo[g,h,i]perylene	191-24-2	0.0E+00	5.6E-03	8.3E-03	2.1E-03	2.2E-02	3.3E-02
Bis(2-Ethylhexyl)adipate	103-23-1	0.0E+00	1.9E-05	1.1E-04	0.0E+00	0.0E+00	6.4E-04
n-Caproic acid vinyl ester	3050-69-9	0.0E+00	5.9E-06	3.5E-05	0.0E+00	0.0E+00	2.0E-04
Chrysene	218-01-9	0.0E+00	8.8E-03	1.4E-02	0.0E+00	3.3E-02	5.7E-02
Coronene	191-07-1	0.0E+00	3.7E-03	6.9E-03	0.0E+00	1.3E-02	3.1E-02
Cyclohexanamine, N-cyclohexyl-	101-83-7	0.0E+00	4.2E-08	7.0E-08	2.8E-08	1.3E-07	3.8E-07
Cyclohexylamine	108-91-8	0.0E+00	2.8E-07	8.3E-07	0.0E+00	1.9E-06	3.8E-06



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Chemical	CASRN	OneDayHQ _{inh-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Cyclopenta[cd]pyrene	27208-37-3	0.0E+00	3.1E-03	3.8E-03	1.2E-03	9.0E-03	1.8E-02
N,N-Dicyclohexylmethylamine	7560-83-0	0.0E+00	4.1E-08	5.7E-08	3.1E-08	1.7E-07	2.4E-07
Dimethyl phthalate	131-11-3	0.0E+00	7.8E-07	2.6E-06	0.0E+00	5.2E-06	1.3E-05
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	4.6E-03	1.5E-02	0.0E+00	5.2E-02	5.2E-02
Methyl stearate	112-61-8	0.0E+00	4.9E-06	1.0E-05	0.0E+00	3.3E-05	3.9E-05
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	0.0E+00	1.1E-08	4.4E-08	0.0E+00	6.5E-08	1.9E-07
Phenol, 4-(1-phenylethyl)-	1988-89-2	0.0E+00	2.7E-07	7.3E-07	0.0E+00	1.3E-06	3.9E-06
4-tert-Octylphenol	140-66-9	0.0E+00	1.1E-06	2.3E-06	0.0E+00	6.3E-06	8.6E-06

^a 35 field-specific One-Day HQ_{inh-DART-field} are included in this table.

Table G-22. **On-Field Field-Specific^a One-Day Inhalation Route Total Hazard Quotients for Individual Field-Related DARTs (One-Day HQ_{inh-DART-field}, unitless)— Combined Gender Spectators 16<30 years**

Chemical	CASRN	OneDayHQ _{inh-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Benzo[a]pyrene	50-32-8	0.0E+00	3.2E-02	3.4E-02	1.7E-02	8.7E-02	1.3E-01
Benzo[e]pyrene	192-97-2	0.0E+00	5.3E-04	1.2E-03	0.0E+00	3.6E-03	3.6E-03
Benzo[g,h,i]perylene	191-24-2	0.0E+00	3.7E-03	5.5E-03	1.4E-03	1.5E-02	2.1E-02
Bis(2-Ethylhexyl)adipate	103-23-1	0.0E+00	1.3E-05	7.3E-05	0.0E+00	0.0E+00	4.3E-04
n-Caproic acid vinyl ester	3050-69-9	0.0E+00	3.9E-06	2.3E-05	0.0E+00	0.0E+00	1.3E-04
Chrysene	218-01-9	0.0E+00	5.8E-03	9.0E-03	0.0E+00	2.2E-02	3.7E-02
Coronene	191-07-1	0.0E+00	2.4E-03	4.6E-03	0.0E+00	8.5E-03	2.1E-02
Cyclohexanamine, N-cyclohexyl-	101-83-7	0.0E+00	2.7E-08	4.6E-08	1.9E-08	8.3E-08	2.5E-07
Cyclohexylamine	108-91-8	0.0E+00	1.8E-07	5.5E-07	0.0E+00	1.3E-06	2.5E-06
Cyclopenta[cd]pyrene	27208-37-3	0.0E+00	2.1E-03	2.5E-03	7.7E-04	6.0E-03	1.2E-02
N,N-Dicyclohexylmethylamine	7560-83-0	0.0E+00	2.7E-08	3.8E-08	2.0E-08	1.1E-07	1.6E-07



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Chemical	CASRN	OneDayHQ _{inh-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Dimethyl phthalate	131-11-3	0.0E+00	5.1E-07	1.7E-06	0.0E+00	3.4E-06	8.8E-06
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	3.0E-03	9.9E-03	0.0E+00	3.5E-02	3.5E-02
Methyl stearate	112-61-8	0.0E+00	3.2E-06	6.7E-06	0.0E+00	2.2E-05	2.6E-05
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	0.0E+00	7.2E-09	2.9E-08	0.0E+00	4.3E-08	1.2E-07
Phenol, 4-(1-phenylethyl)-	1988-89-2	0.0E+00	1.8E-07	4.8E-07	0.0E+00	8.3E-07	2.5E-06
4-tert-Octylphenol	140-66-9	0.0E+00	7.4E-07	1.5E-06	0.0E+00	4.2E-06	5.7E-06

^a 35 field-specific One-Day HQ_{inh-DART-field} are included in this table.

Table G-23. On-Field Field-Specific^a One-Day Inhalation Route Total Hazard Quotients for Individual Field-Related DARTs (One-Day HQ_{inh-DART-field}, unitless)— Combined Gender Spectators 30<40 years

Chemical	CASRN	OneDayHQ _{inh-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Benzo[a]pyrene	50-32-8	0.0E+00	2.8E-02	3.0E-02	1.5E-02	7.6E-02	1.2E-01
Benzo[e]pyrene	192-97-2	0.0E+00	4.6E-04	1.1E-03	0.0E+00	3.1E-03	3.1E-03
Benzo[g,h,i]perylene	191-24-2	0.0E+00	3.2E-03	4.8E-03	1.2E-03	1.3E-02	1.9E-02
Bis(2-Ethylhexyl)adipate	103-23-1	0.0E+00	1.1E-05	6.4E-05	0.0E+00	0.0E+00	3.7E-04
n-Caproic acid vinyl ester	3050-69-9	0.0E+00	3.4E-06	2.0E-05	0.0E+00	0.0E+00	1.2E-04
Chrysene	218-01-9	0.0E+00	5.1E-03	7.9E-03	0.0E+00	1.9E-02	3.3E-02
Coronene	191-07-1	0.0E+00	2.1E-03	4.0E-03	0.0E+00	7.4E-03	1.8E-02
Cyclohexanamine, N-cyclohexyl-	101-83-7	0.0E+00	2.4E-08	4.0E-08	1.6E-08	7.3E-08	2.2E-07
Cyclohexylamine	108-91-8	0.0E+00	1.6E-07	4.8E-07	0.0E+00	1.1E-06	2.2E-06
Cyclopenta[cd]pyrene	27208-37-3	0.0E+00	1.8E-03	2.2E-03	6.7E-04	5.2E-03	1.0E-02
N,N-Dicyclohexylmethylamine	7560-83-0	0.0E+00	2.4E-08	3.3E-08	1.8E-08	9.8E-08	1.4E-07
Dimethyl phthalate	131-11-3	0.0E+00	4.5E-07	1.5E-06	0.0E+00	3.0E-06	7.7E-06
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	2.7E-03	8.7E-03	0.0E+00	3.0E-02	3.0E-02
Methyl stearate	112-61-8	0.0E+00	2.8E-06	5.9E-06	0.0E+00	1.9E-05	2.2E-05



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Chemical	CASRN	OneDayHQ _{inh-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	0.0E+00	6.3E-09	2.5E-08	0.0E+00	3.7E-08	1.1E-07
Phenol, 4-(1-phenylethyl)-	1988-89-2	0.0E+00	1.6E-07	4.2E-07	0.0E+00	7.3E-07	2.2E-06
4-tert-Octylphenol	140-66-9	0.0E+00	6.4E-07	1.3E-06	0.0E+00	3.6E-06	5.0E-06

^a 35 field-specific One-Day HQ_{inh-DART-field} are included in this table.

Table G-24. **On-Field Field-Specific^a One-Day Inhalation Route Total Hazard Quotients for Individual Field-Related DARTs (One-Day HQ_{inh-DART-field}, unitless)— Combined Gender Spectators 40<50 years**

Chemical	CASRN	OneDayHQ _{inh-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Benzo[a]pyrene	50-32-8	0.0E+00	2.9E-02	3.0E-02	1.5E-02	7.7E-02	1.2E-01
Benzo[e]pyrene	192-97-2	0.0E+00	4.7E-04	1.1E-03	0.0E+00	3.2E-03	3.2E-03
Benzo[g,h,i]perylene	191-24-2	0.0E+00	3.3E-03	4.8E-03	1.2E-03	1.3E-02	1.9E-02
Bis(2-Ethylhexyl)adipate	103-23-1	0.0E+00	1.1E-05	6.4E-05	0.0E+00	0.0E+00	3.8E-04
n-Caproic acid vinyl ester	3050-69-9	0.0E+00	3.5E-06	2.0E-05	0.0E+00	0.0E+00	1.2E-04
Chrysene	218-01-9	0.0E+00	5.1E-03	8.0E-03	0.0E+00	1.9E-02	3.3E-02
Coronene	191-07-1	0.0E+00	2.1E-03	4.0E-03	0.0E+00	7.5E-03	1.8E-02
Cyclohexanamine, N-cyclohexyl-	101-83-7	0.0E+00	2.4E-08	4.1E-08	1.7E-08	7.3E-08	2.2E-07
Cyclohexylamine	108-91-8	0.0E+00	1.6E-07	4.8E-07	0.0E+00	1.1E-06	2.2E-06
Cyclopenta[cd]pyrene	27208-37-3	0.0E+00	1.8E-03	2.2E-03	6.8E-04	5.3E-03	1.0E-02
N,N-Dicyclohexylmethylamine	7560-83-0	0.0E+00	2.4E-08	3.3E-08	1.8E-08	9.9E-08	1.4E-07
Dimethyl phthalate	131-11-3	0.0E+00	4.5E-07	1.5E-06	0.0E+00	3.0E-06	7.7E-06
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	2.7E-03	8.8E-03	0.0E+00	3.1E-02	3.1E-02
Methyl stearate	112-61-8	0.0E+00	2.8E-06	6.0E-06	0.0E+00	1.9E-05	2.3E-05
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	0.0E+00	6.3E-09	2.6E-08	0.0E+00	3.8E-08	1.1E-07
Phenol, 4-(1-phenylethyl)-	1988-89-2	0.0E+00	1.6E-07	4.3E-07	0.0E+00	7.4E-07	2.2E-06



Chemical	CASRN	OneDayHQ _{inh-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
4-tert-Octylphenol	140-66-9	0.0E+00	6.5E-07	1.4E-06	0.0E+00	3.7E-06	5.0E-06

^a 35 field-specific One-Day HQ_{inh-DART-field} are included in this table.

Table G-25. On-Field Field-Specific^a One-Day Inhalation Route Total Hazard Quotients for Individual Field-Related DARTs (One-Day HQ_{inh-DART-field}, unitless)— Combined Gender Spectators 50<70 years

Chemical	CASRN	OneDayHQ _{inh-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Benzo[a]pyrene	50-32-8	0.0E+00	2.9E-02	3.0E-02	1.5E-02	7.7E-02	1.2E-01
Benzo[e]pyrene	192-97-2	0.0E+00	4.7E-04	1.1E-03	0.0E+00	3.2E-03	3.2E-03
Benzo[g,h,i]perylene	191-24-2	0.0E+00	3.3E-03	4.8E-03	1.2E-03	1.3E-02	1.9E-02
Bis(2-Ethylhexyl)adipate	103-23-1	0.0E+00	1.1E-05	6.5E-05	0.0E+00	0.0E+00	3.8E-04
n-Caproic acid vinyl ester	3050-69-9	0.0E+00	3.5E-06	2.0E-05	0.0E+00	0.0E+00	1.2E-04
Chrysene	218-01-9	0.0E+00	5.1E-03	8.0E-03	0.0E+00	1.9E-02	3.3E-02
Coronene	191-07-1	0.0E+00	2.1E-03	4.0E-03	0.0E+00	7.5E-03	1.8E-02
Cyclohexanamine, N-cyclohexyl-	101-83-7	0.0E+00	2.4E-08	4.1E-08	1.7E-08	7.4E-08	2.2E-07
Cyclohexylamine	108-91-8	0.0E+00	1.6E-07	4.8E-07	0.0E+00	1.1E-06	2.2E-06
Cyclopenta[cd]pyrene	27208-37-3	0.0E+00	1.8E-03	2.2E-03	6.8E-04	5.3E-03	1.0E-02
N,N-Dicyclohexylmethylamine	7560-83-0	0.0E+00	2.4E-08	3.4E-08	1.8E-08	9.9E-08	1.4E-07
Dimethyl phthalate	131-11-3	0.0E+00	4.5E-07	1.5E-06	0.0E+00	3.1E-06	7.8E-06
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	2.7E-03	8.8E-03	0.0E+00	3.1E-02	3.1E-02
Methyl stearate	112-61-8	0.0E+00	2.8E-06	6.0E-06	0.0E+00	1.9E-05	2.3E-05
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	0.0E+00	6.4E-09	2.6E-08	0.0E+00	3.8E-08	1.1E-07
Phenol, 4-(1-phenylethyl)-	1988-89-2	0.0E+00	1.6E-07	4.3E-07	0.0E+00	7.4E-07	2.3E-06
4-tert-Octylphenol	140-66-9	0.0E+00	6.5E-07	1.4E-06	0.0E+00	3.7E-06	5.0E-06

^a 35 field-specific One-Day HQ_{inh-DART-field} are included in this table.



Table G-26. **On-Field** Field-Specific^a One-Day Inhalation Route Total Hazard Quotients for **2-Butanone CASRN 78-93-3 (Non-Field-Related DART)** (One-Day HQ_{inh-DART-field}, unitless)—Combined Gender

Receptor Category and Age Group	One-Day HQ _{inh-DART-field}					
	Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Athletes 2<6 years	0.0E+00	8.4E-05	6.0E-05	6.7E-05	1.8E-04	2.1E-04
Athletes 6<11 years	0.0E+00	6.4E-05	4.6E-05	5.0E-05	1.3E-04	1.6E-04
Athletes 11<16 years	0.0E+00	5.3E-05	3.8E-05	4.2E-05	1.1E-04	1.3E-04
Athletes 16<30 years	0.0E+00	7.8E-05	5.6E-05	6.2E-05	1.6E-04	1.9E-04
Athletes 30<40 years	0.0E+00	5.2E-05	3.7E-05	4.1E-05	1.1E-04	1.3E-04
Athletes 40<50 years	0.0E+00	5.2E-05	3.7E-05	4.1E-05	1.1E-04	1.3E-04
Athletes 50<70 years	0.0E+00	5.6E-05	4.1E-05	4.5E-05	1.2E-04	1.4E-04
Coaches 16<30 years	0.0E+00	3.3E-05	2.4E-05	2.6E-05	7.0E-05	8.1E-05
Coaches 30<40 years	0.0E+00	2.9E-05	2.1E-05	2.3E-05	6.1E-05	7.1E-05
Coaches 40<50 years	0.0E+00	2.9E-05	2.1E-05	2.3E-05	6.2E-05	7.2E-05
Coaches 50<70 years	0.0E+00	2.9E-05	2.1E-05	2.3E-05	6.2E-05	7.2E-05
Referees 16<30 years	0.0E+00	3.1E-05	2.2E-05	2.4E-05	6.5E-05	7.5E-05
Referees 30<40 years	0.0E+00	2.7E-05	1.9E-05	2.1E-05	5.7E-05	6.6E-05
Referees 40<50 years	0.0E+00	2.7E-05	1.9E-05	2.2E-05	5.7E-05	6.7E-05
Referees 50<70 years	0.0E+00	2.7E-05	2.0E-05	2.2E-05	5.8E-05	6.7E-05
Spectators Third trimester fetus	0.0E+00	5.7E-06	4.1E-06	4.5E-06	1.2E-05	1.4E-05
Spectators 0<2 years	0.0E+00	4.6E-05	3.3E-05	3.6E-05	9.6E-05	1.1E-04
Spectators 2<6 years	0.0E+00	2.4E-05	1.7E-05	1.9E-05	5.1E-05	5.9E-05
Spectators 6<11 years	0.0E+00	2.3E-05	1.6E-05	1.8E-05	4.8E-05	5.6E-05
Spectators 11<16 years	0.0E+00	9.9E-06	7.1E-06	7.8E-06	2.1E-05	2.4E-05
Spectators 16<30 years	0.0E+00	6.5E-06	4.7E-06	5.2E-06	1.4E-05	1.6E-05
Spectators 30<40 years	0.0E+00	5.7E-06	4.1E-06	4.5E-06	1.2E-05	1.4E-05
Spectators 40<50 years	0.0E+00	5.7E-06	4.1E-06	4.6E-06	1.2E-05	1.4E-05
Spectators 50<70 years	0.0E+00	5.8E-06	4.1E-06	4.6E-06	1.2E-05	1.4E-05



^a Only individual fields that had samples collected are included in the distribution calculations. 35 field-specific One-Day HQ_{inh}-DART-field are included in this table.

Table G-27. Off-Field Field-Specific^a One-Day Inhalation Route Total Hazard Quotients for Individual Field-Related DARTs (One-Day HQ_{inh}-DART-field, unitless)— Combined Gender Spectators Third Trimester Fetus

Chemical	CASRN	OneDayHQ _{inh} -DART-field					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Benzo[a]pyrene	50-32-8	0.0E+00	1.7E-04	2.7E-04	7.2E-05	6.2E-04	1.2E-03
Benzo[e]pyrene	192-97-2	0.0E+00	3.3E-06	7.6E-06	0.0E+00	1.6E-05	3.2E-05
Benzo[g,h,i]perylene	191-24-2	0.0E+00	1.6E-05	2.7E-05	0.0E+00	6.0E-05	1.2E-04
Bis(2-Ethylhexyl)adipate	103-23-1	0.0E+00	8.6E-06	3.4E-05	0.0E+00	5.7E-05	1.4E-04
n-Caproic acid vinyl ester	3050-69-9	0.0E+00	6.7E-06	2.7E-05	0.0E+00	3.5E-05	1.5E-04
Chrysene	218-01-9	0.0E+00	1.3E-05	2.7E-05	0.0E+00	5.2E-05	1.1E-04
Coronene	191-07-1	0.0E+00	8.3E-06	1.9E-05	0.0E+00	3.1E-05	8.7E-05
Cyclohexanamine, N-cyclohexyl-	101-83-7	0.0E+00	1.4E-08	2.5E-08	0.0E+00	7.5E-08	8.8E-08
Cyclohexylamine	108-91-8	0.0E+00	6.6E-08	3.8E-07	0.0E+00	0.0E+00	2.2E-06
Cyclopenta[cd]pyrene	27208-37-3	0.0E+00	7.8E-06	1.0E-05	3.3E-06	2.8E-05	3.2E-05
N,N-Dicyclohexylmethylamine	7560-83-0	0.0E+00	2.5E-08	3.8E-08	0.0E+00	9.5E-08	1.3E-07
Dimethyl phthalate	131-11-3	0.0E+00	4.1E-07	1.4E-06	0.0E+00	3.0E-06	7.4E-06
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	9.1E-06	3.6E-05	0.0E+00	6.0E-05	1.5E-04
Methyl stearate	112-61-8	0.0E+00	2.8E-06	6.0E-06	0.0E+00	1.8E-05	2.2E-05
Phenol, 4-(1-phenylethyl)-	1988-89-2	0.0E+00	2.3E-07	5.0E-07	0.0E+00	9.4E-07	2.5E-06
4-tert-Octylphenol	140-66-9	0.0E+00	1.9E-07	4.5E-07	0.0E+00	1.1E-06	2.0E-06

^a 35 field-specific One-Day HQ_{inh}-DART-field are included in this table.



Table G-28. **Off-Field** Field-Specific^a One-Day Inhalation Route Total Hazard Quotients for Individual **Field-Related DARTs** (One-Day HQ_{inh-DART-field}, unitless)— Combined Gender **Spectators 0<2 years**

Chemical	CASRN	OneDayHQ _{inh-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Benzo[a]pyrene	50-32-8	0.0E+00	1.4E-03	2.1E-03	5.8E-04	5.0E-03	9.8E-03
Benzo[e]pyrene	192-97-2	0.0E+00	2.7E-05	6.1E-05	0.0E+00	1.3E-04	2.5E-04
Benzo[g,h,i]perylene	191-24-2	0.0E+00	1.3E-04	2.1E-04	0.0E+00	4.8E-04	9.8E-04
Bis(2-Ethylhexyl)adipate	103-23-1	0.0E+00	6.9E-05	2.8E-04	0.0E+00	4.6E-04	1.1E-03
n-Caproic acid vinyl ester	3050-69-9	0.0E+00	5.4E-05	2.2E-04	0.0E+00	2.8E-04	1.2E-03
Chrysene	218-01-9	0.0E+00	1.0E-04	2.2E-04	0.0E+00	4.2E-04	9.2E-04
Coronene	191-07-1	0.0E+00	6.7E-05	1.5E-04	0.0E+00	2.5E-04	7.0E-04
Cyclohexanamine, N-cyclohexyl-	101-83-7	0.0E+00	1.1E-07	2.0E-07	0.0E+00	6.0E-07	7.1E-07
Cyclohexylamine	108-91-8	0.0E+00	5.3E-07	3.0E-06	0.0E+00	0.0E+00	1.8E-05
Cyclopenta[cd]pyrene	27208-37-3	0.0E+00	6.3E-05	8.1E-05	2.7E-05	2.2E-04	2.6E-04
N,N-Dicyclohexylmethylamine	7560-83-0	0.0E+00	2.0E-07	3.0E-07	0.0E+00	7.6E-07	1.0E-06
Dimethyl phthalate	131-11-3	0.0E+00	3.3E-06	1.2E-05	0.0E+00	2.4E-05	5.9E-05
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	7.3E-05	2.9E-04	0.0E+00	4.8E-04	1.2E-03
Methyl stearate	112-61-8	0.0E+00	2.2E-05	4.8E-05	0.0E+00	1.4E-04	1.8E-04
Phenol, 4-(1-phenylethyl)-	1988-89-2	0.0E+00	1.8E-06	4.0E-06	0.0E+00	7.5E-06	2.0E-05
4-tert-Octylphenol	140-66-9	0.0E+00	1.5E-06	3.6E-06	0.0E+00	8.7E-06	1.6E-05

^a 35 field-specific One-Day HQ_{inh-DART-field} are included in this table.

Table G-29. **Off-Field** Field-Specific^a One-Day Inhalation Route Total Hazard Quotients for Individual **Field-Related DARTs** (One-Day HQ_{inh-DART-field}, unitless)— Combined Gender **Spectators 2<6 years**

Chemical	CASRN	OneDayHQ _{inh-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Benzo[a]pyrene	50-32-8	0.0E+00	7.3E-04	1.1E-03	3.0E-04	2.6E-03	5.2E-03
Benzo[e]pyrene	192-97-2	0.0E+00	1.4E-05	3.2E-05	0.0E+00	6.6E-05	1.3E-04



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Chemical	CASRN	OneDayHQ _{inh-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Benzo[g,h,i]perylene	191-24-2	0.0E+00	6.9E-05	1.1E-04	0.0E+00	2.5E-04	5.2E-04
Bis(2-Ethylhexyl)adipate	103-23-1	0.0E+00	3.6E-05	1.5E-04	0.0E+00	2.4E-04	6.0E-04
n-Caproic acid vinyl ester	3050-69-9	0.0E+00	2.8E-05	1.1E-04	0.0E+00	1.5E-04	6.3E-04
Chrysene	218-01-9	0.0E+00	5.5E-05	1.2E-04	0.0E+00	2.2E-04	4.8E-04
Coronene	191-07-1	0.0E+00	3.5E-05	7.9E-05	0.0E+00	1.3E-04	3.7E-04
Cyclohexanamine, N-cyclohexyl-	101-83-7	0.0E+00	6.0E-08	1.1E-07	0.0E+00	3.2E-07	3.7E-07
Cyclohexylamine	108-91-8	0.0E+00	2.8E-07	1.6E-06	0.0E+00	0.0E+00	9.2E-06
Cyclopenta[cd]pyrene	27208-37-3	0.0E+00	3.3E-05	4.3E-05	1.4E-05	1.2E-04	1.4E-04
N,N-Dicyclohexylmethylamine	7560-83-0	0.0E+00	1.0E-07	1.6E-07	0.0E+00	4.0E-07	5.4E-07
Dimethyl phthalate	131-11-3	0.0E+00	1.7E-06	6.1E-06	0.0E+00	1.3E-05	3.1E-05
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	3.9E-05	1.5E-04	0.0E+00	2.5E-04	6.4E-04
Methyl stearate	112-61-8	0.0E+00	1.2E-05	2.5E-05	0.0E+00	7.5E-05	9.3E-05
Phenol, 4-(1-phenylethyl)-	1988-89-2	0.0E+00	9.6E-07	2.1E-06	0.0E+00	4.0E-06	1.0E-05
4-tert-Octylphenol	140-66-9	0.0E+00	7.9E-07	1.9E-06	0.0E+00	4.6E-06	8.6E-06

^a 35 field-specific One-Day HQ_{inh-DART-field} are included in this table.

Table G-30. Off-Field Field-Specific^a One-Day Inhalation Route Total Hazard Quotients for Individual Field-Related DARTs (One-Day HQ_{inh-DART-field}, unitless)— Combined Gender Spectators 6<11 years

Chemical	CASRN	OneDayHQ _{inh-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Benzo[a]pyrene	50-32-8	0.0E+00	7.0E-04	1.1E-03	2.9E-04	2.5E-03	4.9E-03
Benzo[e]pyrene	192-97-2	0.0E+00	1.3E-05	3.1E-05	0.0E+00	6.3E-05	1.3E-04
Benzo[g,h,i]perylene	191-24-2	0.0E+00	6.6E-05	1.1E-04	0.0E+00	2.4E-04	4.9E-04
Bis(2-Ethylhexyl)adipate	103-23-1	0.0E+00	3.5E-05	1.4E-04	0.0E+00	2.3E-04	5.7E-04
n-Caproic acid vinyl ester	3050-69-9	0.0E+00	2.7E-05	1.1E-04	0.0E+00	1.4E-04	6.0E-04
Chrysene	218-01-9	0.0E+00	5.2E-05	1.1E-04	0.0E+00	2.1E-04	4.6E-04



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Chemical	CASRN	OneDayHQ _{inh-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Coronene	191-07-1	0.0E+00	3.4E-05	7.5E-05	0.0E+00	1.3E-04	3.5E-04
Cyclohexanamine, N-cyclohexyl-	101-83-7	0.0E+00	5.7E-08	1.0E-07	0.0E+00	3.0E-07	3.5E-07
Cyclohexylamine	108-91-8	0.0E+00	2.7E-07	1.5E-06	0.0E+00	0.0E+00	8.8E-06
Cyclopenta[cd]pyrene	27208-37-3	0.0E+00	3.2E-05	4.1E-05	1.4E-05	1.1E-04	1.3E-04
N,N-Dicyclohexylmethylamine	7560-83-0	0.0E+00	9.9E-08	1.5E-07	0.0E+00	3.8E-07	5.1E-07
Dimethyl phthalate	131-11-3	0.0E+00	1.6E-06	5.8E-06	0.0E+00	1.2E-05	3.0E-05
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	3.7E-05	1.5E-04	0.0E+00	2.4E-04	6.1E-04
Methyl stearate	112-61-8	0.0E+00	1.1E-05	2.4E-05	0.0E+00	7.2E-05	8.9E-05
Phenol, 4-(1-phenylethyl)-	1988-89-2	0.0E+00	9.2E-07	2.0E-06	0.0E+00	3.8E-06	9.9E-06
4-tert-Octylphenol	140-66-9	0.0E+00	7.5E-07	1.8E-06	0.0E+00	4.4E-06	8.2E-06

^a 35 field-specific One-Day HQ_{inh-DART-field} are included in this table.

Table G-31. **Off-Field Field-Specific^a One-Day Inhalation Route Total Hazard Quotients for Individual Field-Related DARTs (One-Day HQ_{inh-DART-field}, unitless)— Combined Gender Spectators 11<16 years**

Chemical	CASRN	OneDayHQ _{inh-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Benzo[a]pyrene	50-32-8	0.0E+00	6.0E-02	9.3E-02	2.5E-02	2.1E-01	4.3E-01
Benzo[e]pyrene	192-97-2	0.0E+00	1.2E-03	2.7E-03	0.0E+00	5.5E-03	1.1E-02
Benzo[g,h,i]perylene	191-24-2	0.0E+00	5.7E-03	9.3E-03	0.0E+00	2.1E-02	4.3E-02
Bis(2-Ethylhexyl)adipate	103-23-1	0.0E+00	1.5E-05	6.0E-05	0.0E+00	9.9E-05	2.5E-04
n-Caproic acid vinyl ester	3050-69-9	0.0E+00	1.2E-05	4.7E-05	0.0E+00	6.1E-05	2.6E-04
Chrysene	218-01-9	0.0E+00	4.5E-03	9.5E-03	0.0E+00	1.8E-02	4.0E-02
Coronene	191-07-1	0.0E+00	2.9E-03	6.5E-03	0.0E+00	1.1E-02	3.0E-02
Cyclohexanamine, N-cyclohexyl-	101-83-7	0.0E+00	2.5E-08	4.4E-08	0.0E+00	1.3E-07	1.5E-07
Cyclohexylamine	108-91-8	0.0E+00	1.1E-07	6.6E-07	0.0E+00	0.0E+00	3.8E-06



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Chemical	CASRN	OneDayHQ _{inh-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Cyclopenta[cd]pyrene	27208-37-3	0.0E+00	2.7E-03	3.5E-03	1.2E-03	9.7E-03	1.1E-02
N,N-Dicyclohexylmethylamine	7560-83-0	0.0E+00	4.3E-08	6.6E-08	0.0E+00	1.7E-07	2.2E-07
Dimethyl phthalate	131-11-3	0.0E+00	7.0E-07	2.5E-06	0.0E+00	5.2E-06	1.3E-05
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	3.2E-03	1.3E-02	0.0E+00	2.1E-02	5.2E-02
Methyl stearate	112-61-8	0.0E+00	4.8E-06	1.0E-05	0.0E+00	3.1E-05	3.8E-05
Phenol, 4-(1-phenylethyl)-	1988-89-2	0.0E+00	4.0E-07	8.7E-07	0.0E+00	1.6E-06	4.3E-06
4-tert-Octylphenol	140-66-9	0.0E+00	3.2E-07	7.8E-07	0.0E+00	1.9E-06	3.5E-06

^a 35 field-specific One-Day HQ_{inh-DART-field} are included in this table.

Table G-32. **Off-Field Field-Specific^a One-Day Inhalation Route Total Hazard Quotients for Individual Field-Related DARTs (One-Day HQ_{inh-DART-field}, unitless)— Combined Gender Spectators 16<30 years**

Chemical	CASRN	OneDayHQ _{inh-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Benzo[a]pyrene	50-32-8	0.0E+00	4.0E-02	6.1E-02	1.6E-02	1.4E-01	2.8E-01
Benzo[e]pyrene	192-97-2	0.0E+00	7.7E-04	1.8E-03	0.0E+00	3.6E-03	7.3E-03
Benzo[g,h,i]perylene	191-24-2	0.0E+00	3.8E-03	6.1E-03	0.0E+00	1.4E-02	2.8E-02
Bis(2-Ethylhexyl)adipate	103-23-1	0.0E+00	9.9E-06	3.9E-05	0.0E+00	6.5E-05	1.6E-04
n-Caproic acid vinyl ester	3050-69-9	0.0E+00	7.6E-06	3.1E-05	0.0E+00	4.0E-05	1.7E-04
Chrysene	218-01-9	0.0E+00	3.0E-03	6.3E-03	0.0E+00	1.2E-02	2.6E-02
Coronene	191-07-1	0.0E+00	1.9E-03	4.3E-03	0.0E+00	7.2E-03	2.0E-02
Cyclohexanamine, N-cyclohexyl-	101-83-7	0.0E+00	1.6E-08	2.9E-08	0.0E+00	8.6E-08	1.0E-07
Cyclohexylamine	108-91-8	0.0E+00	7.6E-08	4.4E-07	0.0E+00	0.0E+00	2.5E-06
Cyclopenta[cd]pyrene	27208-37-3	0.0E+00	1.8E-03	2.3E-03	7.7E-04	6.4E-03	7.4E-03
N,N-Dicyclohexylmethylamine	7560-83-0	0.0E+00	2.8E-08	4.3E-08	0.0E+00	1.1E-07	1.5E-07
Dimethyl phthalate	131-11-3	0.0E+00	4.7E-07	1.7E-06	0.0E+00	3.5E-06	8.5E-06



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Chemical	CASRN	OneDayHQ _{inh-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	2.1E-03	8.4E-03	0.0E+00	1.4E-02	3.5E-02
Methyl stearate	112-61-8	0.0E+00	3.2E-06	6.9E-06	0.0E+00	2.0E-05	2.5E-05
Phenol, 4-(1-phenylethyl)-	1988-89-2	0.0E+00	2.6E-07	5.8E-07	0.0E+00	1.1E-06	2.8E-06
4-tert-Octylphenol	140-66-9	0.0E+00	2.1E-07	5.1E-07	0.0E+00	1.2E-06	2.3E-06

^a 35 field-specific One-Day HQ_{inh-DART-field} are included in this table.

Table G-33. **Off-Field Field-Specific^a One-Day Inhalation Route Total Hazard Quotients for Individual Field-Related DARTs (One-Day HQ_{inh-DART-field}, unitless)— Combined Gender Spectators 30<40 years**

Chemical	CASRN	OneDayHQ _{inh-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Benzo[a]pyrene	50-32-8	0.0E+00	3.5E-02	5.4E-02	1.4E-02	1.2E-01	2.5E-01
Benzo[e]pyrene	192-97-2	0.0E+00	6.7E-04	1.5E-03	0.0E+00	3.1E-03	6.3E-03
Benzo[g,h,i]perylene	191-24-2	0.0E+00	3.3E-03	5.4E-03	0.0E+00	1.2E-02	2.5E-02
Bis(2-Ethylhexyl)adipate	103-23-1	0.0E+00	8.6E-06	3.4E-05	0.0E+00	5.7E-05	1.4E-04
n-Caproic acid vinyl ester	3050-69-9	0.0E+00	6.7E-06	2.7E-05	0.0E+00	3.5E-05	1.5E-04
Chrysene	218-01-9	0.0E+00	2.6E-03	5.5E-03	0.0E+00	1.0E-02	2.3E-02
Coronene	191-07-1	0.0E+00	1.7E-03	3.8E-03	0.0E+00	6.3E-03	1.7E-02
Cyclohexanamine, N-cyclohexyl-	101-83-7	0.0E+00	1.4E-08	2.5E-08	0.0E+00	7.5E-08	8.8E-08
Cyclohexylamine	108-91-8	0.0E+00	6.6E-08	3.8E-07	0.0E+00	0.0E+00	2.2E-06
Cyclopenta[cd]pyrene	27208-37-3	0.0E+00	1.6E-03	2.0E-03	6.7E-04	5.6E-03	6.5E-03
N,N-Dicyclohexylmethylamine	7560-83-0	0.0E+00	2.5E-08	3.8E-08	0.0E+00	9.5E-08	1.3E-07
Dimethyl phthalate	131-11-3	0.0E+00	4.1E-07	1.5E-06	0.0E+00	3.0E-06	7.4E-06
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	1.8E-03	7.3E-03	0.0E+00	1.2E-02	3.0E-02
Methyl stearate	112-61-8	0.0E+00	2.8E-06	6.0E-06	0.0E+00	1.8E-05	2.2E-05
Phenol, 4-(1-phenylethyl)-	1988-89-2	0.0E+00	2.3E-07	5.0E-07	0.0E+00	9.4E-07	2.5E-06
4-tert-Octylphenol	140-66-9	0.0E+00	1.9E-07	4.5E-07	0.0E+00	1.1E-06	2.0E-06



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^a 35 field-specific One-Day HQ_{inh}-DART-field are included in this table.

Table G-34. Off-Field Field-Specific^a One-Day Inhalation Route Total Hazard Quotients for Individual Field-Related DARTs (One-Day HQ_{inh}-DART-field, unitless)— Combined Gender Spectators 40<50 years

Chemical	CASRN	OneDayHQ _{inh} -DART-field					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Benzo[a]pyrene	50-32-8	0.0E+00	3.5E-02	5.4E-02	1.5E-02	1.3E-01	2.5E-01
Benzo[e]pyrene	192-97-2	0.0E+00	6.8E-04	1.5E-03	0.0E+00	3.2E-03	6.4E-03
Benzo[g,h,i]perylene	191-24-2	0.0E+00	3.3E-03	5.4E-03	0.0E+00	1.2E-02	2.5E-02
Bis(2-Ethylhexyl)adipate	103-23-1	0.0E+00	8.7E-06	3.5E-05	0.0E+00	5.8E-05	1.4E-04
n-Caproic acid vinyl ester	3050-69-9	0.0E+00	6.8E-06	2.7E-05	0.0E+00	3.6E-05	1.5E-04
Chrysene	218-01-9	0.0E+00	2.6E-03	5.5E-03	0.0E+00	1.1E-02	2.3E-02
Coronene	191-07-1	0.0E+00	1.7E-03	3.8E-03	0.0E+00	6.4E-03	1.8E-02
Cyclohexanamine, N-cyclohexyl-	101-83-7	0.0E+00	1.4E-08	2.5E-08	0.0E+00	7.6E-08	8.9E-08
Cyclohexylamine	108-91-8	0.0E+00	6.7E-08	3.8E-07	0.0E+00	0.0E+00	2.2E-06
Cyclopenta[cd]pyrene	27208-37-3	0.0E+00	1.6E-03	2.0E-03	6.8E-04	5.6E-03	6.5E-03
N,N-Dicyclohexylmethylamine	7560-83-0	0.0E+00	2.5E-08	3.8E-08	0.0E+00	9.6E-08	1.3E-07
Dimethyl phthalate	131-11-3	0.0E+00	4.1E-07	1.5E-06	0.0E+00	3.1E-06	7.5E-06
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	1.8E-03	7.4E-03	0.0E+00	1.2E-02	3.1E-02
Methyl stearate	112-61-8	0.0E+00	2.8E-06	6.1E-06	0.0E+00	1.8E-05	2.2E-05
Phenol, 4-(1-phenylethyl)-	1988-89-2	0.0E+00	2.3E-07	5.1E-07	0.0E+00	9.5E-07	2.5E-06
4-tert-Octylphenol	140-66-9	0.0E+00	1.9E-07	4.5E-07	0.0E+00	1.1E-06	2.1E-06

^a 35 field-specific One-Day HQ_{inh}-DART-field are included in this table.

Table G-35. Off-Field Field-Specific^a One-Day Inhalation Route Total Hazard Quotients for Individual Field-Related DARTs (One-Day HQ_{inh}-DART-field, unitless)— Combined Gender Spectators 50<70 years

Chemical	CASRN	OneDayHQ _{inh} -DART-field					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Benzo[a]pyrene	50-32-8	0.0E+00	3.5E-02	5.4E-02	1.5E-02	1.3E-01	2.5E-01



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Chemical	CASRN	OneDayHQ _{inh-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Benzo[e]pyrene	192-97-2	0.0E+00	6.8E-04	1.6E-03	0.0E+00	3.2E-03	6.4E-03
Benzo[g,h,i]perylene	191-24-2	0.0E+00	3.3E-03	5.4E-03	0.0E+00	1.2E-02	2.5E-02
Bis(2-Ethylhexyl)adipate	103-23-1	0.0E+00	8.7E-06	3.5E-05	0.0E+00	5.8E-05	1.4E-04
n-Caproic acid vinyl ester	3050-69-9	0.0E+00	6.8E-06	2.7E-05	0.0E+00	3.6E-05	1.5E-04
Chrysene	218-01-9	0.0E+00	2.6E-03	5.6E-03	0.0E+00	1.1E-02	2.3E-02
Coronene	191-07-1	0.0E+00	1.7E-03	3.8E-03	0.0E+00	6.4E-03	1.8E-02
Cyclohexanamine, N-cyclohexyl-	101-83-7	0.0E+00	1.4E-08	2.5E-08	0.0E+00	7.6E-08	8.9E-08
Cyclohexylamine	108-91-8	0.0E+00	6.7E-08	3.9E-07	0.0E+00	0.0E+00	2.2E-06
Cyclopenta[cd]pyrene	27208-37-3	0.0E+00	1.6E-03	2.0E-03	6.8E-04	5.6E-03	6.6E-03
N,N-Dicyclohexylmethylamine	7560-83-0	0.0E+00	2.5E-08	3.8E-08	0.0E+00	9.7E-08	1.3E-07
Dimethyl phthalate	131-11-3	0.0E+00	4.1E-07	1.5E-06	0.0E+00	3.1E-06	7.5E-06
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	1.9E-03	7.4E-03	0.0E+00	1.2E-02	3.1E-02
Methyl stearate	112-61-8	0.0E+00	2.8E-06	6.1E-06	0.0E+00	1.8E-05	2.2E-05
Phenol, 4-(1-phenylethyl)-	1988-89-2	0.0E+00	2.3E-07	5.1E-07	0.0E+00	9.6E-07	2.5E-06
4-tert-Octylphenol	140-66-9	0.0E+00	1.9E-07	4.5E-07	0.0E+00	1.1E-06	2.1E-06

^a 35 field-specific One-Day HQ_{inh-DART-field} are included in this table.

INDIVIDUAL FIELD ASSESSMENT (Table G-46 to Table G-50)

Table G-36. **On-Field** Field-Specific^a One-Day Inhalation Route Total Hazard Quotients for All DARTs (One-Day HQ_{inh-DART-sum-field}, unitless)—Combined Gender

Receptor Category and Age Group	One-Day HQ _{inh-DART-sum-field}					
	Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Athletes 2<6 years	7.4E-07	3.5E-03	3.5E-03	1.6E-03	9.8E-03	1.3E-02
Athletes 6<11 years	5.6E-07	2.6E-03	2.7E-03	1.2E-03	7.4E-03	9.6E-03
Athletes 11<16 years	4.7E-07	3.9E-01	4.0E-01	1.8E-01	1.1E+00	1.3E+00
Athletes 16<30 years	6.9E-07	5.8E-01	5.8E-01	2.7E-01	1.7E+00	1.8E+00
Athletes 30<40 years	4.6E-07	3.9E-01	3.9E-01	1.8E-01	1.1E+00	1.2E+00



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Receptor Category and Age Group	One-Day HQ _{inh-DART-sum-field}					
	Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Athletes 40<50 years	4.6E-07	3.9E-01	3.9E-01	1.8E-01	1.1E+00	1.2E+00
Athletes 50<70 years	5.0E-07	4.2E-01	4.2E-01	1.9E-01	1.2E+00	1.3E+00
Coaches 16<30 years	2.9E-07	2.5E-01	2.5E-01	1.1E-01	7.2E-01	7.8E-01
Coaches 30<40 years	2.6E-07	2.1E-01	2.1E-01	9.9E-02	6.3E-01	6.8E-01
Coaches 40<50 years	2.6E-07	2.2E-01	2.2E-01	1.0E-01	6.3E-01	6.9E-01
Coaches 50<70 years	2.6E-07	2.2E-01	2.2E-01	1.0E-01	6.4E-01	6.9E-01
Referees 16<30 years	2.7E-07	2.3E-01	2.3E-01	1.1E-01	6.7E-01	7.3E-01
Referees 30<40 years	2.4E-07	2.0E-01	2.0E-01	9.2E-02	5.8E-01	6.4E-01
Referees 40<50 years	2.4E-07	2.0E-01	2.0E-01	9.3E-02	5.9E-01	6.4E-01
Referees 50<70 years	2.4E-07	2.0E-01	2.0E-01	9.3E-02	5.9E-01	6.4E-01
Spectators Third trimester fetus	5.0E-08	2.3E-04	2.4E-04	1.1E-04	6.6E-04	8.5E-04
Spectators 0<2 years	4.0E-07	1.9E-03	1.9E-03	8.5E-04	5.3E-03	6.9E-03
Spectators 2<6 years	2.1E-07	9.9E-04	1.0E-03	4.5E-04	2.8E-03	3.6E-03
Spectators 6<11 years	2.0E-07	9.4E-04	9.6E-04	4.3E-04	2.7E-03	3.4E-03
Spectators 11<16 years	8.7E-08	7.3E-02	7.3E-02	3.4E-02	2.1E-01	2.3E-01
Spectators 16<30 years	5.8E-08	4.8E-02	4.8E-02	2.2E-02	1.4E-01	1.5E-01
Spectators 30<40 years	5.0E-08	4.2E-02	4.2E-02	2.0E-02	1.2E-01	1.3E-01
Spectators 40<50 years	5.1E-08	4.3E-02	4.3E-02	2.0E-02	1.2E-01	1.4E-01
Spectators 50<70 years	5.1E-08	4.3E-02	4.3E-02	2.0E-02	1.3E-01	1.4E-01

^a Only individual fields that had samples collected are included in the distribution calculations. 35 field-specific One-Day HQ_{inh-DART-sum-field} are included in this table.

Values are rounded to two decimal places.

Table G-37. On-Field Field-Specific^a One-Day Inhalation Route Total Hazard Quotients for Field-Related DARTs (One-Day HQ_{inh-DART-sum-field}, unitless)—Combined Gender

Receptor Category and Age Group	One-Day HQ _{inh-DART-sum-field}					
	Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Athletes 2<6 years	2.4E-07	3.5E-03	3.5E-03	1.8E-03	9.8E-03	1.2E-02



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Receptor Category and Age Group	One-Day HQ _{inh-DART-sum-field}					
	Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Athletes 6<11 years	1.8E-07	2.6E-03	2.7E-03	1.4E-03	7.4E-03	9.4E-03
Athletes 11<16 years	1.5E-07	4.0E-01	4.0E-01	2.2E-01	1.2E+00	1.3E+00
Athletes 16<30 years	2.2E-07	5.9E-01	5.8E-01	3.2E-01	1.7E+00	1.8E+00
Athletes 30<40 years	1.5E-07	4.0E-01	3.9E-01	2.2E-01	1.1E+00	1.2E+00
Athletes 40<50 years	1.5E-07	4.0E-01	3.9E-01	2.2E-01	1.1E+00	1.2E+00
Athletes 50<70 years	1.6E-07	4.3E-01	4.2E-01	2.4E-01	1.2E+00	1.3E+00
Coaches 16<30 years	9.5E-08	2.5E-01	2.5E-01	1.4E-01	7.2E-01	7.8E-01
Coaches 30<40 years	8.3E-08	2.2E-01	2.1E-01	1.2E-01	6.3E-01	6.8E-01
Coaches 40<50 years	8.4E-08	2.2E-01	2.2E-01	1.2E-01	6.4E-01	6.9E-01
Coaches 50<70 years	8.4E-08	2.2E-01	2.2E-01	1.2E-01	6.4E-01	6.9E-01
Referees 16<30 years	8.8E-08	2.3E-01	2.3E-01	1.3E-01	6.7E-01	7.3E-01
Referees 30<40 years	7.7E-08	2.1E-01	2.0E-01	1.1E-01	5.8E-01	6.4E-01
Referees 40<50 years	7.8E-08	2.1E-01	2.0E-01	1.1E-01	5.9E-01	6.4E-01
Referees 50<70 years	7.8E-08	2.1E-01	2.0E-01	1.1E-01	5.9E-01	6.4E-01
Spectators Third trimester fetus	1.6E-08	2.4E-04	2.4E-04	1.2E-04	6.6E-04	8.4E-04
Spectators 0<2 years	1.3E-07	1.9E-03	1.9E-03	9.8E-04	5.3E-03	6.8E-03
Spectators 2<6 years	6.9E-08	1.0E-03	1.0E-03	5.1E-04	2.8E-03	3.6E-03
Spectators 6<11 years	6.6E-08	9.5E-04	9.5E-04	4.9E-04	2.7E-03	3.4E-03
Spectators 11<16 years	2.8E-08	7.6E-02	7.3E-02	4.1E-02	2.1E-01	2.3E-01
Spectators 16<30 years	1.9E-08	5.0E-02	4.8E-02	2.7E-02	1.4E-01	1.5E-01
Spectators 30<40 years	1.6E-08	4.4E-02	4.2E-02	2.4E-02	1.2E-01	1.3E-01
Spectators 40<50 years	1.7E-08	4.4E-02	4.3E-02	2.4E-02	1.3E-01	1.4E-01
Spectators 50<70 years	1.7E-08	4.4E-02	4.3E-02	2.4E-02	1.3E-01	1.4E-01

^a Only individual fields that had samples collected are included in the distribution calculations. 1 of the 35 fields did not have on-field SVOC samples. 34 field-specific One-Day HQ_{inh-DART-sum-field} are included in this table.

Values are rounded to two decimal places.



Table G-38. **On-Field Field-Specific^a One-Day Inhalation Route Total Hazard Quotients for Non-Field-Related DARTs (One-Day HQ_{inh-DART-sum-field}, unitless)—Combined Gender**

Receptor Category and Age Group	One-Day HQ _{inh-DART-sum-field}					
	Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Athletes 2<6 years	0.0E+00	8.4E-05	6.0E-05	6.7E-05	1.8E-04	2.1E-04
Athletes 6<11 years	0.0E+00	6.4E-05	4.6E-05	5.0E-05	1.3E-04	1.6E-04
Athletes 11<16 years	0.0E+00	5.3E-05	3.8E-05	4.2E-05	1.1E-04	1.3E-04
Athletes 16<30 years	0.0E+00	7.8E-05	5.6E-05	6.2E-05	1.6E-04	1.9E-04
Athletes 30<40 years	0.0E+00	5.2E-05	3.7E-05	4.1E-05	1.1E-04	1.3E-04
Athletes 40<50 years	0.0E+00	5.2E-05	3.7E-05	4.1E-05	1.1E-04	1.3E-04
Athletes 50<70 years	0.0E+00	5.6E-05	4.1E-05	4.5E-05	1.2E-04	1.4E-04
Coaches 16<30 years	0.0E+00	3.3E-05	2.4E-05	2.6E-05	7.0E-05	8.1E-05
Coaches 30<40 years	0.0E+00	2.9E-05	2.1E-05	2.3E-05	6.1E-05	7.1E-05
Coaches 40<50 years	0.0E+00	2.9E-05	2.1E-05	2.3E-05	6.2E-05	7.2E-05
Coaches 50<70 years	0.0E+00	2.9E-05	2.1E-05	2.3E-05	6.2E-05	7.2E-05
Referees 16<30 years	0.0E+00	3.1E-05	2.2E-05	2.4E-05	6.5E-05	7.5E-05
Referees 30<40 years	0.0E+00	2.7E-05	1.9E-05	2.1E-05	5.7E-05	6.6E-05
Referees 40<50 years	0.0E+00	2.7E-05	1.9E-05	2.2E-05	5.7E-05	6.7E-05
Referees 50<70 years	0.0E+00	2.7E-05	2.0E-05	2.2E-05	5.8E-05	6.7E-05
Spectators Third trimester fetus	0.0E+00	5.7E-06	4.1E-06	4.5E-06	1.2E-05	1.4E-05
Spectators 0<2 years	0.0E+00	4.6E-05	3.3E-05	3.6E-05	9.6E-05	1.1E-04
Spectators 2<6 years	0.0E+00	2.4E-05	1.7E-05	1.9E-05	5.1E-05	5.9E-05
Spectators 6<11 years	0.0E+00	2.3E-05	1.6E-05	1.8E-05	4.8E-05	5.6E-05
Spectators 11<16 years	0.0E+00	9.9E-06	7.1E-06	7.8E-06	2.1E-05	2.4E-05
Spectators 16<30 years	0.0E+00	6.5E-06	4.7E-06	5.2E-06	1.4E-05	1.6E-05
Spectators 30<40 years	0.0E+00	5.7E-06	4.1E-06	4.5E-06	1.2E-05	1.4E-05
Spectators 40<50 years	0.0E+00	5.7E-06	4.1E-06	4.6E-06	1.2E-05	1.4E-05
Spectators 50<70 years	0.0E+00	5.8E-06	4.1E-06	4.6E-06	1.2E-05	1.4E-05



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^a Only individual fields that had samples collected are included in the distribution calculations. 1 of the 35 fields did not have on-field ALD samples. 34 field-specific One-Day HQ_{inh-DART-sum-field} are included in this table.

Values are rounded to two decimal places.

Table G-39. Off-Field Field-Specific^a One-Day Inhalation Route Total Hazard Quotients for All DARTs (One-Day HQ_{inh-DART-sum-field}, unitless) for Combined Gender Spectators

Spectator Receptor Age Group	One-Day HQ _{inh-DART-sum-field}					
	Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Third trimester fetus	0.0E+00	2.5E-04	3.1E-04	1.3E-04	8.1E-04	1.4E-03
0<2 years	0.0E+00	2.0E-03	2.5E-03	1.1E-03	6.5E-03	1.2E-02
2<6 years	0.0E+00	1.1E-03	1.3E-03	5.6E-04	3.4E-03	6.1E-03
6<11 years	0.0E+00	1.0E-03	1.3E-03	5.3E-04	3.3E-03	5.8E-03
11<16 years	0.0E+00	8.0E-02	1.0E-01	4.5E-02	2.7E-01	4.5E-01
16<30 years	0.0E+00	5.3E-02	6.6E-02	3.0E-02	1.8E-01	3.0E-01
30<40 years	0.0E+00	4.6E-02	5.8E-02	2.6E-02	1.6E-01	2.6E-01
40<50 years	0.0E+00	4.7E-02	5.9E-02	2.6E-02	1.6E-01	2.6E-01
50<70 years	0.0E+00	4.7E-02	5.9E-02	2.7E-02	1.6E-01	2.6E-01

^a Only individual fields that had samples collected are included in the distribution calculations. 2 of the 35 fields did not have off-field SVOCs samples and none of the 35 fields have off-field ALD samples. 33 field-specific One-Day HQ_{inh-DART-sum-field} are included in this table.

Values are rounded to two significant figures.

Table G-40. Off-Field Field-Specific^a One-Day Inhalation Route Total Hazard Quotients for Field-Related DARTs (One-Day HQ_{inh-DART-sum-field}, unitless) for Combined Gender Spectators

Spectator Receptor Age Group	One-Day HQ _{inh-DART-sum-field}					
	Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Third trimester fetus	0.0E+00	2.5E-04	3.1E-04	1.3E-04	8.1E-04	1.4E-03
0<2 years	0.0E+00	2.0E-03	2.5E-03	1.1E-03	6.5E-03	1.2E-02
2<6 years	0.0E+00	1.1E-03	1.3E-03	5.6E-04	3.4E-03	6.1E-03
6<11 years	0.0E+00	1.0E-03	1.3E-03	5.3E-04	3.3E-03	5.8E-03
11<16 years	0.0E+00	8.0E-02	1.0E-01	4.5E-02	2.7E-01	4.5E-01
16<30 years	0.0E+00	5.3E-02	6.6E-02	3.0E-02	1.8E-01	3.0E-01



Spectator Receptor Age Group	One-Day HQ _{inh-DART-sum-field}					
	Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
30<40 years	0.0E+00	4.6E-02	5.8E-02	2.6E-02	1.6E-01	2.6E-01
40<50 years	0.0E+00	4.7E-02	5.9E-02	2.6E-02	1.6E-01	2.6E-01
50<70 years	0.0E+00	4.7E-02	5.9E-02	2.7E-02	1.6E-01	2.6E-01

^a Only individual fields that had samples collected are included in the distribution calculations. 2 of the 35 fields did not have off-field SVOCs samples. 33 field-specific One-Day HQ_{inh-DART-sum-field} are included in this table.

Values are rounded to two significant figures.

G.2.3. Chronic Inhalation Hazard for Sensory Irritants (Chronic HQ_{inh-sensory}) and Chronic Hazard Index for Sensory Irritants (Chronic HI_{sensory})

Table G-1. Chronic Inhalation Hazard Quotient for Individual Sensory Irritant (Chronic HQ_{inh-sensory}, unitless), Inhalation Route Total Hazard Quotients for **Sensory Irritants** (Chronic HQ_{inh-sensory-sum}, unitless), and Chronic Hazard Index for Sensory Irritants (Chronic HI_{sensory}, unitless)—All Receptor Categories and Age Groups

Chemical	CASRN	Chronic HQ _{inh-sensory}	
		On-Field	Off-Field
Field-Related			
Styrene	100-42-5	6.5E-05	6.7E-05
Field-Related Chronic HQ _{inh-sensory-sum} or Field-Related Chronic HI _{sensory}		6.5E-05	6.7E-05
Non-Field-Related			
Acetaldehyde	75-07-0	1.8E-02	Not assessed
Formaldehyde	50-00-0	4.3E-01	Not assessed
Non-Field-Related Chronic HQ _{inh-sensory-sum} or Non-Field-Related Chronic HI _{sensory}		4.4E-01	Not assessed
All Sensory Irritants Chronic HI _{sensory} ^a		4.4E-01	6.7E-05

^a Inhalation exposure is the only route assessed for sensory irritants. Hazard index for sensory irritants (Chronic HI_{sensory}) equals to the inhalation route total of chronic hazard quotients of sensory irritants (Chronic HQ_{inh-sensory-sum}) assessed.

Values are rounded to two decimal places.

INDIVIDUAL FIELD ASSESSMENT (Table G-52)



Table G-2. On-Field Field-Specific^a Chronic Inhalation Route Total Hazard Quotients^b for Sensory Irritants (Chronic HQ_{inh-sensory-sum-field}, unitless) and Field-Specific Chronic Hazard Index^b for Sensory Irritants (Chronic HI_{sensory-field}, unitless)—All Receptor Categories and Age Groups

Chemical Group	Chronic HQ _{inh-sensory-sum-field} or Chronic HI _{sensory-field}					
	Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Non-field related Chronic HQ _{inh-sensory-sum-field} or Chronic HI _{sensory-field}	9.5E-02	4.4E-01	3.3E-01	3.7E-01	7.4E-01	1.9E+00
Field related Chronic HQ _{inh-sensory-sum-field} or Chronic HI _{sensory-field}	0.0E+00	6.5E-05	1.3E-04	0.0E+00	2.2E-04	7.3E-04
All Sensory Irritants Chronic HQ _{inh-sensory-sum-field} or Chronic HI _{sensory-field}	0.0E+00	4.3E-01	3.4E-01	3.7E-01	7.4E-01	1.9E+00

^a 35 field-specific Chronic HQ_{inh-sensory-sum-field} are included in this table.

^b Inhalation route is the only exposure assessed for sensory irritants. For each field, its Chronic HQ_{inh-sensory-sum-field} equals to Chronic HI_{sensory-field}.

Values are rounded to two decimal places.

G.2.4. Chronic Inhalation Hazard Quotient (Chronic HQ_{inh}) for General Chemicals

Table G-1. On-Field Chronic Inhalation Hazard Quotient for Individual Chemical (Chronic HQ_{inh}, unitless), Chronic Inhalation Route Total Hazard Quotients (Chronic HQ_{inh-sum}, unitless) for Field-Related General Chemicals—Combined Gender Athletes

Chemical	CASRN	Chronic HQ _{inh}						
		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-07	9.6E-07	9.4E-07	1.8E-06	1.2E-06	1.1E-06	1.1E-06
Acetone	67-64-1	9.6E-04	1.3E-03	1.2E-03	2.3E-03	1.5E-03	1.5E-03	1.5E-03
Aniline	62-53-3	1.0E-03	1.3E-03	1.3E-03	2.4E-03	1.6E-03	1.5E-03	1.5E-03
Anthracene	120-12-7	4.8E-08	6.3E-08	6.1E-08	1.2E-07	7.5E-08	7.4E-08	7.3E-08
Anthracene, 2-methyl-	613-12-7	1.3E-08	1.6E-08	1.6E-08	3.0E-08	2.0E-08	1.9E-08	1.9E-08
Anthracene, 9,10-dimethyl	781-43-1	1.4E-08	1.9E-08	1.8E-08	3.4E-08	2.2E-08	2.2E-08	2.2E-08
Anthracene, 9-phenyl	602-55-1	1.3E-09	1.7E-09	1.7E-09	3.2E-09	2.1E-09	2.1E-09	2.0E-09
Benz[a]anthracene	56-55-3	7.3E-10	9.4E-10	9.2E-10	1.7E-09	1.1E-09	1.1E-09	1.1E-09
Benzaldehyde	100-52-7	3.9E-05	5.1E-05	5.0E-05	9.4E-05	6.2E-05	6.1E-05	6.0E-05
Benzene, 1,2,3-trimethyl-	526-73-8	3.4E-05	4.4E-05	4.3E-05	8.1E-05	5.3E-05	5.2E-05	5.2E-05
Benzene, 1,2,4,5-tetramethyl-	95-93-2	6.5E-06	8.4E-06	8.2E-06	1.5E-05	1.0E-05	1.0E-05	9.8E-06
Benzene, 1,2,4-trimethyl-	95-63-6	3.0E-04	3.9E-04	3.8E-04	7.3E-04	4.7E-04	4.7E-04	4.6E-04



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Chemical	CASRN	Chronic HQ _{inh}						
		2<6 years	6<11 years	11<16 years	16<30 years	30<40 years	40<50 years	50<70 years
Benzene, 1-ethyl-2,4-dimethyl-	874-41-9	1.4E-05	1.8E-05	1.7E-05	3.2E-05	2.1E-05	2.1E-05	2.1E-05
Benzene, 2-ethyl-1,4-dimethyl-	1758-88-9	1.9E-05	2.5E-05	2.4E-05	4.6E-05	3.0E-05	3.0E-05	2.9E-05
Benzene, butyl-	104-51-8	2.3E-08	3.0E-08	2.9E-08	5.6E-08	3.6E-08	3.6E-08	3.5E-08
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	5.5E-05	7.2E-05	7.0E-05	1.3E-04	8.6E-05	8.5E-05	8.3E-05
Benzo[b]fluoranthene	205-99-2	2.7E-08	3.5E-08	3.5E-08	6.5E-08	4.3E-08	4.2E-08	4.1E-08
7H-Benzo[c]fluorene	205-12-9	6.0E-08	7.7E-08	7.6E-08	1.4E-07	9.3E-08	9.2E-08	9.0E-08
Benzo[k]fluoranthene	207-08-9	3.4E-08	4.4E-08	4.3E-08	8.1E-08	5.3E-08	5.2E-08	5.1E-08
Benzothiazole	95-16-9	3.3E-03	4.3E-03	4.2E-03	7.8E-03	5.1E-03	5.0E-03	5.0E-03
Benzothiazole, 2-phenyl-	883-93-2	2.6E-04	3.4E-04	3.3E-04	6.2E-04	4.1E-04	4.0E-04	3.9E-04
2-Benzothiazolone	934-34-9	4.1E-04	5.3E-04	5.2E-04	9.8E-04	6.4E-04	6.3E-04	6.2E-04
Benzyl butyl phthalate	85-68-7	7.6E-07	9.9E-07	9.6E-07	1.8E-06	1.2E-06	1.2E-06	1.1E-06
Butanal	123-72-8	5.9E-03	7.7E-03	7.5E-03	1.4E-02	9.2E-03	9.1E-03	9.0E-03
Cyclopentasiloxane, decamethyl-	541-02-6	3.6E-05	4.6E-05	4.5E-05	8.5E-05	5.6E-05	5.5E-05	5.4E-05
Cyclotetrasiloxane, octamethyl-	556-67-2	1.3E-05	1.7E-05	1.6E-05	3.1E-05	2.0E-05	2.0E-05	1.9E-05
p-Cymene	99-87-6	6.5E-05	8.4E-05	8.2E-05	1.5E-04	1.0E-04	1.0E-04	9.8E-05
Decane	124-18-5	4.2E-04	5.4E-04	5.3E-04	1.0E-03	6.6E-04	6.5E-04	6.3E-04
Dibenz[a,h]anthracene	53-70-3	2.1E-08	2.7E-08	2.7E-08	5.1E-08	3.3E-08	3.3E-08	3.2E-08
Dibenzothiophene	132-65-0	5.5E-06	7.1E-06	6.9E-06	1.3E-05	8.5E-06	8.4E-06	8.3E-06
Dibutyl phthalate	84-74-2	1.7E-04	2.2E-04	2.1E-04	4.0E-04	2.6E-04	2.6E-04	2.5E-04
Diethyl phthalate	84-66-2	1.5E-07	1.9E-07	1.8E-07	3.5E-07	2.3E-07	2.2E-07	2.2E-07
Diisobutyl phthalate	84-69-5	6.3E-05	8.2E-05	8.0E-05	1.5E-04	9.9E-05	9.7E-05	9.5E-05
Diisooctylphthalate	27554-26-3	2.2E-04	2.8E-04	2.8E-04	5.2E-04	3.4E-04	3.4E-04	3.3E-04
Di-n-octyl phthalate	117-84-0	4.3E-07	5.5E-07	5.4E-07	1.0E-06	6.7E-07	6.6E-07	6.5E-07
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	7.2E-04	9.3E-04	9.1E-04	1.7E-03	1.1E-03	1.1E-03	1.1E-03



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Chemical	CASRN	Chronic HQ _{inh}						
		2<6 years	6<11 years	11<16 years	16<30 years	30<40 years	40<50 years	50<70 years
3,5-di-tert-Butyl-4-hydroxybenzaldehyde	1620-98-0	2.5E-06	3.3E-06	3.2E-06	6.0E-06	3.9E-06	3.9E-06	3.8E-06
Dodecane	112-40-3	5.2E-05	6.8E-05	6.6E-05	1.3E-04	8.2E-05	8.1E-05	7.9E-05
Fluoranthene	206-44-0	4.2E-06	5.4E-06	5.3E-06	1.0E-05	6.5E-06	6.4E-06	6.3E-06
Fluorene	86-73-7	6.6E-06	8.6E-06	8.4E-06	1.6E-05	1.0E-05	1.0E-05	1.0E-05
Furan, 2-methyl	534-22-5	4.7E-02	6.1E-02	6.0E-02	1.1E-01	7.4E-02	7.3E-02	7.1E-02
Heptanal	111-71-7	2.9E-04	3.7E-04	3.6E-04	6.8E-04	4.5E-04	4.4E-04	4.3E-04
Hexadecane	544-76-3	2.5E-04	3.2E-04	3.1E-04	5.9E-04	3.8E-04	3.8E-04	3.7E-04
2,5-Hexanedione	110-13-4	1.4E-04	1.8E-04	1.8E-04	3.4E-04	2.2E-04	2.2E-04	2.1E-04
Indan	496-11-7	2.3E-06	3.0E-06	3.0E-06	5.6E-06	3.7E-06	3.6E-06	3.5E-06
Mesitylene	108-67-8	7.1E-05	9.3E-05	9.0E-05	1.7E-04	1.1E-04	1.1E-04	1.1E-04
Methacrolein	78-85-3	8.4E-03	1.1E-02	1.1E-02	2.0E-02	1.3E-02	1.3E-02	1.3E-02
Methyl Isobutyl Ketone	108-10-1	1.5E-05	2.0E-05	1.9E-05	3.6E-05	2.4E-05	2.3E-05	2.3E-05
Naphthalene	91-20-3	1.4E-03	1.8E-03	1.7E-03	3.3E-03	2.1E-03	2.1E-03	2.1E-03
Naphthalene, 1,2-dimethyl-	573-98-8	1.9E-05	2.5E-05	2.4E-05	4.6E-05	3.0E-05	3.0E-05	2.9E-05
Naphthalene, 1,6-dimethyl-	575-43-9	1.4E-04	1.8E-04	1.7E-04	3.3E-04	2.1E-04	2.1E-04	2.1E-04
Naphthalene, 1-methyl-	90-12-0	1.4E-04	1.8E-04	1.7E-04	3.3E-04	2.1E-04	2.1E-04	2.1E-04
Naphthalene, 2-(bromomethyl)-	939-26-4	3.8E-05	4.9E-05	4.8E-05	9.1E-05	6.0E-05	5.9E-05	5.8E-05
Naphthalene, 2,3-dimethyl-	581-40-8	1.0E-04	1.3E-04	1.3E-04	2.5E-04	1.6E-04	1.6E-04	1.6E-04
Naphthalene, 2-methyl-	91-57-6	3.7E-04	4.8E-04	4.6E-04	8.8E-04	5.7E-04	5.6E-04	5.5E-04
1-Octadecene	112-88-9	3.4E-05	4.4E-05	4.3E-05	8.2E-05	5.3E-05	5.3E-05	5.2E-05
Octanal	124-13-0	8.7E-04	1.1E-03	1.1E-03	2.1E-03	1.4E-03	1.3E-03	1.3E-03
Octane	111-65-9	4.7E-04	6.1E-04	5.9E-04	1.1E-03	7.3E-04	7.2E-04	7.1E-04
17-Pentatriacontene	6971-40-0	5.7E-06	7.4E-06	7.2E-06	1.4E-05	8.9E-06	8.7E-06	8.6E-06
N-Phenylbenzamide	93-98-1	1.4E-03	1.8E-03	1.8E-03	3.3E-03	2.2E-03	2.1E-03	2.1E-03
Phenanthrene	85-01-8	1.9E-06	2.5E-06	2.4E-06	4.6E-06	3.0E-06	3.0E-06	2.9E-06



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Chemical	CASRN	Chronic HQ _{inh}						
		2<6 years	6<11 years	11<16 years	16<30 years	30<40 years	40<50 years	50<70 years
Phenanthrene, 1-methyl	832-69-9	1.2E-07	1.6E-07	1.5E-07	2.9E-07	1.9E-07	1.9E-07	1.8E-07
Phenanthrene, 2-methyl-	2531-84-2	2.2E-07	2.9E-07	2.8E-07	5.3E-07	3.4E-07	3.4E-07	3.3E-07
Phenanthrene, 3-methyl	832-71-3	2.6E-07	3.4E-07	3.3E-07	6.3E-07	4.1E-07	4.0E-07	4.0E-07
Propionaldehyde	123-38-6	3.6E-03	4.6E-03	4.5E-03	8.5E-03	5.6E-03	5.5E-03	5.4E-03
Pyrene	129-00-0	4.7E-06	6.1E-06	6.0E-06	1.1E-05	7.4E-06	7.3E-06	7.1E-06
Pyridine, 2-(4-methylphenyl)-	4467-06-5	1.6E-06	2.0E-06	2.0E-06	3.7E-06	2.4E-06	2.4E-06	2.4E-06
Resorcinol	108-46-3	1.5E-05	1.9E-05	1.8E-05	3.5E-05	2.3E-05	2.2E-05	2.2E-05
m-Tolualdehyde	620-23-5	1.2E-04	1.6E-04	1.5E-04	2.9E-04	1.9E-04	1.8E-04	1.8E-04
TXIB "Kodaflex"	6846-50-0	2.9E-05	3.8E-05	3.7E-05	7.0E-05	4.6E-05	4.5E-05	4.4E-05
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	3.7E-06	4.8E-06	4.6E-06	8.8E-06	5.7E-06	5.6E-06	5.5E-06
Undecane	1120-21-4	1.0E-04	1.3E-04	1.3E-04	2.4E-04	1.6E-04	1.6E-04	1.5E-04
Valeraldehyde	110-62-3	1.8E-02	2.3E-02	2.3E-02	4.3E-02	2.8E-02	2.8E-02	2.7E-02
Field-Related Chronic HQ _{inh} -sum		9.7E-02	1.3E-01	1.2E-01	2.3E-01	1.5E-01	1.5E-01	1.5E-01

Values are rounded to two significant figures.

Table G-2. On-Field Chronic Inhalation Hazard Quotient for Individual Chemical (Chronic HQ_{inh}, unitless), Chronic Inhalation Route Total Hazard Quotients (Chronic HQ_{inh}-sum, unitless) for Non-Field-Related General Chemicals—Combined Gender Athletes

Chemical	CASRN	Chronic HQ _{inh}						
		2<6 years	6<11 years	11<16 years	16<30 years	30<40 years	40<50 years	50<70 years
Benzene	71-43-2	3.1E-02	4.1E-02	4.0E-02	7.5E-02	4.9E-02	4.8E-02	4.7E-02
Benzene, 1,4-dichloro	106-46-7	5.0E-05	6.4E-05	6.3E-05	1.2E-04	7.7E-05	7.6E-05	7.5E-05
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	3.0E-04	3.9E-04	3.8E-04	7.1E-04	4.6E-04	4.6E-04	4.5E-04
2-Butoxyethanol	111-76-2	9.6E-06	1.2E-05	1.2E-05	2.3E-05	1.5E-05	1.5E-05	1.5E-05
Cyclotrisiloxane, hexamethyl-	541-05-9	1.6E-05	2.1E-05	2.1E-05	3.9E-05	2.5E-05	2.5E-05	2.5E-05
Decanal	112-31-2	5.4E-04	7.1E-04	6.9E-04	1.3E-03	8.5E-04	8.4E-04	8.2E-04



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Chemical	CASRN	Chronic HQ _{inh}						
		2<6 years	6<11 years	11<16 years	16<30 years	30<40 years	40<50 years	50<70 years
Ethylbenzene	100-41-4	8.9E-05	1.2E-04	1.1E-04	2.1E-04	1.4E-04	1.4E-04	1.3E-04
Heptane	142-82-5	8.9E-05	1.2E-04	1.1E-04	2.1E-04	1.4E-04	1.4E-04	1.4E-04
Hexanal	66-25-1	1.5E-02	2.0E-02	1.9E-02	3.6E-02	2.4E-02	2.3E-02	2.3E-02
Hexane	110-54-3	1.5E-04	1.9E-04	1.9E-04	3.5E-04	2.3E-04	2.3E-04	2.2E-04
1-Hexanol, 2-ethyl-	104-76-7	3.0E-03	3.9E-03	3.8E-03	7.2E-03	4.7E-03	4.7E-03	4.6E-03
Nonanal	124-19-6	1.5E-04	2.0E-04	1.9E-04	3.6E-04	2.4E-04	2.3E-04	2.3E-04
Phenol	108-95-2	4.5E-05	5.9E-05	5.7E-05	1.1E-04	7.1E-05	7.0E-05	6.8E-05
Tetrachloroethylene	127-18-4	1.9E-04	2.4E-04	2.3E-04	4.4E-04	2.9E-04	2.9E-04	2.8E-04
Tetradecane	629-59-4	6.3E-05	8.2E-05	8.0E-05	1.5E-04	9.8E-05	9.7E-05	9.5E-05
Texanol, TXIB (mono-isomer)	25265-77-4	1.5E-03	2.0E-03	2.0E-03	3.7E-03	2.4E-03	2.4E-03	2.3E-03
Toluene	108-88-3	5.0E-04	6.5E-04	6.3E-04	1.2E-03	7.8E-04	7.7E-04	7.6E-04
Trichloroethylene	79-01-6	5.0E-06	6.5E-06	6.4E-06	1.2E-05	7.9E-06	7.8E-06	7.6E-06
Trichloromethane	67-66-3	5.6E-04	7.3E-04	7.1E-04	1.3E-03	8.8E-04	8.7E-04	8.5E-04
m/p-Xylene	106-42-3	9.0E-04	1.2E-03	1.1E-03	2.1E-03	1.4E-03	1.4E-03	1.4E-03
o-Xylene	95-47-6	3.0E-04	3.9E-04	3.8E-04	7.2E-04	4.7E-04	4.6E-04	4.5E-04
Non-Field-Related Chronic HQ _{inh-sum}		5.5E-02	7.1E-02	7.0E-02	1.3E-01	8.6E-02	8.5E-02	8.3E-02

Values are rounded to two significant figures.

Table G-3. **On-Field** Chronic Inhalation Hazard Quotient for Individual Chemical (Chronic HQ_{inh}, unitless), Chronic Inhalation Route Total Hazard Quotients (Chronic HQ_{inh-sum}, unitless) for **Field-Related General Chemicals**—Combined Gender Coaches

Chemical	CASRN	Chronic HQ _{inh}			
		16<30 years	30<40 years	40<50 years	50<70 years
Acenaphthylene	208-96-8	7.3E-07	6.4E-07	6.5E-07	6.5E-07
Acetone	67-64-1	9.5E-04	8.3E-04	8.4E-04	8.4E-04
Aniline	62-53-3	9.9E-04	8.7E-04	8.8E-04	8.8E-04



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Chemical	CASRN	Chronic HQ _{inh}			
		16<30 years	30<40 years	40<50 years	50<70 years
Anthracene	120-12-7	4.8E-08	4.2E-08	4.2E-08	4.2E-08
Anthracene, 2-methyl-	613-12-7	1.2E-08	1.1E-08	1.1E-08	1.1E-08
Anthracene, 9,10-dimethyl	781-43-1	1.4E-08	1.2E-08	1.3E-08	1.3E-08
Anthracene, 9-phenyl	602-55-1	1.3E-09	1.2E-09	1.2E-09	1.2E-09
Benz[a]anthracene	56-55-3	7.2E-10	6.3E-10	6.3E-10	6.4E-10
Benzaldehyde	100-52-7	3.9E-05	3.4E-05	3.4E-05	3.5E-05
Benzene, 1,2,3-trimethyl-	526-73-8	3.4E-05	2.9E-05	3.0E-05	3.0E-05
Benzene, 1,2,4,5-tetramethyl-	95-93-2	6.4E-06	5.6E-06	5.6E-06	5.7E-06
Benzene, 1,2,4-trimethyl-	95-63-6	3.0E-04	2.6E-04	2.6E-04	2.7E-04
Benzene, 1-ethyl-2,4-dimethyl-	874-41-9	1.3E-05	1.2E-05	1.2E-05	1.2E-05
Benzene, 2-ethyl-1,4-dimethyl-	1758-88-9	1.9E-05	1.7E-05	1.7E-05	1.7E-05
Benzene, butyl-	104-51-8	2.3E-08	2.0E-08	2.0E-08	2.0E-08
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	5.4E-05	4.8E-05	4.8E-05	4.8E-05
Benzo[b]fluoranthene	205-99-2	2.7E-08	2.4E-08	2.4E-08	2.4E-08
7H-Benzo[c]fluorene	205-12-9	5.9E-08	5.2E-08	5.2E-08	5.2E-08
Benzo[k]fluoranthene	207-08-9	3.4E-08	2.9E-08	3.0E-08	3.0E-08
Benzothiazole	95-16-9	3.2E-03	2.8E-03	2.9E-03	2.9E-03
Benzothiazole, 2-phenyl-	883-93-2	2.6E-04	2.3E-04	2.3E-04	2.3E-04
2-Benzothiazolone	934-34-9	4.0E-04	3.5E-04	3.6E-04	3.6E-04
Benzyl butyl phthalate	85-68-7	7.5E-07	6.6E-07	6.6E-07	6.6E-07
Butanal	123-72-8	5.8E-03	5.1E-03	5.2E-03	5.2E-03
Cyclopentasiloxane, decamethyl-	541-02-6	3.5E-05	3.1E-05	3.1E-05	3.1E-05
Cyclotetrasiloxane, octamethyl-	556-67-2	1.3E-05	1.1E-05	1.1E-05	1.1E-05
p-Cymene	99-87-6	6.4E-05	5.6E-05	5.6E-05	5.7E-05
Decane	124-18-5	4.1E-04	3.6E-04	3.7E-04	3.7E-04



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Chemical	CASRN	Chronic HQ _{inh}			
		16<30 years	30<40 years	40<50 years	50<70 years
Dibenz[a,h]anthracene	53-70-3	2.1E-08	1.8E-08	1.8E-08	1.9E-08
Dibenzothiophene	132-65-0	5.4E-06	4.7E-06	4.8E-06	4.8E-06
Dibutyl phthalate	84-74-2	1.6E-04	1.4E-04	1.5E-04	1.5E-04
Diethyl phthalate	84-66-2	1.4E-07	1.3E-07	1.3E-07	1.3E-07
Diisobutyl phthalate	84-69-5	6.2E-05	5.4E-05	5.5E-05	5.5E-05
Diisoctylphthalate	27554-26-3	2.2E-04	1.9E-04	1.9E-04	1.9E-04
Di-n-octyl phthalate	117-84-0	4.2E-07	3.7E-07	3.7E-07	3.7E-07
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	7.1E-04	6.2E-04	6.2E-04	6.3E-04
3,5-di-tert-Butyl-4-hydroxybenzaldehyde	1620-98-0	2.5E-06	2.2E-06	2.2E-06	2.2E-06
Dodecane	112-40-3	5.2E-05	4.5E-05	4.6E-05	4.6E-05
Fluoranthene	206-44-0	4.1E-06	3.6E-06	3.6E-06	3.7E-06
Fluorene	86-73-7	6.5E-06	5.7E-06	5.8E-06	5.8E-06
Furan, 2-methyl	534-22-5	4.7E-02	4.1E-02	4.1E-02	4.1E-02
Heptanal	111-71-7	2.8E-04	2.5E-04	2.5E-04	2.5E-04
Hexadecane	544-76-3	2.4E-04	2.1E-04	2.1E-04	2.2E-04
2,5-Hexanedione	110-13-4	1.4E-04	1.2E-04	1.2E-04	1.2E-04
Indan	496-11-7	2.3E-06	2.0E-06	2.0E-06	2.1E-06
Mesitylene	108-67-8	7.0E-05	6.2E-05	6.2E-05	6.2E-05
Methacrolein	78-85-3	8.3E-03	7.2E-03	7.3E-03	7.3E-03
Methyl Isobutyl Ketone	108-10-1	1.5E-05	1.3E-05	1.3E-05	1.3E-05
Naphthalene	91-20-3	1.4E-03	1.2E-03	1.2E-03	1.2E-03
Naphthalene, 1,2-dimethyl-	573-98-8	1.9E-05	1.7E-05	1.7E-05	1.7E-05
Naphthalene, 1,6-dimethyl-	575-43-9	1.4E-04	1.2E-04	1.2E-04	1.2E-04
Naphthalene, 1-methyl-	90-12-0	1.4E-04	1.2E-04	1.2E-04	1.2E-04
Naphthalene, 2-(bromomethyl)-	939-26-4	3.8E-05	3.3E-05	3.3E-05	3.3E-05
Naphthalene, 2,3-dimethyl-	581-40-8	1.0E-04	8.9E-05	9.0E-05	9.1E-05



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Chemical	CASRN	Chronic HQ _{inh}			
		16<30 years	30<40 years	40<50 years	50<70 years
Naphthalene, 2-methyl-	91-57-6	3.6E-04	3.2E-04	3.2E-04	3.2E-04
1-Octadecene	112-88-9	3.4E-05	3.0E-05	3.0E-05	3.0E-05
Octanal	124-13-0	8.6E-04	7.5E-04	7.6E-04	7.6E-04
Octane	111-65-9	4.6E-04	4.0E-04	4.1E-04	4.1E-04
17-Pentatriacontene	6971-40-0	5.6E-06	4.9E-06	4.9E-06	5.0E-06
N-Phenylbenzamide	93-98-1	1.4E-03	1.2E-03	1.2E-03	1.2E-03
Phenanthrene	85-01-8	1.9E-06	1.7E-06	1.7E-06	1.7E-06
Phenanthrene, 1-methyl	832-69-9	1.2E-07	1.0E-07	1.1E-07	1.1E-07
Phenanthrene, 2-methyl-	2531-84-2	2.2E-07	1.9E-07	1.9E-07	1.9E-07
Phenanthrene, 3-methyl	832-71-3	2.6E-07	2.3E-07	2.3E-07	2.3E-07
Propionaldehyde	123-38-6	3.5E-03	3.1E-03	3.1E-03	3.1E-03
Pyrene	129-00-0	4.7E-06	4.1E-06	4.1E-06	4.1E-06
Pyridine, 2-(4-methylphenyl)-	4467-06-5	1.5E-06	1.4E-06	1.4E-06	1.4E-06
Resorcinol	108-46-3	1.4E-05	1.3E-05	1.3E-05	1.3E-05
m-Tolualdehyde	620-23-5	1.2E-04	1.0E-04	1.0E-04	1.0E-04
TXIB "Kodaflex"	6846-50-0	2.9E-05	2.5E-05	2.5E-05	2.6E-05
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	3.6E-06	3.2E-06	3.2E-06	3.2E-06
Undecane	1120-21-4	1.0E-04	8.8E-05	8.9E-05	8.9E-05
Valeraldehyde	110-62-3	1.8E-02	1.6E-02	1.6E-02	1.6E-02
Field-Related Chronic HQ _{inh-sum}		9.6E-02	8.4E-02	8.5E-02	8.5E-02

Values are rounded to two significant figures.



Table G-4. On-Field Chronic Inhalation Hazard Quotient for Individual Chemical (Chronic HQ_{inh}, unitless), Chronic Inhalation Route Total Hazard Quotients (Chronic HQ_{inh-sum}, unitless) for Non-Field-Related General Chemicals—Combined Gender Coaches

Chemical	CASRN	Chronic HQ _{inh}			
		16<30 years	30<40 years	40<50 years	50<70 years
Benzene	71-43-2	3.1E-02	2.7E-02	2.7E-02	2.7E-02
Benzene, 1,4-dichloro	106-46-7	4.9E-05	4.3E-05	4.3E-05	4.3E-05
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	2.9E-04	2.6E-04	2.6E-04	2.6E-04
2-Butoxyethanol	111-76-2	9.5E-06	8.3E-06	8.4E-06	8.4E-06
Cyclotrisiloxane, hexamethyl-	541-05-9	1.6E-05	1.4E-05	1.4E-05	1.4E-05
Decanal	112-31-2	5.4E-04	4.7E-04	4.7E-04	4.8E-04
Ethylbenzene	100-41-4	8.8E-05	7.7E-05	7.7E-05	7.8E-05
Heptane	142-82-5	8.8E-05	7.7E-05	7.8E-05	7.8E-05
Hexanal	66-25-1	1.5E-02	1.3E-02	1.3E-02	1.3E-02
Hexane	110-54-3	1.5E-04	1.3E-04	1.3E-04	1.3E-04
1-Hexanol, 2-ethyl-	104-76-7	3.0E-03	2.6E-03	2.6E-03	2.6E-03
Nonanal	124-19-6	1.5E-04	1.3E-04	1.3E-04	1.3E-04
Phenol	108-95-2	4.5E-05	3.9E-05	3.9E-05	4.0E-05
Tetrachloroethylene	127-18-4	1.8E-04	1.6E-04	1.6E-04	1.6E-04
Tetradecane	629-59-4	6.2E-05	5.4E-05	5.5E-05	5.5E-05
Texanol, TXIB (mono-isomer)	25265-77-4	1.5E-03	1.3E-03	1.3E-03	1.3E-03
Toluene	108-88-3	4.9E-04	4.3E-04	4.4E-04	4.4E-04
Trichloroethylene	79-01-6	5.0E-06	4.4E-06	4.4E-06	4.4E-06
Trichloromethane	67-66-3	5.5E-04	4.8E-04	4.9E-04	4.9E-04
m/p-Xylene	106-42-3	8.8E-04	7.7E-04	7.8E-04	7.8E-04
o-Xylene	95-47-6	3.0E-04	2.6E-04	2.6E-04	2.6E-04
Non-Field-Related Chronic HQ _{inh-sum}		5.4E-02	4.7E-02	4.8E-02	4.8E-02

Values are rounded to two significant figures.



Table G-5. **On-Field** Chronic Inhalation Hazard Quotient for Individual Chemical (Chronic HQ_{inh}, unitless), Chronic Inhalation Route Total Hazard Quotients (Chronic HQ_{inh-sum}, unitless) for **Field-Related General Chemicals**—Combined Gender Referees

Chemical	CASRN	Chronic HQ _{inh}			
		16<30 years	30<40 years	40<50 years	50<70 years
Acenaphthylene	208-96-8	2.7E-07	2.4E-07	2.4E-07	2.4E-07
Acetone	67-64-1	3.5E-04	3.1E-04	3.1E-04	3.1E-04
Aniline	62-53-3	3.7E-04	3.2E-04	3.3E-04	3.3E-04
Anthracene	120-12-7	1.8E-08	1.5E-08	1.6E-08	1.6E-08
Anthracene, 2-methyl-	613-12-7	4.6E-09	4.0E-09	4.1E-09	4.1E-09
Anthracene, 9,10-dimethyl	781-43-1	5.3E-09	4.6E-09	4.6E-09	4.7E-09
Anthracene, 9-phenyl	602-55-1	4.9E-10	4.3E-10	4.3E-10	4.3E-10
Benz[a]anthracene	56-55-3	2.7E-10	2.3E-10	2.4E-10	2.4E-10
Benzaldehyde	100-52-7	1.4E-05	1.3E-05	1.3E-05	1.3E-05
Benzene, 1,2,3-trimethyl-	526-73-8	1.2E-05	1.1E-05	1.1E-05	1.1E-05
Benzene, 1,2,4,5-tetramethyl-	95-93-2	2.4E-06	2.1E-06	2.1E-06	2.1E-06
Benzene, 1,2,4-trimethyl-	95-63-6	1.1E-04	9.7E-05	9.8E-05	9.9E-05
Benzene, 1-ethyl-2,4-dimethyl-	874-41-9	5.0E-06	4.4E-06	4.4E-06	4.4E-06
Benzene, 2-ethyl-1,4-dimethyl-	1758-88-9	7.1E-06	6.2E-06	6.2E-06	6.3E-06
Benzene, butyl-	104-51-8	8.5E-09	7.4E-09	7.5E-09	7.5E-09
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	2.0E-05	1.8E-05	1.8E-05	1.8E-05
Benzo[b]fluoranthene	205-99-2	1.0E-08	8.7E-09	8.8E-09	8.9E-09
7H-Benzo[c]fluorene	205-12-9	2.2E-08	1.9E-08	1.9E-08	1.9E-08
Benzo[k]fluoranthene	207-08-9	1.2E-08	1.1E-08	1.1E-08	1.1E-08
Benzothiazole	95-16-9	1.2E-03	1.0E-03	1.1E-03	1.1E-03
Benzothiazole, 2-phenyl-	883-93-2	9.6E-05	8.4E-05	8.4E-05	8.5E-05
2-Benzothiazolone	934-34-9	1.5E-04	1.3E-04	1.3E-04	1.3E-04
Benzyl butyl phthalate	85-68-7	2.8E-07	2.4E-07	2.5E-07	2.5E-07



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Chemical	CASRN	Chronic HQ _{inh}			
		16<30 years	30<40 years	40<50 years	50<70 years
Butanal	123-72-8	2.2E-03	1.9E-03	1.9E-03	1.9E-03
Cyclopentasiloxane, decamethyl-	541-02-6	1.3E-05	1.1E-05	1.2E-05	1.2E-05
Cyclotetrasiloxane, octamethyl-	556-67-2	4.7E-06	4.1E-06	4.2E-06	4.2E-06
p-Cymene	99-87-6	2.4E-05	2.1E-05	2.1E-05	2.1E-05
Decane	124-18-5	1.5E-04	1.3E-04	1.4E-04	1.4E-04
Dibenz[a,h]anthracene	53-70-3	7.8E-09	6.8E-09	6.9E-09	6.9E-09
Dibenzothiophene	132-65-0	2.0E-06	1.8E-06	1.8E-06	1.8E-06
Dibutyl phthalate	84-74-2	6.1E-05	5.3E-05	5.4E-05	5.4E-05
Diethyl phthalate	84-66-2	5.3E-08	4.7E-08	4.7E-08	4.7E-08
Diisobutyl phthalate	84-69-5	2.3E-05	2.0E-05	2.0E-05	2.0E-05
Diisoctylphthalate	27554-26-3	8.0E-05	7.0E-05	7.1E-05	7.1E-05
Di-n-octyl phthalate	117-84-0	1.6E-07	1.4E-07	1.4E-07	1.4E-07
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	2.6E-04	2.3E-04	2.3E-04	2.3E-04
3,5-di-tert-Butyl-4-hydroxybenzaldehyde	1620-98-0	9.2E-07	8.0E-07	8.1E-07	8.1E-07
Dodecane	112-40-3	1.9E-05	1.7E-05	1.7E-05	1.7E-05
Fluoranthene	206-44-0	1.5E-06	1.3E-06	1.4E-06	1.4E-06
Fluorene	86-73-7	2.4E-06	2.1E-06	2.1E-06	2.1E-06
Furan, 2-methyl	534-22-5	1.7E-02	1.5E-02	1.5E-02	1.5E-02
Heptanal	111-71-7	1.0E-04	9.1E-05	9.2E-05	9.3E-05
Hexadecane	544-76-3	9.0E-05	7.9E-05	8.0E-05	8.0E-05
2,5-Hexanedione	110-13-4	5.1E-05	4.5E-05	4.5E-05	4.6E-05
Indan	496-11-7	8.6E-07	7.5E-07	7.6E-07	7.6E-07
Mesitylene	108-67-8	2.6E-05	2.3E-05	2.3E-05	2.3E-05
Methacrolein	78-85-3	3.1E-03	2.7E-03	2.7E-03	2.7E-03
Methyl Isobutyl Ketone	108-10-1	5.6E-06	4.9E-06	4.9E-06	4.9E-06
Naphthalene	91-20-3	5.0E-04	4.4E-04	4.4E-04	4.5E-04



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Chemical	CASRN	Chronic HQ _{inh}			
		16<30 years	30<40 years	40<50 years	50<70 years
Naphthalene, 1,2-dimethyl-	573-98-8	7.0E-06	6.1E-06	6.2E-06	6.2E-06
Naphthalene, 1,6-dimethyl-	575-43-9	5.0E-05	4.4E-05	4.4E-05	4.5E-05
Naphthalene, 1-methyl-	90-12-0	5.0E-05	4.4E-05	4.4E-05	4.5E-05
Naphthalene, 2-(bromomethyl)-	939-26-4	1.4E-05	1.2E-05	1.2E-05	1.2E-05
Naphthalene, 2,3-dimethyl-	581-40-8	3.8E-05	3.3E-05	3.4E-05	3.4E-05
Naphthalene, 2-methyl-	91-57-6	1.3E-04	1.2E-04	1.2E-04	1.2E-04
1-Octadecene	112-88-9	1.3E-05	1.1E-05	1.1E-05	1.1E-05
Octanal	124-13-0	3.2E-04	2.8E-04	2.8E-04	2.8E-04
Octane	111-65-9	1.7E-04	1.5E-04	1.5E-04	1.5E-04
17-Pentatriacontene	6971-40-0	2.1E-06	1.8E-06	1.8E-06	1.8E-06
N-Phenylbenzamide	93-98-1	5.1E-04	4.5E-04	4.5E-04	4.5E-04
Phenanthrene	85-01-8	7.0E-07	6.1E-07	6.2E-07	6.2E-07
Phenanthrene, 1-methyl	832-69-9	4.4E-08	3.9E-08	3.9E-08	3.9E-08
Phenanthrene, 2-methyl-	2531-84-2	8.1E-08	7.1E-08	7.1E-08	7.2E-08
Phenanthrene, 3-methyl	832-71-3	9.6E-08	8.4E-08	8.5E-08	8.5E-08
Propionaldehyde	123-38-6	1.3E-03	1.1E-03	1.2E-03	1.2E-03
Pyrene	129-00-0	1.7E-06	1.5E-06	1.5E-06	1.5E-06
Pyridine, 2-(4-methylphenyl)-	4467-06-5	5.7E-07	5.0E-07	5.1E-07	5.1E-07
Resorcinol	108-46-3	5.3E-06	4.7E-06	4.7E-06	4.7E-06
m-Tolualdehyde	620-23-5	4.4E-05	3.8E-05	3.9E-05	3.9E-05
TXIB "Kodaflex"	6846-50-0	1.1E-05	9.3E-06	9.5E-06	9.5E-06
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	1.3E-06	1.2E-06	1.2E-06	1.2E-06
Undecane	1120-21-4	3.7E-05	3.3E-05	3.3E-05	3.3E-05
Valeraldehyde	110-62-3	6.6E-03	5.8E-03	5.9E-03	5.9E-03
Field-Related Chronic HQ _{inh} -sum		3.6E-02	3.1E-02	3.1E-02	3.2E-02

Values are rounded to two significant figures.



Table G-6. **On-Field** Chronic Inhalation Hazard Quotient for Individual Chemical (Chronic HQ_{inh}, unitless), Chronic Inhalation Route Total Hazard Quotients (Chronic HQ_{inh-sum}, unitless) for **Non-Field-Related General Chemicals**—Combined Gender Referees

Chemical	CASRN	Chronic HQ _{inh}			
		16<30 years	30<40 years	40<50 years	50<70 years
Benzene	71-43-2	1.1E-02	1.0E-02	1.0E-02	1.0E-02
Benzene, 1,4-dichloro	106-46-7	1.8E-05	1.6E-05	1.6E-05	1.6E-05
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	1.1E-04	9.5E-05	9.6E-05	9.6E-05
2-Butoxyethanol	111-76-2	3.5E-06	3.1E-06	3.1E-06	3.1E-06
Cyclotrisiloxane, hexamethyl-	541-05-9	5.9E-06	5.2E-06	5.3E-06	5.3E-06
Decanal	112-31-2	2.0E-04	1.7E-04	1.8E-04	1.8E-04
Ethylbenzene	100-41-4	3.3E-05	2.8E-05	2.9E-05	2.9E-05
Heptane	142-82-5	3.3E-05	2.9E-05	2.9E-05	2.9E-05
Hexanal	66-25-1	5.6E-03	4.9E-03	4.9E-03	5.0E-03
Hexane	110-54-3	5.4E-05	4.8E-05	4.8E-05	4.8E-05
1-Hexanol, 2-ethyl-	104-76-7	1.1E-03	9.7E-04	9.8E-04	9.8E-04
Nonanal	124-19-6	5.5E-05	4.8E-05	4.9E-05	4.9E-05
Phenol	108-95-2	1.7E-05	1.5E-05	1.5E-05	1.5E-05
Tetrachloroethylene	127-18-4	6.8E-05	5.9E-05	6.0E-05	6.0E-05
Tetradecane	629-59-4	2.3E-05	2.0E-05	2.0E-05	2.0E-05
Texanol, TXIB (mono-isomer)	25265-77-4	5.6E-04	4.9E-04	5.0E-04	5.0E-04
Toluene	108-88-3	1.8E-04	1.6E-04	1.6E-04	1.6E-04
Trichloroethylene	79-01-6	1.8E-06	1.6E-06	1.6E-06	1.6E-06
Trichloromethane	67-66-3	2.1E-04	1.8E-04	1.8E-04	1.8E-04
m/p-Xylene	106-42-3	3.3E-04	2.9E-04	2.9E-04	2.9E-04
o-Xylene	95-47-6	1.1E-04	9.6E-05	9.7E-05	9.7E-05
Non-Field-Related Chronic HQ _{inh-sum}		2.0E-02	1.8E-02	1.8E-02	1.8E-02

Values are rounded to two significant figures.



Table G-7. On-Field Chronic Inhalation Hazard Quotient for Individual Chemical (Chronic HQ_{inh}, unitless), Chronic Inhalation Route Total Hazard Quotients (Chronic HQ_{inh-sum}, unitless) for Field-Related General Chemicals—Combined Gender Spectators

Chemical	CASRN	Chronic HQ _{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
Acenaphthylene	208-96-8	9.8E-08	7.9E-07	4.2E-07	4.0E-07	1.7E-07	1.1E-07	9.9E-08	1.0E-07	1.0E-07
Acetone	67-64-1	1.3E-04	1.0E-03	5.4E-04	5.2E-04	2.2E-04	1.5E-04	1.3E-04	1.3E-04	1.3E-04
Aniline	62-53-3	1.3E-04	1.1E-03	5.6E-04	5.4E-04	2.3E-04	1.5E-04	1.3E-04	1.4E-04	1.4E-04
Anthracene	120-12-7	6.4E-09	5.2E-08	2.7E-08	2.6E-08	1.1E-08	7.4E-09	6.4E-09	6.5E-09	6.5E-09
Anthracene, 2-methyl-	613-12-7	1.7E-09	1.3E-08	7.1E-09	6.8E-09	2.9E-09	1.9E-09	1.7E-09	1.7E-09	1.7E-09
Anthracene, 9,10-dimethyl	781-43-1	1.9E-09	1.5E-08	8.1E-09	7.7E-09	3.3E-09	2.2E-09	1.9E-09	1.9E-09	1.9E-09
Anthracene, 9-phenyl	602-55-1	1.8E-10	1.4E-09	7.5E-10	7.2E-10	3.1E-10	2.0E-10	1.8E-10	1.8E-10	1.8E-10
Benz[a]anthracene	56-55-3	9.7E-11	7.8E-10	4.1E-10	3.9E-10	1.7E-10	1.1E-10	9.7E-11	9.8E-11	9.8E-11
Benzaldehyde	100-52-7	5.2E-06	4.2E-05	2.2E-05	2.1E-05	9.1E-06	6.0E-06	5.3E-06	5.3E-06	5.3E-06
Benzene, 1,2,3-trimethyl-	526-73-8	4.5E-06	3.6E-05	1.9E-05	1.8E-05	7.9E-06	5.2E-06	4.5E-06	4.6E-06	4.6E-06
Benzene, 1,2,4,5-tetramethyl-	95-93-2	8.6E-07	6.9E-06	3.6E-06	3.5E-06	1.5E-06	9.9E-07	8.6E-07	8.7E-07	8.7E-07
Benzene, 1,2,4-trimethyl-	95-63-6	4.0E-05	3.2E-04	1.7E-04	1.6E-04	7.0E-05	4.6E-05	4.0E-05	4.1E-05	4.1E-05
Benzene, 1-ethyl-2,4-dimethyl-	874-41-9	1.8E-06	1.5E-05	7.6E-06	7.3E-06	3.1E-06	2.1E-06	1.8E-06	1.8E-06	1.8E-06
Benzene, 2-ethyl-1,4-dimethyl-	1758-88-9	2.6E-06	2.1E-05	1.1E-05	1.0E-05	4.5E-06	2.9E-06	2.6E-06	2.6E-06	2.6E-06
Benzene, butyl-	104-51-8	3.1E-09	2.5E-08	1.3E-08	1.2E-08	5.4E-09	3.5E-09	3.1E-09	3.1E-09	3.1E-09
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	7.3E-06	5.9E-05	3.1E-05	3.0E-05	1.3E-05	8.4E-06	7.4E-06	7.4E-06	7.5E-06
Benzo[b]fluoranthene	205-99-2	3.6E-09	2.9E-08	1.5E-08	1.5E-08	6.3E-09	4.2E-09	3.6E-09	3.7E-09	3.7E-09
7H-Benzo[c]fluorene	205-12-9	7.9E-09	6.4E-08	3.4E-08	3.2E-08	1.4E-08	9.1E-09	8.0E-09	8.1E-09	8.1E-09
Benzo[k]fluoranthene	207-08-9	4.5E-09	3.6E-08	1.9E-08	1.8E-08	7.9E-09	5.2E-09	4.5E-09	4.6E-09	4.6E-09



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Chemical	CASRN	Chronic HQ _{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
Benzothiazole	95-16-9	4.4E-04	3.5E-03	1.8E-03	1.8E-03	7.6E-04	5.0E-04	4.4E-04	4.4E-04	4.4E-04
Benzothiazole, 2-phenyl-	883-93-2	3.5E-05	2.8E-04	1.5E-04	1.4E-04	6.0E-05	4.0E-05	3.5E-05	3.5E-05	3.5E-05
2-Benzothiazolone	934-34-9	5.4E-05	4.4E-04	2.3E-04	2.2E-04	9.5E-05	6.2E-05	5.5E-05	5.5E-05	5.5E-05
Benzyl butyl phthalate	85-68-7	1.0E-07	8.1E-07	4.3E-07	4.1E-07	1.8E-07	1.2E-07	1.0E-07	1.0E-07	1.0E-07
Butanal	123-72-8	7.9E-04	6.3E-03	3.3E-03	3.2E-03	1.4E-03	9.0E-04	7.9E-04	8.0E-04	8.0E-04
Cyclopentasiloxane, decamethyl-	541-02-6	4.7E-06	3.8E-05	2.0E-05	1.9E-05	8.3E-06	5.4E-06	4.8E-06	4.8E-06	4.8E-06
Cyclotetrasiloxane, octamethyl-	556-67-2	1.7E-06	1.4E-05	7.2E-06	6.9E-06	3.0E-06	2.0E-06	1.7E-06	1.7E-06	1.7E-06
p-Cymene	99-87-6	8.6E-06	6.9E-05	3.6E-05	3.5E-05	1.5E-05	9.9E-06	8.6E-06	8.7E-06	8.8E-06
Decane	124-18-5	5.6E-05	4.5E-04	2.4E-04	2.3E-04	9.7E-05	6.4E-05	5.6E-05	5.7E-05	5.7E-05
Dibenz[a,h]anthracene	53-70-3	2.8E-09	2.3E-08	1.2E-08	1.1E-08	4.9E-09	3.2E-09	2.8E-09	2.9E-09	2.9E-09
Dibenzothiophene	132-65-0	7.3E-07	5.9E-06	3.1E-06	2.9E-06	1.3E-06	8.4E-07	7.3E-07	7.4E-07	7.4E-07
Dibutyl phthalate	84-74-2	2.2E-05	1.8E-04	9.3E-05	8.9E-05	3.9E-05	2.5E-05	2.2E-05	2.2E-05	2.2E-05
Diethyl phthalate	84-66-2	1.9E-08	1.6E-07	8.2E-08	7.8E-08	3.4E-08	2.2E-08	1.9E-08	2.0E-08	2.0E-08
Diisobutyl phthalate	84-69-5	8.4E-06	6.8E-05	3.5E-05	3.4E-05	1.5E-05	9.6E-06	8.4E-06	8.5E-06	8.5E-06
Diisoctylphthalate	27554-26-3	2.9E-05	2.3E-04	1.2E-04	1.2E-04	5.1E-05	3.3E-05	2.9E-05	3.0E-05	3.0E-05
Di-n-octyl phthalate	117-84-0	5.7E-08	4.6E-07	2.4E-07	2.3E-07	9.9E-08	6.5E-08	5.7E-08	5.8E-08	5.8E-08
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	9.5E-05	7.7E-04	4.0E-04	3.8E-04	1.7E-04	1.1E-04	9.6E-05	9.7E-05	9.7E-05
3,5-di-tert-Butyl-4-hydroxybenzaldehyde	1620-98-0	3.3E-07	2.7E-06	1.4E-06	1.3E-06	5.8E-07	3.8E-07	3.3E-07	3.4E-07	3.4E-07
Dodecane	112-40-3	7.0E-06	5.6E-05	2.9E-05	2.8E-05	1.2E-05	8.0E-06	7.0E-06	7.1E-06	7.1E-06
Fluoranthene	206-44-0	5.6E-07	4.5E-06	2.3E-06	2.2E-06	9.7E-07	6.4E-07	5.6E-07	5.6E-07	5.7E-07
Fluorene	86-73-7	8.8E-07	7.1E-06	3.7E-06	3.5E-06	1.5E-06	1.0E-06	8.8E-07	8.9E-07	9.0E-07
Furan, 2-methyl	534-22-5	6.3E-03	5.0E-02	2.7E-02	2.5E-02	1.1E-02	7.2E-03	6.3E-03	6.4E-03	6.4E-03



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Chemical	CASRN	Chronic HQ _{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
Heptanal	111-71-7	3.8E-05	3.0E-04	1.6E-04	1.5E-04	6.6E-05	4.4E-05	3.8E-05	3.8E-05	3.9E-05
Hexadecane	544-76-3	3.3E-05	2.6E-04	1.4E-04	1.3E-04	5.7E-05	3.8E-05	3.3E-05	3.3E-05	3.3E-05
2,5-Hexanedione	110-13-4	1.9E-05	1.5E-04	7.9E-05	7.5E-05	3.2E-05	2.1E-05	1.9E-05	1.9E-05	1.9E-05
Indan	496-11-7	3.1E-07	2.5E-06	1.3E-06	1.3E-06	5.4E-07	3.6E-07	3.1E-07	3.2E-07	3.2E-07
Mesitylene	108-67-8	9.5E-06	7.6E-05	4.0E-05	3.8E-05	1.7E-05	1.1E-05	9.5E-06	9.6E-06	9.7E-06
Methacrolein	78-85-3	1.1E-03	9.0E-03	4.7E-03	4.5E-03	1.9E-03	1.3E-03	1.1E-03	1.1E-03	1.1E-03
Methyl Isobutyl Ketone	108-10-1	2.0E-06	1.6E-05	8.5E-06	8.1E-06	3.5E-06	2.3E-06	2.0E-06	2.0E-06	2.1E-06
Naphthalene	91-20-3	1.8E-04	1.5E-03	7.7E-04	7.4E-04	3.2E-04	2.1E-04	1.8E-04	1.9E-04	1.9E-04
Naphthalene, 1,2-dimethyl-	573-98-8	2.6E-06	2.1E-05	1.1E-05	1.0E-05	4.4E-06	2.9E-06	2.6E-06	2.6E-06	2.6E-06
Naphthalene, 1,6-dimethyl-	575-43-9	1.8E-05	1.5E-04	7.7E-05	7.4E-05	3.2E-05	2.1E-05	1.8E-05	1.9E-05	1.9E-05
Naphthalene, 1-methyl-	90-12-0	1.8E-05	1.5E-04	7.7E-05	7.4E-05	3.2E-05	2.1E-05	1.8E-05	1.9E-05	1.9E-05
Naphthalene, 2-(bromomethyl)-	939-26-4	5.1E-06	4.1E-05	2.1E-05	2.0E-05	8.8E-06	5.8E-06	5.1E-06	5.1E-06	5.2E-06
Naphthalene, 2,3-dimethyl-	581-40-8	1.4E-05	1.1E-04	5.8E-05	5.5E-05	2.4E-05	1.6E-05	1.4E-05	1.4E-05	1.4E-05
Naphthalene, 2-methyl-	91-57-6	4.9E-05	3.9E-04	2.1E-04	2.0E-04	8.5E-05	5.6E-05	4.9E-05	4.9E-05	5.0E-05
1-Octadecene	112-88-9	4.6E-06	3.7E-05	1.9E-05	1.8E-05	7.9E-06	5.2E-06	4.6E-06	4.6E-06	4.6E-06
Octanal	124-13-0	1.2E-04	9.3E-04	4.9E-04	4.7E-04	2.0E-04	1.3E-04	1.2E-04	1.2E-04	1.2E-04
Octane	111-65-9	6.2E-05	5.0E-04	2.6E-04	2.5E-04	1.1E-04	7.2E-05	6.3E-05	6.3E-05	6.3E-05
17-Pentatriacontene	6971-40-0	7.5E-07	6.1E-06	3.2E-06	3.0E-06	1.3E-06	8.7E-07	7.6E-07	7.7E-07	7.7E-07
N-Phenylbenzamide	93-98-1	1.8E-04	1.5E-03	7.8E-04	7.5E-04	3.2E-04	2.1E-04	1.9E-04	1.9E-04	1.9E-04
Phenanthrene	85-01-8	2.5E-07	2.0E-06	1.1E-06	1.0E-06	4.4E-07	2.9E-07	2.6E-07	2.6E-07	2.6E-07
Phenanthrene, 1-methyl	832-69-9	1.6E-08	1.3E-07	6.8E-08	6.5E-08	2.8E-08	1.9E-08	1.6E-08	1.6E-08	1.6E-08
Phenanthrene, 2-methyl-	2531-84-2	2.9E-08	2.4E-07	1.2E-07	1.2E-07	5.1E-08	3.4E-08	2.9E-08	3.0E-08	3.0E-08



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Chemical	CASRN	Chronic HQ _{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
Phenanthrene, 3-methyl	832-71-3	3.5E-08	2.8E-07	1.5E-07	1.4E-07	6.1E-08	4.0E-08	3.5E-08	3.5E-08	3.6E-08
Propionaldehyde	123-38-6	4.7E-04	3.8E-03	2.0E-03	1.9E-03	8.3E-04	5.5E-04	4.8E-04	4.8E-04	4.8E-04
Pyrene	129-00-0	6.3E-07	5.0E-06	2.7E-06	2.5E-06	1.1E-06	7.2E-07	6.3E-07	6.4E-07	6.4E-07
Pyridine, 2-(4-methylphenyl)-	4467-06-5	2.1E-07	1.7E-06	8.8E-07	8.4E-07	3.6E-07	2.4E-07	2.1E-07	2.1E-07	2.1E-07
Resorcinol	108-46-3	1.9E-06	1.6E-05	8.2E-06	7.8E-06	3.4E-06	2.2E-06	1.9E-06	2.0E-06	2.0E-06
m-Tolualdehyde	620-23-5	1.6E-05	1.3E-04	6.7E-05	6.4E-05	2.8E-05	1.8E-05	1.6E-05	1.6E-05	1.6E-05
TXIB "Kodaflex"	6846-50-0	3.9E-06	3.1E-05	1.6E-05	1.6E-05	6.8E-06	4.5E-06	3.9E-06	3.9E-06	3.9E-06
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	4.9E-07	3.9E-06	2.1E-06	2.0E-06	8.5E-07	5.6E-07	4.9E-07	4.9E-07	5.0E-07
Undecane	1120-21-4	1.4E-05	1.1E-04	5.7E-05	5.5E-05	2.4E-05	1.6E-05	1.4E-05	1.4E-05	1.4E-05
Valeraldehyde	110-62-3	2.4E-03	1.9E-02	1.0E-02	9.7E-03	4.2E-03	2.8E-03	2.4E-03	2.4E-03	2.4E-03
Field-Related Chronic HQ _{inh} -sum		1.3E-02	1.0E-01	5.5E-02	5.2E-02	2.3E-02	1.5E-02	1.3E-02	1.3E-02	1.3E-02

Values are rounded to two significant figures.

Table G-8. On-Field Chronic Inhalation Hazard Quotient for Individual Chemical (Chronic HQ_{inh}, unitless), Chronic Inhalation Route Total Hazard Quotients (Chronic HQ_{inh}-sum, unitless) for Non-Field-Related General Chemicals—Combined Gender Spectators

Chemical	CASRN	Chronic HQ _{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	71-43-2	4.2E-03	3.3E-02	1.8E-02	1.7E-02	7.2E-03	4.8E-03	4.2E-03	4.2E-03	4.2E-03
Benzene, 1,4-dichloro	106-46-7	6.6E-06	5.3E-05	2.8E-05	2.7E-05	1.1E-05	7.6E-06	6.6E-06	6.7E-06	6.7E-06
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	4.0E-05	3.2E-04	1.7E-04	1.6E-04	6.9E-05	4.5E-05	4.0E-05	4.0E-05	4.0E-05
2-Butoxyethanol	111-76-2	1.3E-06	1.0E-05	5.4E-06	5.1E-06	2.2E-06	1.5E-06	1.3E-06	1.3E-06	1.3E-06
Cyclotrisiloxane, hexamethyl-	541-05-9	2.2E-06	1.7E-05	9.1E-06	8.7E-06	3.8E-06	2.5E-06	2.2E-06	2.2E-06	2.2E-06



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Chemical	CASRN	Chronic HQ _{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
Decanal	112-31-2	7.2E-05	5.8E-04	3.1E-04	2.9E-04	1.3E-04	8.3E-05	7.3E-05	7.3E-05	7.4E-05
Ethylbenzene	100-41-4	1.2E-05	9.5E-05	5.0E-05	4.8E-05	2.1E-05	1.4E-05	1.2E-05	1.2E-05	1.2E-05
Heptane	142-82-5	1.2E-05	9.6E-05	5.0E-05	4.8E-05	2.1E-05	1.4E-05	1.2E-05	1.2E-05	1.2E-05
Hexanal	66-25-1	2.0E-03	1.6E-02	8.6E-03	8.2E-03	3.5E-03	2.3E-03	2.0E-03	2.1E-03	2.1E-03
Hexane	110-54-3	2.0E-05	1.6E-04	8.3E-05	8.0E-05	3.4E-05	2.3E-05	2.0E-05	2.0E-05	2.0E-05
1-Hexanol, 2-ethyl-	104-76-7	4.0E-04	3.2E-03	1.7E-03	1.6E-03	7.0E-04	4.6E-04	4.0E-04	4.1E-04	4.1E-04
Nonanal	124-19-6	2.0E-05	1.6E-04	8.5E-05	8.1E-05	3.5E-05	2.3E-05	2.0E-05	2.0E-05	2.0E-05
Phenol	108-95-2	6.0E-06	4.8E-05	2.5E-05	2.4E-05	1.0E-05	6.9E-06	6.0E-06	6.1E-06	6.1E-06
Tetrachloroethylene	127-18-4	2.5E-05	2.0E-04	1.0E-04	9.9E-05	4.3E-05	2.8E-05	2.5E-05	2.5E-05	2.5E-05
Tetradecane	629-59-4	8.4E-06	6.7E-05	3.5E-05	3.4E-05	1.5E-05	9.6E-06	8.4E-06	8.5E-06	8.5E-06
Texanol, TXIB (mono-isomer)	25265-77-4	2.0E-04	1.6E-03	8.6E-04	8.2E-04	3.6E-04	2.3E-04	2.1E-04	2.1E-04	2.1E-04
Toluene	108-88-3	6.6E-05	5.3E-04	2.8E-04	2.7E-04	1.2E-04	7.6E-05	6.7E-05	6.7E-05	6.8E-05
Trichloroethylene	79-01-6	6.7E-07	5.4E-06	2.8E-06	2.7E-06	1.2E-06	7.7E-07	6.7E-07	6.8E-07	6.8E-07
Trichloromethane	67-66-3	7.5E-05	6.0E-04	3.2E-04	3.0E-04	1.3E-04	8.6E-05	7.5E-05	7.6E-05	7.6E-05
m/p-Xylene	106-42-3	1.2E-04	9.6E-04	5.0E-04	4.8E-04	2.1E-04	1.4E-04	1.2E-04	1.2E-04	1.2E-04
o-Xylene	95-47-6	4.0E-05	3.2E-04	1.7E-04	1.6E-04	6.9E-05	4.6E-05	4.0E-05	4.0E-05	4.1E-05
Non-Field-Related Chronic HQ _{inh} -sum		7.3E-03	5.9E-02	3.1E-02	3.0E-02	1.3E-02	8.4E-03	7.3E-03	7.4E-03	7.4E-03

Values are rounded to two significant figures.



Table G-9. **Off-Field** Chronic Inhalation Hazard Quotient for Individual Chemical (Chronic HQ_{inh}, unitless), Chronic Inhalation Route Total Hazard Quotients (Chronic HQ_{inh-sum}, unitless) for **Field-Related General Chemicals**—Combined Gender Spectators

Chemical	CASRN	Chronic HQ _{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
Acenaphthylene	1.0E-07	8.3E-07	4.4E-07	4.2E-07	1.8E-07	1.2E-07	1.0E-07	1.1E-07	1.1E-07	1.1E-07
Aniline	1.5E-04	1.2E-03	6.2E-04	6.0E-04	2.6E-04	1.7E-04	1.5E-04	1.5E-04	1.5E-04	1.5E-04
Anthracene	3.9E-09	3.2E-08	1.7E-08	1.6E-08	6.9E-09	4.5E-09	4.0E-09	4.0E-09	4.0E-09	4.0E-09
Anthracene, 2-methyl-	1.0E-09	8.3E-09	4.3E-09	4.1E-09	1.8E-09	1.2E-09	1.0E-09	1.0E-09	1.0E-09	1.0E-09
Anthracene, 9,10-dimethyl	1.6E-09	1.3E-08	6.9E-09	6.6E-09	2.9E-09	1.9E-09	1.6E-09	1.7E-09	1.7E-09	1.7E-09
Anthracene, 9-phenyl	7.3E-10	5.9E-09	3.1E-09	2.9E-09	1.3E-09	8.4E-10	7.3E-10	7.4E-10	7.4E-10	7.4E-10
Benz[a]anthracene	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Benzaldehyde	5.7E-06	4.6E-05	2.4E-05	2.3E-05	1.0E-05	6.6E-06	5.7E-06	5.8E-06	5.8E-06	5.8E-06
Benzene, 1,2,3-trimethyl-	5.7E-06	4.6E-05	2.4E-05	2.3E-05	1.0E-05	6.6E-06	5.8E-06	5.8E-06	5.8E-06	5.8E-06
Benzene, 1,2,4,5-tetramethyl-	1.1E-06	8.8E-06	4.6E-06	4.4E-06	1.9E-06	1.3E-06	1.1E-06	1.1E-06	1.1E-06	1.1E-06
Benzene, 1,2,4-trimethyl-	4.4E-05	3.5E-04	1.8E-04	1.8E-04	7.6E-05	5.0E-05	4.4E-05	4.4E-05	4.4E-05	4.4E-05
Benzene, 1-ethyl-2,4-dimethyl-	2.0E-06	1.6E-05	8.6E-06	8.3E-06	3.6E-06	2.4E-06	2.1E-06	2.1E-06	2.1E-06	2.1E-06
Benzene, 2-ethyl-1,4-dimethyl-	2.9E-06	2.3E-05	1.2E-05	1.2E-05	5.0E-06	3.3E-06	2.9E-06	2.9E-06	2.9E-06	2.9E-06
Benzene, butyl-	5.1E-09	4.1E-08	2.2E-08	2.1E-08	8.9E-09	5.8E-09	5.1E-09	5.2E-09	5.2E-09	5.2E-09
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	8.2E-06	6.6E-05	3.5E-05	3.3E-05	1.4E-05	9.5E-06	8.3E-06	8.4E-06	8.4E-06	8.4E-06
Benzo[b]fluoranthene	5.6E-09	4.5E-08	2.4E-08	2.3E-08	9.8E-09	6.4E-09	5.6E-09	5.7E-09	5.7E-09	5.7E-09
7H-Benzo[c]fluorene	4.6E-09	3.7E-08	2.0E-08	1.9E-08	8.0E-09	5.3E-09	4.6E-09	4.7E-09	4.7E-09	4.7E-09
Benzo[k]fluoranthene	4.6E-09	3.7E-08	2.0E-08	1.9E-08	8.1E-09	5.3E-09	4.7E-09	4.7E-09	4.7E-09	4.7E-09
Benzothiazole	5.7E-05	4.6E-04	2.4E-04	2.3E-04	9.9E-05	6.5E-05	5.7E-05	5.8E-05	5.8E-05	5.8E-05



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Chemical	CASRN	Chronic HQ _{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
Benzothiazole, 2-phenyl-	5.1E-06	4.1E-05	2.1E-05	2.0E-05	8.8E-06	5.8E-06	5.1E-06	5.1E-06	5.2E-06	5.2E-06
2-Benzothiazolone	4.8E-05	3.9E-04	2.0E-04	1.9E-04	8.4E-05	5.5E-05	4.8E-05	4.9E-05	4.9E-05	4.9E-05
Benzyl butyl phthalate	1.3E-07	1.0E-06	5.5E-07	5.2E-07	2.2E-07	1.5E-07	1.3E-07	1.3E-07	1.3E-07	1.3E-07
Butanal	7.3E-04	5.9E-03	3.1E-03	3.0E-03	1.3E-03	8.4E-04	7.4E-04	7.4E-04	7.5E-04	7.5E-04
Cyclopentasiloxane, decamethyl-	4.4E-06	3.5E-05	1.8E-05	1.8E-05	7.6E-06	5.0E-06	4.4E-06	4.4E-06	4.4E-06	4.4E-06
Cyclotetrasiloxane, octamethyl-	1.5E-06	1.2E-05	6.5E-06	6.2E-06	2.7E-06	1.8E-06	1.5E-06	1.6E-06	1.6E-06	1.6E-06
p-Cymene	9.0E-06	7.2E-05	3.8E-05	3.6E-05	1.6E-05	1.0E-05	9.0E-06	9.1E-06	9.2E-06	9.2E-06
Decane	6.2E-05	5.0E-04	2.6E-04	2.5E-04	1.1E-04	7.1E-05	6.2E-05	6.3E-05	6.3E-05	6.3E-05
Dibenz[a,h]anthracene	1.8E-09	1.4E-08	7.5E-09	7.1E-09	3.1E-09	2.0E-09	1.8E-09	1.8E-09	1.8E-09	1.8E-09
Dibenzothiophene	6.9E-07	5.6E-06	2.9E-06	2.8E-06	1.2E-06	7.9E-07	6.9E-07	7.0E-07	7.0E-07	7.0E-07
Dibutyl phthalate	1.8E-05	1.4E-04	7.5E-05	7.2E-05	3.1E-05	2.0E-05	1.8E-05	1.8E-05	1.8E-05	1.8E-05
Diethyl phthalate	8.0E-08	6.4E-07	3.4E-07	3.2E-07	1.4E-07	9.2E-08	8.0E-08	8.1E-08	8.1E-08	8.1E-08
Diisobutyl phthalate	9.0E-06	7.2E-05	3.8E-05	3.6E-05	1.6E-05	1.0E-05	9.0E-06	9.1E-06	9.2E-06	9.2E-06
Diisooctylphthalate	8.7E-06	7.0E-05	3.7E-05	3.5E-05	1.5E-05	1.0E-05	8.7E-06	8.8E-06	8.8E-06	8.8E-06
Di-n-octyl phthalate	5.8E-08	4.7E-07	2.5E-07	2.4E-07	1.0E-07	6.7E-08	5.9E-08	5.9E-08	5.9E-08	5.9E-08
2,5-di-tert-Butyl-1,4-benzoquinone	1.2E-04	9.3E-04	4.9E-04	4.7E-04	2.0E-04	1.3E-04	1.2E-04	1.2E-04	1.2E-04	1.2E-04
3,5-di-tert-Butyl-4-hydroxybenzaldehyde	2.2E-07	1.7E-06	9.1E-07	8.7E-07	3.8E-07	2.5E-07	2.2E-07	2.2E-07	2.2E-07	2.2E-07
Dodecane	9.0E-06	7.2E-05	3.8E-05	3.6E-05	1.6E-05	1.0E-05	9.0E-06	9.1E-06	9.1E-06	9.1E-06
Fluoranthene	3.3E-07	2.6E-06	1.4E-06	1.3E-06	5.7E-07	3.8E-07	3.3E-07	3.3E-07	3.3E-07	3.3E-07
Fluorene	7.3E-07	5.9E-06	3.1E-06	3.0E-06	1.3E-06	8.4E-07	7.4E-07	7.4E-07	7.5E-07	7.5E-07
Furan, 2-methyl	2.2E-03	1.8E-02	9.5E-03	9.0E-03	3.9E-03	2.6E-03	2.2E-03	2.3E-03	2.3E-03	2.3E-03
Heptanal	3.9E-05	3.1E-04	1.7E-04	1.6E-04	6.8E-05	4.5E-05	3.9E-05	4.0E-05	4.0E-05	4.0E-05

Appendix G. Calculation Examples, Results of Non-Cancer Hazard and Lifetime Incremental Cancer Risk

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OEHHA Synthetic Turf Study

March 2025



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Chemical	CASRN	Chronic HQ _{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
Hexadecane	4.7E-05	3.8E-04	2.0E-04	1.9E-04	8.2E-05	5.4E-05	4.7E-05	4.8E-05	4.8E-05	4.8E-05
2,5-Hexanedione	2.4E-05	2.0E-04	1.0E-04	9.8E-05	4.2E-05	2.8E-05	2.4E-05	2.5E-05	2.5E-05	2.5E-05
Indan	3.1E-07	2.5E-06	1.3E-06	1.2E-06	5.4E-07	3.5E-07	3.1E-07	3.1E-07	3.1E-07	3.1E-07
Mesitylene	9.8E-06	7.9E-05	4.1E-05	3.9E-05	1.7E-05	1.1E-05	9.8E-06	9.9E-06	9.9E-06	9.9E-06
Methacrolein	1.0E-03	8.2E-03	4.3E-03	4.1E-03	1.8E-03	1.2E-03	1.0E-03	1.0E-03	1.0E-03	1.0E-03
Methyl Isobutyl Ketone	4.6E-07	3.7E-06	1.9E-06	1.9E-06	8.0E-07	5.3E-07	4.6E-07	4.7E-07	4.7E-07	4.7E-07
Naphthalene	2.0E-04	1.6E-03	8.5E-04	8.1E-04	3.5E-04	2.3E-04	2.0E-04	2.0E-04	2.0E-04	2.0E-04
Naphthalene, 1,2-dimethyl-	5.3E-06	4.3E-05	2.3E-05	2.2E-05	9.3E-06	6.1E-06	5.4E-06	5.4E-06	5.4E-06	5.4E-06
Naphthalene, 1,6-dimethyl-	1.9E-05	1.5E-04	8.0E-05	7.7E-05	3.3E-05	2.2E-05	1.9E-05	1.9E-05	1.9E-05	1.9E-05
Naphthalene, 1-methyl-	1.8E-05	1.5E-04	7.7E-05	7.3E-05	3.2E-05	2.1E-05	1.8E-05	1.8E-05	1.8E-05	1.8E-05
Naphthalene, 2-(bromomethyl)-	5.3E-06	4.2E-05	2.2E-05	2.1E-05	9.2E-06	6.1E-06	5.3E-06	5.4E-06	5.4E-06	5.4E-06
Naphthalene, 2,3-dimethyl-	1.4E-05	1.1E-04	6.0E-05	5.8E-05	2.5E-05	1.6E-05	1.4E-05	1.4E-05	1.5E-05	1.5E-05
Naphthalene, 2-methyl-	5.2E-05	4.2E-04	2.2E-04	2.1E-04	9.0E-05	6.0E-05	5.2E-05	5.3E-05	5.3E-05	5.3E-05
1-Octadecene	4.2E-06	3.4E-05	1.8E-05	1.7E-05	7.3E-06	4.8E-06	4.2E-06	4.3E-06	4.3E-06	4.3E-06
Octanal	1.1E-04	9.0E-04	4.7E-04	4.5E-04	2.0E-04	1.3E-04	1.1E-04	1.1E-04	1.1E-04	1.1E-04
Octane	7.5E-05	6.0E-04	3.2E-04	3.0E-04	1.3E-04	8.6E-05	7.5E-05	7.6E-05	7.6E-05	7.6E-05
17-Pentatriacontene	5.2E-07	4.2E-06	2.2E-06	2.1E-06	9.0E-07	6.0E-07	5.2E-07	5.3E-07	5.3E-07	5.3E-07
N-Phenylbenzamide	1.8E-04	1.5E-03	7.7E-04	7.4E-04	3.2E-04	2.1E-04	1.8E-04	1.9E-04	1.9E-04	1.9E-04
Phenanthrene	2.1E-07	1.7E-06	8.9E-07	8.5E-07	3.7E-07	2.4E-07	2.1E-07	2.1E-07	2.2E-07	2.2E-07
Phenanthrene, 1-methyl	9.7E-09	7.8E-08	4.1E-08	3.9E-08	1.7E-08	1.1E-08	9.7E-09	9.8E-09	9.8E-09	9.8E-09
Phenanthrene, 2-methyl-	1.9E-08	1.5E-07	7.9E-08	7.6E-08	3.3E-08	2.2E-08	1.9E-08	1.9E-08	1.9E-08	1.9E-08
Phenanthrene, 3-methyl	2.1E-08	1.7E-07	9.1E-08	8.7E-08	3.7E-08	2.5E-08	2.2E-08	2.2E-08	2.2E-08	2.2E-08

Appendix G. Calculation Examples, Results of Non-Cancer Hazard and Lifetime Incremental Cancer Risk

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OEHHA Synthetic Turf Study

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Chemical	CASRN	Chronic HQ _{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
Pyrene	3.1E-07	2.5E-06	1.3E-06	1.3E-06	5.4E-07	3.6E-07	3.1E-07	3.2E-07	3.2E-07	3.2E-07
Pyridine, 2-(4-methylphenyl)-	3.2E-08	2.5E-07	1.3E-07	1.3E-07	5.5E-08	3.6E-08	3.2E-08	3.2E-08	3.2E-08	3.2E-08
Resorcinol	3.3E-06	2.7E-05	1.4E-05	1.3E-05	5.8E-06	3.8E-06	3.3E-06	3.4E-06	3.4E-06	3.4E-06
TXIB "Kodaflex"	8.0E-06	6.4E-05	3.4E-05	3.2E-05	1.4E-05	9.2E-06	8.0E-06	8.1E-06	8.1E-06	8.1E-06
5,9-Undecadien-2-one, 6,10-dimethyl-	3.5E-07	2.8E-06	1.5E-06	1.4E-06	6.1E-07	4.0E-07	3.5E-07	3.5E-07	3.5E-07	3.5E-07
Undecane	1.9E-05	1.5E-04	7.9E-05	7.5E-05	3.3E-05	2.1E-05	1.9E-05	1.9E-05	1.9E-05	1.9E-05
Field-Related Chronic HQ _{inh} -sum		5.4E-03	4.3E-02	2.3E-02	2.2E-03	9.4E-03	6.2E-03	5.4E-03	5.5E-03	5.5E-03

Values are rounded to two significant figures.

Table G-10. **Off-Field** Chronic Inhalation Hazard Quotient for Individual Chemical (Chronic HQ_{inh}, unitless), Chronic Inhalation Route Total Hazard Quotients (Chronic HQ_{inh}-sum, unitless) for **Non-Field-Related General Chemicals**—Combined Gender Spectators

Chemical	CASRN	Chronic HQ _{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	71-43-2	4.4E-03	3.5E-02	1.8E-02	1.8E-02	7.6E-03	5.0E-03	4.4E-03	4.4E-03	4.4E-03
Benzene, 1,4-dichloro	106-46-7	6.0E-06	4.8E-05	2.5E-05	2.4E-05	1.0E-05	6.9E-06	6.0E-06	6.1E-06	6.1E-06
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	4.0E-05	3.2E-04	1.7E-04	1.6E-04	6.9E-05	4.6E-05	4.0E-05	4.0E-05	4.0E-05
2-Butoxyethanol	111-76-2	1.2E-06	9.8E-06	5.2E-06	4.9E-06	2.1E-06	1.4E-06	1.2E-06	1.2E-06	1.2E-06
Cyclotrisiloxane, hexamethyl-	541-05-9	2.3E-06	1.8E-05	9.6E-06	9.2E-06	4.0E-06	2.6E-06	2.3E-06	2.3E-06	2.3E-06
Decanal	112-31-2	4.4E-05	3.6E-04	1.9E-04	1.8E-04	7.7E-05	5.1E-05	4.4E-05	4.5E-05	4.5E-05
Ethylbenzene	100-41-4	1.2E-05	1.0E-04	5.3E-05	5.0E-05	2.2E-05	1.4E-05	1.3E-05	1.3E-05	1.3E-05
Heptane	142-82-5	1.2E-05	9.6E-05	5.0E-05	4.8E-05	2.1E-05	1.4E-05	1.2E-05	1.2E-05	1.2E-05
Hexanal	66-25-1	2.2E-03	1.8E-02	9.4E-03	9.0E-03	3.9E-03	2.6E-03	2.2E-03	2.3E-03	2.3E-03



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Chemical	CASRN	Chronic HQ _{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
Hexane	110-54-3	1.3E-05	1.1E-04	5.7E-05	5.4E-05	2.3E-05	1.5E-05	1.3E-05	1.4E-05	1.4E-05
1-Hexanol, 2-ethyl-	104-76-7	9.1E-04	7.3E-03	3.8E-03	3.7E-03	1.6E-03	1.0E-03	9.1E-04	9.2E-04	9.2E-04
Nonanal	124-19-6	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Phenol	108-95-2	5.4E-06	4.4E-05	2.3E-05	2.2E-05	9.5E-06	6.3E-06	5.5E-06	5.5E-06	5.5E-06
Tetrachloroethylene	127-18-4	2.5E-05	2.0E-04	1.1E-04	1.0E-04	4.4E-05	2.9E-05	2.5E-05	2.6E-05	2.6E-05
Tetradecane	629-59-4	6.5E-06	5.2E-05	2.7E-05	2.6E-05	1.1E-05	7.4E-06	6.5E-06	6.6E-06	6.6E-06
Texanol, TXIB (mono-isomer)	25265-77-4	2.0E-04	1.6E-03	8.4E-04	8.0E-04	3.5E-04	2.3E-04	2.0E-04	2.0E-04	2.0E-04
Toluene	108-88-3	6.9E-05	5.5E-04	2.9E-04	2.8E-04	1.2E-04	7.9E-05	6.9E-05	7.0E-05	7.0E-05
Trichloroethylene	79-01-6	6.8E-07	5.4E-06	2.9E-06	2.7E-06	1.2E-06	7.8E-07	6.8E-07	6.9E-07	6.9E-07
Trichloromethane	67-66-3	7.2E-05	5.8E-04	3.1E-04	2.9E-04	1.3E-04	8.3E-05	7.3E-05	7.3E-05	7.4E-05
m/p-Xylene	106-42-3	1.3E-04	1.0E-03	5.4E-04	5.1E-04	2.2E-04	1.5E-04	1.3E-04	1.3E-04	1.3E-04
o-Xylene	95-47-6	3.9E-05	3.2E-04	1.7E-04	1.6E-04	6.8E-05	4.5E-05	3.9E-05	4.0E-05	4.0E-05
Non-Field-Related Chronic HQ _{inh-sum}		8.2E-03	6.6E-02	3.5E-02	3.3E-02	1.4E-02	9.4E-03	8.2E-03	8.3E-03	8.3E-03

Values are rounded to two significant figures.

INDIVIDUAL FIELD ASSESSMENT (Table G-35 to Table G-40)

Table G-11. **On-Field** Field-Specific^a Chronic Inhalation Route Total Hazard Quotients for All General Chemicals (Chronic HQ_{inh-sum-field}, unitless)—Combined Gender

Receptor Category and Age Group	Chronic HQ _{inh-sum-field}					
	Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Athletes 2<6 years	2.0E-02	1.5E-01	1.0E-01	1.2E-01	3.5E-01	3.7E-01
Athletes 6<11 years	2.7E-02	2.0E-01	1.3E-01	1.6E-01	4.5E-01	4.8E-01
Athletes 11<16 years	2.6E-02	1.9E-01	1.3E-01	1.6E-01	4.4E-01	4.7E-01
Athletes 16<30 years	4.9E-02	3.6E-01	2.4E-01	2.9E-01	8.3E-01	8.8E-01
Athletes 30<40 years	3.2E-02	2.4E-01	1.6E-01	1.9E-01	5.4E-01	5.8E-01
Athletes 40<50 years	3.1E-02	2.3E-01	1.6E-01	1.9E-01	5.3E-01	5.7E-01
Athletes 50<70 years	3.1E-02	2.3E-01	1.5E-01	1.9E-01	5.2E-01	5.6E-01
Coaches 16<30 years	2.0E-02	1.5E-01	1.0E-01	1.2E-01	3.4E-01	3.6E-01
Coaches 30<40 years	1.8E-02	1.3E-01	8.8E-02	1.1E-01	3.0E-01	3.2E-01



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Receptor Category and Age Group	Chronic HQ _{inh-sum-field}					
	Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Coaches 40<50 years	1.8E-02	1.3E-01	8.9E-02	1.1E-01	3.0E-01	3.2E-01
Coaches 50<70 years	1.8E-02	1.3E-01	8.9E-02	1.1E-01	3.0E-01	3.2E-01
Referees 16<30 years	7.5E-03	5.6E-02	3.7E-02	4.5E-02	1.3E-01	1.4E-01
Referees 30<40 years	6.5E-03	4.9E-02	3.3E-02	3.9E-02	1.1E-01	1.2E-01
Referees 40<50 years	6.6E-03	4.9E-02	3.3E-02	4.0E-02	1.1E-01	1.2E-01
Referees 50<70 years	6.6E-03	4.9E-02	3.3E-02	4.0E-02	1.1E-01	1.2E-01
Spectators Third trimester fetus	2.7E-03	2.0E-02	1.4E-02	1.6E-02	4.6E-02	4.9E-02
Spectators 0<2 years	2.2E-02	1.6E-01	1.1E-01	1.3E-01	3.7E-01	3.9E-01
Spectators 2<6 years	1.1E-02	8.5E-02	5.7E-02	6.9E-02	1.9E-01	2.1E-01
Spectators 6<11 years	1.1E-02	8.1E-02	5.5E-02	6.6E-02	1.9E-01	2.0E-01
Spectators 11<16 years	4.7E-03	3.5E-02	2.4E-02	2.8E-02	8.0E-02	8.5E-02
Spectators 16<30 years	3.1E-03	2.3E-02	1.6E-02	1.9E-02	5.3E-02	5.6E-02
Spectators 30<40 years	2.7E-03	2.0E-02	1.4E-02	1.6E-02	4.6E-02	4.9E-02
Spectators 40<50 years	2.8E-03	2.0E-02	1.4E-02	1.7E-02	4.7E-02	5.0E-02
Spectators 50<70 years	2.8E-03	2.0E-02	1.4E-02	1.7E-02	4.7E-02	5.0E-02

^a 35 field-specific One-Day HQ_{inh-DART-sum-field} are included in this table.

Table G-12. **On-Field Field-Specific^a Chronic Inhalation Route Total Hazard Quotients for Field-Related General Chemicals** (Chronic HQ_{inh-sum-field}, unitless)—Combined Gender

Receptor Category and Age Group	Chronic HQ _{inh-sum-field}					
	Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Athletes 2<6 years	3.9E-03	9.7E-02	6.1E-02	9.1E-02	2.0E-01	2.3E-01
Athletes 6<11 years	5.1E-03	1.3E-01	8.0E-02	1.2E-01	2.6E-01	3.0E-01
Athletes 11<16 years	4.9E-03	1.2E-01	7.8E-02	1.1E-01	2.5E-01	3.0E-01
Athletes 16<30 years	9.3E-03	2.3E-01	1.5E-01	2.2E-01	4.7E-01	5.6E-01
Athletes 30<40 years	6.1E-03	1.5E-01	9.6E-02	1.4E-01	3.1E-01	3.7E-01
Athletes 40<50 years	6.0E-03	1.5E-01	9.4E-02	1.4E-01	3.0E-01	3.6E-01
Athletes 50<70 years	5.9E-03	1.5E-01	9.3E-02	1.4E-01	3.0E-01	3.5E-01
Coaches 16<30 years	3.8E-03	9.5E-02	6.1E-02	8.9E-02	2.0E-01	2.3E-01
Coaches 30<40 years	3.4E-03	8.3E-02	5.3E-02	7.8E-02	1.7E-01	2.0E-01
Coaches 40<50 years	3.4E-03	8.4E-02	5.3E-02	7.9E-02	1.7E-01	2.0E-01
Coaches 50<70 years	3.4E-03	8.4E-02	5.4E-02	7.9E-02	1.7E-01	2.0E-01
Referees 16<30 years	1.4E-03	3.5E-02	2.2E-02	3.3E-02	7.3E-02	8.6E-02
Referees 30<40 years	1.2E-03	3.1E-02	2.0E-02	2.9E-02	6.3E-02	7.5E-02
Referees 40<50 years	1.3E-03	3.1E-02	2.0E-02	2.9E-02	6.4E-02	7.6E-02
Referees 50<70 years	1.3E-03	3.1E-02	2.0E-02	2.9E-02	6.4E-02	7.6E-02
Spectators Third trimester fetus	5.2E-04	1.3E-02	8.1E-03	1.2E-02	2.6E-02	3.1E-02
Spectators 0<2 years	4.2E-03	1.0E-01	6.6E-02	9.7E-02	2.1E-01	2.5E-01
Spectators 2<6 years	2.2E-03	5.4E-02	3.4E-02	5.1E-02	1.1E-01	1.3E-01



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Receptor Category and Age Group	Chronic HQ _{inh-sum-field}					
	Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Spectators 6<11 years	2.1E-03	5.2E-02	3.3E-02	4.9E-02	1.1E-01	1.3E-01
Spectators 11<16 years	9.0E-04	2.2E-02	1.4E-02	2.1E-02	4.6E-02	5.4E-02
Spectators 16<30 years	5.9E-04	1.5E-02	9.4E-03	1.4E-02	3.0E-02	3.6E-02
Spectators 30<40 years	5.2E-04	1.3E-02	8.2E-03	1.2E-02	2.6E-02	3.1E-02
Spectators 40<50 years	5.2E-04	1.3E-02	8.3E-03	1.2E-02	2.7E-02	3.2E-02
Spectators 50<70 years	5.3E-04	1.3E-02	8.3E-03	1.2E-02	2.7E-02	3.2E-02

^a 35 field-specific One-Day HQ_{inh-DART-sum-field} are included in this table.

Table G-13. On-Field Field-Specific^a Chronic Inhalation Route Total Hazard Quotients for Non-Field-Related General Chemicals (Chronic HQ_{inh-sum-field}, unitless)—Combined Gender

Receptor Category and Age Group	Chronic HQ _{inh-sum-field}					
	Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Athletes 2<6 years	6.0E-03	5.5E-02	4.9E-02	3.7E-02	1.4E-01	2.1E-01
Athletes 6<11 years	7.8E-03	7.1E-02	6.3E-02	4.9E-02	1.8E-01	2.8E-01
Athletes 11<16 years	7.6E-03	7.0E-02	6.2E-02	4.7E-02	1.8E-01	2.7E-01
Athletes 16<30 years	1.4E-02	1.3E-01	1.2E-01	8.9E-02	3.4E-01	5.1E-01
Athletes 30<40 years	9.4E-03	8.6E-02	7.6E-02	5.8E-02	2.2E-01	3.3E-01
Athletes 40<50 years	9.3E-03	8.5E-02	7.5E-02	5.8E-02	2.2E-01	3.3E-01
Athletes 50<70 years	9.1E-03	8.3E-02	7.4E-02	5.7E-02	2.2E-01	3.2E-01
Coaches 16<30 years	6.0E-03	5.4E-02	4.8E-02	3.7E-02	1.4E-01	2.1E-01
Coaches 30<40 years	5.2E-03	4.7E-02	4.2E-02	3.2E-02	1.2E-01	1.8E-01
Coaches 40<50 years	5.3E-03	4.8E-02	4.3E-02	3.3E-02	1.2E-01	1.9E-01
Coaches 50<70 years	5.3E-03	4.8E-02	4.3E-02	3.3E-02	1.2E-01	1.9E-01
Referees 16<30 years	2.2E-03	2.0E-02	1.8E-02	1.4E-02	5.2E-02	7.8E-02
Referees 30<40 years	1.9E-03	1.8E-02	1.6E-02	1.2E-02	4.6E-02	6.8E-02
Referees 40<50 years	2.0E-03	1.8E-02	1.6E-02	1.2E-02	4.6E-02	6.9E-02
Referees 50<70 years	2.0E-03	1.8E-02	1.6E-02	1.2E-02	4.6E-02	6.9E-02
Spectators Third trimester fetus	8.0E-04	7.3E-03	6.5E-03	5.0E-03	1.9E-02	2.8E-02
Spectators 0<2 years	6.4E-03	5.9E-02	5.2E-02	4.0E-02	1.5E-01	2.3E-01
Spectators 2<6 years	3.4E-03	3.1E-02	2.7E-02	2.1E-02	8.0E-02	1.2E-01
Spectators 6<11 years	3.2E-03	3.0E-02	2.6E-02	2.0E-02	7.6E-02	1.1E-01
Spectators 11<16 years	1.4E-03	1.3E-02	1.1E-02	8.7E-03	3.3E-02	4.9E-02
Spectators 16<30 years	9.2E-04	8.4E-03	7.5E-03	5.7E-03	2.2E-02	3.2E-02
Spectators 30<40 years	8.0E-04	7.3E-03	6.5E-03	5.0E-03	1.9E-02	2.8E-02
Spectators 40<50 years	8.1E-04	7.4E-03	6.6E-03	5.0E-03	1.9E-02	2.9E-02
Spectators 50<70 years	8.2E-04	7.4E-03	6.6E-03	5.1E-03	1.9E-02	2.9E-02

^a 35 field-specific One-Day HQ_{inh-DART-sum-field} are included in this table.



Table G-14. Off-Field Field-Specific^a Chronic Inhalation Route Total Hazard Quotients for All General Chemicals (Chronic HQ_{inh-sum-field}, unitless) for Combined Gender Spectators

Spectator Receptor Age Group	Chronic HQ _{inh-sum-field}					
	Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Third trimester fetus	9.5E-04	1.3E-02	1.3E-02	6.9E-03	3.4E-02	5.5E-02
0<2 years	7.6E-03	1.1E-01	1.0E-01	5.6E-02	2.7E-01	4.5E-01
2<6 years	4.0E-03	5.6E-02	5.5E-02	2.9E-02	1.4E-01	2.3E-01
6<11 years	3.8E-03	5.3E-02	5.3E-02	2.8E-02	1.4E-01	2.2E-01
11<16 years	1.7E-03	2.3E-02	2.3E-02	1.2E-02	5.9E-02	9.6E-02
16<30 years	1.1E-03	1.5E-02	1.5E-02	7.9E-03	3.9E-02	6.4E-02
30<40 years	9.5E-04	1.3E-02	1.3E-02	6.9E-03	3.4E-02	5.6E-02
40<50 years	9.6E-04	1.3E-02	1.3E-02	7.0E-03	3.4E-02	5.6E-02
50<70 years	9.7E-04	1.3E-02	1.3E-02	7.0E-03	3.4E-02	5.6E-02

^a 35 field-specific One-Day HQ_{inh-DART-sum-field} are included in this table.

Table G-15. Off-Field Field-Specific^a Chronic Inhalation Route Total Hazard Quotients for Field-Related General Chemicals (Chronic HQ_{inh-sum-field}, unitless) for Combined Gender Spectators

Receptor Category and Age Group	Chronic HQ _{inh-sum-field}					
	Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Third trimester fetus	8.9E-06	5.2E-03	6.4E-03	2.4E-03	1.7E-02	2.5E-02
0<2 years	7.1E-05	4.2E-02	5.2E-02	1.9E-02	1.4E-01	2.0E-01
2<6 years	3.7E-05	2.2E-02	2.7E-02	1.0E-02	7.2E-02	1.0E-01
6<11 years	3.6E-05	2.1E-02	2.6E-02	9.6E-03	6.9E-02	9.9E-02
11<16 years	1.5E-05	9.1E-03	1.1E-02	4.1E-03	3.0E-02	4.3E-02
16<30 years	1.0E-05	6.0E-03	7.4E-03	2.7E-03	2.0E-02	2.8E-02
30<40 years	8.9E-06	5.2E-03	6.5E-03	2.4E-03	1.7E-02	2.5E-02
40<50 years	9.0E-06	5.3E-03	6.5E-03	2.4E-03	1.7E-02	2.5E-02
50<70 years	9.0E-06	5.3E-03	6.5E-03	2.4E-03	1.7E-02	2.5E-02

^a 35 field-specific One-Day HQ_{inh-DART-sum-field} are included in this table.

Table G-16. Off-Field Field-Specific^a Chronic Inhalation Route Total Hazard Quotients for Non-Field-Related General Chemicals (Chronic HQ_{inh-sum-field}, unitless) for Combined Gender Spectators

Spectator Receptor Age Group	Chronic HQ _{inh-sum-field}					
	Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Third trimester fetus	1.3E-03	8.2E-03	7.9E-03	5.0E-03	2.2E-02	3.6E-02
0<2 years	1.0E-02	6.6E-02	6.3E-02	4.0E-02	1.8E-01	2.9E-01
2<6 years	5.3E-03	3.5E-02	3.3E-02	2.1E-02	9.3E-02	1.5E-01
6<11 years	5.1E-03	3.3E-02	3.2E-02	2.0E-02	8.9E-02	1.5E-01
11<16 years	2.2E-03	1.4E-02	1.4E-02	8.6E-03	3.8E-02	6.3E-02



Spectator Receptor Age Group	Chronic HQ _{inh-sum-field}					
	Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
16<30 years	1.5E-03	9.4E-03	9.1E-03	5.7E-03	2.5E-02	4.2E-02
30<40 years	1.3E-03	8.2E-03	7.9E-03	5.0E-03	2.2E-02	3.7E-02
40<50 years	1.3E-03	8.3E-03	8.0E-03	5.0E-03	2.2E-02	3.7E-02
50<70 years	1.3E-03	8.3E-03	8.0E-03	5.0E-03	2.2E-02	3.7E-02

^a 34 field-specific One-Day HQ_{inh-DART-sum-field} are included in this table.

G.2.5. One-Day Dermal Hazard Quotient (One-Day HQ_{der-DART}, unitless) for DART Chemicals

Table G-1. Field-Specific^a One-Day Dermal Route Total Hazard Quotients for Individual Field-Related DARTs (One-Day HQ_{der-DART-field}, unitless)— Combined Gender **Athletes 2<6 years**

Chemical	CASRN	OneDayHQ _{der-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
2-Azacyclotridecanone	947-04-6	0.0E+00	1.8E-09	8.2E-09	0.0E+00	5.7E-09	4.5E-08
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	0.0E+00	1.6E-06	6.8E-06	0.0E+00	6.3E-06	4.0E-05
Benzo[a]pyrene	50-32-8	0.0E+00	2.3E-06	2.3E-06	1.5E-06	6.1E-06	9.5E-06
Benzo[e]pyrene	192-97-2	6.6E-07	6.8E-06	5.0E-06	6.5E-06	1.6E-05	1.9E-05
Benzo[g,h,i]perylene	191-24-2	6.4E-07	5.2E-06	3.4E-06	4.8E-06	1.2E-05	1.4E-05
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	0.0E+00	7.1E-08	4.2E-07	0.0E+00	0.0E+00	2.5E-06
Bis(2-Ethylhexyl)adipate	103-23-1	2.4E-08	3.3E-07	5.3E-07	1.7E-07	7.6E-07	3.1E-06
Chrysene	218-01-9	2.2E-06	2.0E-05	1.3E-05	2.0E-05	4.0E-05	4.5E-05
Coronene	191-07-1	0.0E+00	1.6E-06	9.3E-06	0.0E+00	0.0E+00	5.5E-05
Cyclopenta[cd]pyrene	27208-37-3	3.6E-07	3.6E-06	2.1E-06	3.4E-06	6.8E-06	8.1E-06
Dicyclohexylamine	101-83-7	0.0E+00	9.0E-07	1.5E-06	6.9E-07	1.7E-06	9.0E-06
N,N-Dicyclohexylmethylamine	7560-83-0	0.0E+00	1.6E-09	3.2E-09	7.3E-10	6.7E-09	1.6E-08
Dimethyl phthalate	131-11-3	0.0E+00	9.4E-09	3.1E-08	0.0E+00	1.0E-07	1.2E-07
1,3-Diphenylguanidine	102-06-7	0.0E+00	5.3E-07	2.4E-06	0.0E+00	1.7E-06	1.3E-05
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	2.3E-06	1.9E-06	2.0E-06	5.3E-06	8.3E-06
Methyl stearate	112-61-8	0.0E+00	1.4E-07	2.0E-07	7.8E-08	3.8E-07	1.1E-06



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Chemical	CASRN	OneDayHQ _{der-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	1.1E-07	1.3E-06	1.0E-06	9.2E-07	3.2E-06	4.9E-06
Phenol, 4-(1-phenylethyl)-	1988-89-2	1.3E-07	1.4E-06	1.6E-06	7.9E-07	5.2E-06	6.9E-06
4-tert-Octylphenol	140-66-9	0.0E+00	4.3E-07	9.1E-07	1.2E-07	2.1E-06	4.0E-06

^a 35 field-specific One-Day HQ_{der-DART-field} are included in this table.

Table G-2. Field-Specific^a One-Day Dermal Route Total Hazard Quotients for Individual **Field-Related DARTs** (One-Day HQ_{der-DART-field}, unitless)— Combined Gender **Athletes 6<11 years**

Chemical	CASRN	OneDayHQ _{der-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
2-Azacyclotridecanone	947-04-6	0.0E+00	1.7E-09	7.4E-09	0.0E+00	5.1E-09	4.1E-08
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	0.0E+00	1.5E-06	6.3E-06	0.0E+00	5.7E-06	3.7E-05
Benzo[a]pyrene	50-32-8	0.0E+00	2.1E-06	2.1E-06	1.4E-06	5.5E-06	8.6E-06
Benzo[e]pyrene	192-97-2	6.0E-07	6.2E-06	4.6E-06	5.9E-06	1.5E-05	1.7E-05
Benzo[g,h,i]perylene	191-24-2	5.8E-07	4.7E-06	3.0E-06	4.4E-06	1.0E-05	1.2E-05
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	0.0E+00	6.3E-08	3.7E-07	0.0E+00	0.0E+00	2.2E-06
Bis(2-Ethylhexyl)adipate	103-23-1	2.2E-08	3.0E-07	4.8E-07	1.5E-07	6.9E-07	2.8E-06
Chrysene	218-01-9	2.0E-06	1.8E-05	1.2E-05	1.8E-05	3.6E-05	4.1E-05
Coronene	191-07-1	0.0E+00	1.4E-06	8.5E-06	0.0E+00	0.0E+00	5.0E-05
Cyclopenta[cd]pyrene	27208-37-3	3.3E-07	3.2E-06	1.9E-06	3.1E-06	6.1E-06	7.4E-06
Dicyclohexylamine	101-83-7	0.0E+00	8.2E-07	1.4E-06	6.3E-07	1.5E-06	8.2E-06
N,N-Dicyclohexylmethylamine	7560-83-0	0.0E+00	1.4E-09	2.9E-09	6.6E-10	6.0E-09	1.5E-08
Dimethyl phthalate	131-11-3	0.0E+00	8.5E-09	2.8E-08	0.0E+00	9.3E-08	1.1E-07
1,3-Diphenylguanidine	102-06-7	0.0E+00	4.9E-07	2.2E-06	0.0E+00	1.5E-06	1.2E-05
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	2.1E-06	1.7E-06	1.8E-06	4.8E-06	7.5E-06
Methyl stearate	112-61-8	0.0E+00	1.3E-07	1.8E-07	7.1E-08	3.3E-07	9.9E-07
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	9.8E-08	1.2E-06	9.4E-07	8.3E-07	2.9E-06	4.4E-06



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Chemical	CASRN	OneDayHQ _{der-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Phenol, 4-(1-phenylethyl)-	1988-89-2	1.1E-07	1.3E-06	1.5E-06	7.1E-07	4.7E-06	6.2E-06
4-tert-Octylphenol	140-66-9	0.0E+00	3.9E-07	8.2E-07	1.1E-07	1.9E-06	3.6E-06

^a 35 field-specific One-Day HQ_{der-DART-field} are included in this table.

Table G-3. Field-Specific^a One-Day Dermal Route Total Hazard Quotients for Individual Field-Related DARTs (One-Day HQ_{der-DART-field}, unitless)— Combined Gender Athletes 11<16 years

Chemical	CASRN	OneDayHQ _{der-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
2-Azacyclotridecanone	947-04-6	0.0E+00	1.4E-09	6.4E-09	0.0E+00	4.5E-09	3.5E-08
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	0.0E+00	1.3E-06	5.3E-06	0.0E+00	4.9E-06	3.1E-05
Benzo[a]pyrene	50-32-8	0.0E+00	1.8E-06	1.8E-06	1.2E-06	4.7E-06	7.4E-06
Benzo[e]pyrene	192-97-2	5.1E-07	5.3E-06	3.9E-06	5.1E-06	1.3E-05	1.5E-05
Benzo[g,h,i]perylene	191-24-2	5.0E-07	4.0E-06	2.6E-06	3.7E-06	8.9E-06	1.1E-05
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	0.0E+00	5.4E-08	3.2E-07	0.0E+00	0.0E+00	1.9E-06
Bis(2-Ethylhexyl)adipate	103-23-1	1.9E-08	2.5E-07	4.1E-07	1.3E-07	5.9E-07	2.4E-06
Chrysene	218-01-9	1.7E-06	1.5E-05	9.9E-06	1.5E-05	3.1E-05	3.5E-05
Coronene	191-07-1	0.0E+00	1.2E-06	7.3E-06	0.0E+00	0.0E+00	4.3E-05
Cyclopenta[cd]pyrene	27208-37-3	2.8E-07	2.8E-06	1.6E-06	2.7E-06	5.3E-06	6.3E-06
Dicyclohexylamine	101-83-7	0.0E+00	7.0E-07	1.2E-06	5.4E-07	1.3E-06	7.0E-06
N,N-Dicyclohexylmethylamine	7560-83-0	0.0E+00	1.2E-09	2.5E-09	5.7E-10	5.1E-09	1.3E-08
Dimethyl phthalate	131-11-3	0.0E+00	7.3E-09	2.4E-08	0.0E+00	7.9E-08	9.3E-08
1,3-Diphenylguanidine	102-06-7	0.0E+00	4.1E-07	1.8E-06	0.0E+00	1.3E-06	1.0E-05
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	1.8E-06	1.5E-06	1.6E-06	4.1E-06	6.5E-06
Methyl stearate	112-61-8	0.0E+00	1.1E-07	1.5E-07	6.1E-08	2.9E-07	8.4E-07
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	8.4E-08	9.9E-07	8.1E-07	7.1E-07	2.5E-06	3.8E-06
Phenol, 4-(1-phenylethyl)-	1988-89-2	9.8E-08	1.1E-06	1.3E-06	6.1E-07	4.0E-06	5.3E-06



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Chemical	CASRN	OneDayHQ _{der-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
4-tert-Octylphenol	140-66-9	0.0E+00	3.4E-07	7.0E-07	9.1E-08	1.6E-06	3.1E-06

^a 35 field-specific One-Day HQ_{der-DART-field} are included in this table.

Table G-4. Field-Specific^a One-Day Dermal Route Total Hazard Quotients for Individual **Field-Related DARTs** (One-Day HQ_{der-DART-field}, unitless)— Combined Gender **Athletes 16<30 years**

Chemical	CASRN	OneDayHQ _{der-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
2-Azacyclotridecanone	947-04-6	0.0E+00	1.2E-09	5.5E-09	0.0E+00	3.9E-09	3.0E-08
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	0.0E+00	1.1E-06	4.8E-06	0.0E+00	4.3E-06	2.8E-05
Benzo[a]pyrene	50-32-8	0.0E+00	1.6E-06	1.6E-06	1.0E-06	4.1E-06	6.4E-06
Benzo[e]pyrene	192-97-2	4.5E-07	4.7E-06	3.5E-06	4.4E-06	1.1E-05	1.3E-05
Benzo[g,h,i]perylene	191-24-2	4.4E-07	3.5E-06	2.3E-06	3.3E-06	7.8E-06	9.3E-06
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	0.0E+00	4.9E-08	2.9E-07	0.0E+00	0.0E+00	1.7E-06
Bis(2-Ethylhexyl)adipate	103-23-1	1.7E-08	2.2E-07	3.6E-07	1.2E-07	5.2E-07	2.1E-06
Chrysene	218-01-9	1.5E-06	1.4E-05	8.8E-06	1.4E-05	2.7E-05	3.1E-05
Coronene	191-07-1	0.0E+00	1.1E-06	6.3E-06	0.0E+00	0.0E+00	3.7E-05
Cyclopenta[cd]pyrene	27208-37-3	2.5E-07	2.4E-06	1.4E-06	2.3E-06	4.7E-06	5.5E-06
Dicyclohexylamine	101-83-7	0.0E+00	6.1E-07	1.0E-06	4.7E-07	1.1E-06	6.1E-06
N,N-Dicyclohexylmethylamine	7560-83-0	0.0E+00	1.1E-09	2.1E-09	5.0E-10	4.5E-09	1.1E-08
Dimethyl phthalate	131-11-3	0.0E+00	6.4E-09	2.1E-08	0.0E+00	6.9E-08	8.2E-08
1,3-Diphenylguanidine	102-06-7	0.0E+00	3.7E-07	1.6E-06	0.0E+00	1.1E-06	9.1E-06
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	1.6E-06	1.3E-06	1.4E-06	3.6E-06	5.7E-06
Methyl stearate	112-61-8	0.0E+00	9.6E-08	1.4E-07	5.3E-08	2.5E-07	7.4E-07
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	7.3E-08	8.6E-07	7.0E-07	6.2E-07	2.2E-06	3.3E-06
Phenol, 4-(1-phenylethyl)-	1988-89-2	8.5E-08	9.4E-07	1.1E-06	5.3E-07	3.5E-06	4.7E-06
4-tert-Octylphenol	140-66-9	0.0E+00	2.9E-07	6.2E-07	8.0E-08	1.4E-06	2.7E-06



^a 35 field-specific One-Day HQ_{der-DART-field} are included in this table.

Table G-5. Field-Specific^a One-Day Dermal Route Total Hazard Quotients for Individual **Field-Related DARTs** (One-Day HQ_{der-DART-field}, unitless)— Combined Gender **Athletes 30<40 years**

Chemical	CASRN	OneDayHQ _{der-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
2-Azacyclotridecanone	947-04-6	0.0E+00	1.2E-09	5.2E-09	0.0E+00	3.6E-09	2.9E-08
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	0.0E+00	1.1E-06	4.4E-06	0.0E+00	4.0E-06	2.6E-05
Benzo[a]pyrene	50-32-8	0.0E+00	1.5E-06	1.5E-06	9.7E-07	3.9E-06	6.0E-06
Benzo[e]pyrene	192-97-2	4.2E-07	4.4E-06	3.2E-06	4.1E-06	1.0E-05	1.2E-05
Benzo[g,h,i]perylene	191-24-2	4.1E-07	3.3E-06	2.1E-06	3.1E-06	7.3E-06	8.7E-06
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	0.0E+00	4.6E-08	2.7E-07	0.0E+00	0.0E+00	1.6E-06
Bis(2-Ethylhexyl)adipate	103-23-1	1.6E-08	2.1E-07	3.4E-07	1.1E-07	4.8E-07	2.0E-06
Chrysene	218-01-9	1.4E-06	1.3E-05	8.1E-06	1.3E-05	2.5E-05	2.9E-05
Coronene	191-07-1	0.0E+00	1.0E-06	5.9E-06	0.0E+00	0.0E+00	3.5E-05
Cyclopenta[cd]pyrene	27208-37-3	2.3E-07	2.3E-06	1.4E-06	2.2E-06	4.4E-06	5.2E-06
Dicyclohexylamine	101-83-7	0.0E+00	5.7E-07	9.4E-07	4.4E-07	1.1E-06	5.7E-06
N,N-Dicyclohexylmethylamine	7560-83-0	0.0E+00	9.9E-10	2.0E-09	4.6E-10	4.2E-09	1.0E-08
Dimethyl phthalate	131-11-3	0.0E+00	6.0E-09	2.0E-08	0.0E+00	6.5E-08	7.7E-08
1,3-Diphenylguanidine	102-06-7	0.0E+00	3.5E-07	1.5E-06	0.0E+00	1.1E-06	8.5E-06
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	1.5E-06	1.2E-06	1.3E-06	3.4E-06	5.3E-06
Methyl stearate	112-61-8	0.0E+00	8.9E-08	1.3E-07	5.0E-08	2.3E-07	6.9E-07
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	6.8E-08	8.0E-07	6.6E-07	5.8E-07	2.1E-06	3.1E-06
Phenol, 4-(1-phenylethyl)-	1988-89-2	8.0E-08	8.8E-07	1.0E-06	5.0E-07	3.3E-06	4.4E-06
4-tert-Octylphenol	140-66-9	0.0E+00	2.7E-07	5.7E-07	7.4E-08	1.3E-06	2.5E-06

^a 35 field-specific One-Day HQ_{der-DART-field} are included in this table.



Table G-6. Field-Specific^a One-Day Dermal Route Total Hazard Quotients for Individual **Field-Related DARTs** (One-Day HQ_{der-DART-field}, unitless)— Combined Gender **Athletes 40<50 years**

Chemical	CASRN	OneDayHQ _{der-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
2-Azacyclotridecanone	947-04-6	0.0E+00	1.2E-09	5.2E-09	0.0E+00	3.6E-09	2.9E-08
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	0.0E+00	1.1E-06	4.4E-06	0.0E+00	4.0E-06	2.6E-05
Benzo[a]pyrene	50-32-8	0.0E+00	1.5E-06	1.5E-06	9.7E-07	3.9E-06	6.1E-06
Benzo[e]pyrene	192-97-2	4.2E-07	4.4E-06	3.2E-06	4.2E-06	1.0E-05	1.2E-05
Benzo[g,h,i]perylene	191-24-2	4.1E-07	3.3E-06	2.2E-06	3.1E-06	7.3E-06	8.8E-06
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	0.0E+00	4.6E-08	2.7E-07	0.0E+00	0.0E+00	1.6E-06
Bis(2-Ethylhexyl)adipate	103-23-1	1.6E-08	2.1E-07	3.4E-07	1.1E-07	4.9E-07	2.0E-06
Chrysene	218-01-9	1.4E-06	1.3E-05	8.2E-06	1.3E-05	2.6E-05	2.9E-05
Coronene	191-07-1	0.0E+00	1.0E-06	5.9E-06	0.0E+00	0.0E+00	3.5E-05
Cyclopenta[cd]pyrene	27208-37-3	2.3E-07	2.3E-06	1.4E-06	2.2E-06	4.4E-06	5.2E-06
Dicyclohexylamine	101-83-7	0.0E+00	5.8E-07	9.6E-07	4.4E-07	1.1E-06	5.8E-06
N,N-Dicyclohexylmethylamine	7560-83-0	0.0E+00	1.0E-09	2.1E-09	4.7E-10	4.2E-09	1.1E-08
Dimethyl phthalate	131-11-3	0.0E+00	6.0E-09	2.0E-08	0.0E+00	6.5E-08	7.7E-08
1,3-Diphenylguanidine	102-06-7	0.0E+00	3.5E-07	1.6E-06	0.0E+00	1.1E-06	8.6E-06
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	1.5E-06	1.2E-06	1.3E-06	3.4E-06	5.3E-06
Methyl stearate	112-61-8	0.0E+00	9.0E-08	1.3E-07	5.0E-08	2.3E-07	7.0E-07
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	6.9E-08	8.1E-07	6.6E-07	5.9E-07	2.1E-06	3.1E-06
Phenol, 4-(1-phenylethyl)-	1988-89-2	8.0E-08	8.8E-07	1.0E-06	5.0E-07	3.3E-06	4.4E-06
4-tert-Octylphenol	140-66-9	0.0E+00	2.8E-07	5.8E-07	7.5E-08	1.3E-06	2.6E-06

^a 35 field-specific One-Day HQ_{der-DART-field} are included in this table.



Table G-7. Field-Specific^a One-Day Dermal Route Total Hazard Quotients for Individual **Field-Related DARTs** (One-Day HQ_{der-DART-field}, unitless)— Combined Gender **Athletes** **50<70 years**

Chemical	CASRN	OneDayHQ _{der-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
2-Azacyclotridecanone	947-04-6	0.0E+00	1.2E-09	5.2E-09	0.0E+00	3.6E-09	2.9E-08
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	0.0E+00	1.1E-06	4.4E-06	0.0E+00	4.0E-06	2.6E-05
Benzo[a]pyrene	50-32-8	0.0E+00	1.5E-06	1.5E-06	9.8E-07	3.9E-06	6.1E-06
Benzo[e]pyrene	192-97-2	4.2E-07	4.4E-06	3.2E-06	4.2E-06	1.0E-05	1.2E-05
Benzo[g,h,i]perylene	191-24-2	4.1E-07	3.3E-06	2.2E-06	3.1E-06	7.4E-06	8.8E-06
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	0.0E+00	4.6E-08	2.7E-07	0.0E+00	0.0E+00	1.6E-06
Bis(2-Ethylhexyl)adipate	103-23-1	1.6E-08	2.1E-07	3.4E-07	1.1E-07	4.9E-07	2.0E-06
Chrysene	218-01-9	1.4E-06	1.3E-05	8.3E-06	1.3E-05	2.6E-05	2.9E-05
Coronene	191-07-1	0.0E+00	1.0E-06	5.9E-06	0.0E+00	0.0E+00	3.5E-05
Cyclopenta[cd]pyrene	27208-37-3	2.3E-07	2.3E-06	1.4E-06	2.2E-06	4.4E-06	5.2E-06
Dicyclohexylamine	101-83-7	0.0E+00	5.8E-07	9.6E-07	4.4E-07	1.1E-06	5.8E-06
N,N-Dicyclohexylmethylamine	7560-83-0	0.0E+00	1.0E-09	2.1E-09	4.7E-10	4.2E-09	1.1E-08
Dimethyl phthalate	131-11-3	0.0E+00	6.0E-09	2.0E-08	0.0E+00	6.5E-08	7.7E-08
1,3-Diphenylguanidine	102-06-7	0.0E+00	3.5E-07	1.6E-06	0.0E+00	1.1E-06	8.6E-06
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	1.5E-06	1.2E-06	1.3E-06	3.4E-06	5.3E-06
Methyl stearate	112-61-8	0.0E+00	9.1E-08	1.3E-07	5.0E-08	2.4E-07	7.0E-07
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	6.9E-08	8.1E-07	6.6E-07	5.9E-07	2.1E-06	3.1E-06
Phenol, 4-(1-phenylethyl)-	1988-89-2	8.1E-08	8.8E-07	1.0E-06	5.0E-07	3.3E-06	4.4E-06
4-tert-Octylphenol	140-66-9	0.0E+00	2.8E-07	5.8E-07	7.5E-08	1.3E-06	2.6E-06

^a 35 field-specific One-Day HQ_{der-DART-field} are included in this table.



Table G-8. Field-Specific^a One-Day Dermal Route Total Hazard Quotients for Individual **Field-Related DARTs** (One-Day HQ_{der-DART-field}, unitless)— Combined Gender **Coaches 16<30 years**

Chemical	CASRN	OneDayHQ _{der-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
2-Azacyclotridecanone	947-04-6	0.0E+00	6.1E-10	2.7E-09	0.0E+00	1.9E-09	1.5E-08
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	0.0E+00	5.7E-07	2.4E-06	0.0E+00	2.1E-06	1.4E-05
Benzo[a]pyrene	50-32-8	0.0E+00	7.8E-07	7.7E-07	5.1E-07	2.1E-06	3.2E-06
Benzo[e]pyrene	192-97-2	2.2E-07	2.3E-06	1.7E-06	2.2E-06	5.5E-06	6.3E-06
Benzo[g,h,i]perylene	191-24-2	2.2E-07	1.7E-06	1.1E-06	1.6E-06	3.8E-06	4.6E-06
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	0.0E+00	2.3E-08	1.4E-07	0.0E+00	0.0E+00	8.2E-07
Bis(2-Ethylhexyl)adipate	103-23-1	8.2E-09	1.1E-07	1.9E-07	5.7E-08	2.5E-07	1.1E-06
Chrysene	218-01-9	7.3E-07	6.7E-06	4.3E-06	6.7E-06	1.3E-05	1.5E-05
Coronene	191-07-1	0.0E+00	5.4E-07	3.2E-06	0.0E+00	0.0E+00	1.9E-05
Cyclopenta[cd]pyrene	27208-37-3	1.2E-07	1.2E-06	7.1E-07	1.2E-06	2.3E-06	2.7E-06
Dicyclohexylamine	101-83-7	0.0E+00	3.0E-07	5.0E-07	2.3E-07	5.6E-07	3.0E-06
N,N-Dicyclohexylmethylamine	7560-83-0	0.0E+00	5.3E-10	1.1E-09	2.5E-10	2.2E-09	5.5E-09
Dimethyl phthalate	131-11-3	0.0E+00	3.1E-09	1.0E-08	0.0E+00	3.4E-08	4.0E-08
1,3-Diphenylguanidine	102-06-7	0.0E+00	1.8E-07	8.2E-07	0.0E+00	5.7E-07	4.5E-06
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	7.6E-07	6.4E-07	6.8E-07	1.8E-06	2.8E-06
Methyl stearate	112-61-8	0.0E+00	4.7E-08	6.7E-08	2.6E-08	1.2E-07	3.7E-07
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	3.6E-08	4.3E-07	3.5E-07	3.1E-07	1.1E-06	1.6E-06
Phenol, 4-(1-phenylethyl)-	1988-89-2	4.2E-08	4.7E-07	5.5E-07	2.6E-07	1.8E-06	2.3E-06
4-tert-Octylphenol	140-66-9	0.0E+00	1.4E-07	3.0E-07	3.9E-08	7.1E-07	1.3E-06

^a 35 field-specific One-Day HQ_{der-DART-field} are included in this table.



Table G-9. Field-Specific^a One-Day Dermal Route Total Hazard Quotients for Individual **Field-Related DARTs** (One-Day HQ_{der-DART-field}, unitless)— Combined Gender **Coaches** **30<40 years**

Chemical	CASRN	OneDayHQ _{der-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
2-Azacyclotridecanone	947-04-6	0.0E+00	5.7E-10	2.5E-09	0.0E+00	1.8E-09	1.4E-08
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	0.0E+00	5.3E-07	2.2E-06	0.0E+00	2.0E-06	1.3E-05
Benzo[a]pyrene	50-32-8	0.0E+00	7.3E-07	7.2E-07	4.8E-07	1.9E-06	3.0E-06
Benzo[e]pyrene	192-97-2	2.1E-07	2.2E-06	1.6E-06	2.0E-06	5.2E-06	5.9E-06
Benzo[g,h,i]perylene	191-24-2	2.0E-07	1.6E-06	1.1E-06	1.5E-06	3.6E-06	4.3E-06
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	0.0E+00	2.2E-08	1.3E-07	0.0E+00	0.0E+00	7.7E-07
Bis(2-Ethylhexyl)adipate	103-23-1	7.7E-09	1.0E-07	1.7E-07	5.3E-08	2.4E-07	9.9E-07
Chrysene	218-01-9	6.8E-07	6.3E-06	4.1E-06	6.3E-06	1.3E-05	1.4E-05
Coronene	191-07-1	0.0E+00	4.9E-07	2.9E-06	0.0E+00	0.0E+00	1.7E-05
Cyclopenta[cd]pyrene	27208-37-3	1.1E-07	1.1E-06	6.7E-07	1.1E-06	2.2E-06	2.6E-06
Dicyclohexylamine	101-83-7	0.0E+00	2.8E-07	4.6E-07	2.2E-07	5.2E-07	2.8E-06
N,N-Dicyclohexylmethylamine	7560-83-0	0.0E+00	5.0E-10	1.0E-09	2.3E-10	2.0E-09	5.2E-09
Dimethyl phthalate	131-11-3	0.0E+00	2.9E-09	9.8E-09	0.0E+00	3.2E-08	3.8E-08
1,3-Diphenylguanidine	102-06-7	0.0E+00	1.7E-07	7.6E-07	0.0E+00	5.4E-07	4.2E-06
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	7.1E-07	5.9E-07	6.3E-07	1.7E-06	2.6E-06
Methyl stearate	112-61-8	0.0E+00	4.4E-08	6.2E-08	2.5E-08	1.2E-07	3.4E-07
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	3.4E-08	4.0E-07	3.2E-07	2.9E-07	1.0E-06	1.5E-06
Phenol, 4-(1-phenylethyl)-	1988-89-2	4.0E-08	4.4E-07	5.2E-07	2.5E-07	1.7E-06	2.2E-06
4-tert-Octylphenol	140-66-9	0.0E+00	1.4E-07	2.9E-07	3.7E-08	6.6E-07	1.3E-06

^a 35 field-specific One-Day HQ_{der-DART-field} are included in this table.



Table G-10. Field-Specific^a One-Day Dermal Route Total Hazard Quotients for Individual Field-Related DARTs (One-Day HQ_{der-DART-field}, unitless)— Combined Gender Coaches 40<50 years

Chemical	CASRN	OneDayHQ _{der-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
2-Azacyclotridecanone	947-04-6	0.0E+00	5.7E-10	2.5E-09	0.0E+00	1.8E-09	1.4E-08
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	0.0E+00	5.3E-07	2.2E-06	0.0E+00	2.0E-06	1.3E-05
Benzo[a]pyrene	50-32-8	0.0E+00	7.4E-07	7.2E-07	4.8E-07	1.9E-06	3.0E-06
Benzo[e]pyrene	192-97-2	2.1E-07	2.2E-06	1.6E-06	2.1E-06	5.2E-06	5.9E-06
Benzo[g,h,i]perylene	191-24-2	2.0E-07	1.7E-06	1.1E-06	1.5E-06	3.7E-06	4.4E-06
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	0.0E+00	2.2E-08	1.3E-07	0.0E+00	0.0E+00	7.8E-07
Bis(2-Ethylhexyl)adipate	103-23-1	7.8E-09	1.0E-07	1.7E-07	5.4E-08	2.4E-07	1.0E-06
Chrysene	218-01-9	6.9E-07	6.3E-06	4.1E-06	6.3E-06	1.3E-05	1.4E-05
Coronene	191-07-1	0.0E+00	5.1E-07	3.0E-06	0.0E+00	0.0E+00	1.8E-05
Cyclopenta[cd]pyrene	27208-37-3	1.2E-07	1.1E-06	6.7E-07	1.1E-06	2.2E-06	2.6E-06
Dicyclohexylamine	101-83-7	0.0E+00	2.9E-07	4.8E-07	2.2E-07	5.3E-07	2.9E-06
N,N-Dicyclohexylmethylamine	7560-83-0	0.0E+00	5.0E-10	1.0E-09	2.3E-10	2.1E-09	5.2E-09
Dimethyl phthalate	131-11-3	0.0E+00	3.0E-09	9.9E-09	0.0E+00	3.2E-08	3.8E-08
1,3-Diphenylguanidine	102-06-7	0.0E+00	1.7E-07	7.8E-07	0.0E+00	5.4E-07	4.3E-06
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	7.2E-07	6.0E-07	6.4E-07	1.7E-06	2.6E-06
Methyl stearate	112-61-8	0.0E+00	4.5E-08	6.4E-08	2.5E-08	1.2E-07	3.5E-07
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	3.4E-08	4.1E-07	3.4E-07	2.9E-07	1.0E-06	1.6E-06
Phenol, 4-(1-phenylethyl)-	1988-89-2	4.0E-08	4.4E-07	5.2E-07	2.5E-07	1.7E-06	2.2E-06
4-tert-Octylphenol	140-66-9	0.0E+00	1.4E-07	2.9E-07	3.7E-08	6.7E-07	1.3E-06

^a 35 field-specific One-Day HQ_{der-DART-field} are included in this table.



Table G-11. Field-Specific^a One-Day Dermal Route Total Hazard Quotients for Individual Field-Related DARTs (One-Day HQ_{der-DART-field}, unitless)— Combined Gender Coaches 50<70 years

Chemical	CASRN	OneDayHQ _{der-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
2-Azacyclotridecanone	947-04-6	0.0E+00	5.7E-10	2.5E-09	0.0E+00	1.8E-09	1.4E-08
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	0.0E+00	5.3E-07	2.2E-06	0.0E+00	2.0E-06	1.3E-05
Benzo[a]pyrene	50-32-8	0.0E+00	7.4E-07	7.3E-07	4.9E-07	1.9E-06	3.0E-06
Benzo[e]pyrene	192-97-2	2.1E-07	2.2E-06	1.6E-06	2.1E-06	5.3E-06	6.0E-06
Benzo[g,h,i]perylene	191-24-2	2.1E-07	1.7E-06	1.1E-06	1.5E-06	3.7E-06	4.4E-06
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	0.0E+00	2.2E-08	1.3E-07	0.0E+00	0.0E+00	7.8E-07
Bis(2-Ethylhexyl)adipate	103-23-1	7.8E-09	1.0E-07	1.7E-07	5.4E-08	2.4E-07	1.0E-06
Chrysene	218-01-9	6.9E-07	6.3E-06	4.1E-06	6.3E-06	1.3E-05	1.4E-05
Coronene	191-07-1	0.0E+00	5.1E-07	3.0E-06	0.0E+00	0.0E+00	1.8E-05
Cyclopenta[cd]pyrene	27208-37-3	1.2E-07	1.1E-06	6.7E-07	1.1E-06	2.2E-06	2.6E-06
Dicyclohexylamine	101-83-7	0.0E+00	2.9E-07	4.8E-07	2.2E-07	5.3E-07	2.9E-06
N,N-Dicyclohexylmethylamine	7560-83-0	0.0E+00	5.0E-10	1.0E-09	2.3E-10	2.1E-09	5.2E-09
Dimethyl phthalate	131-11-3	0.0E+00	3.0E-09	1.0E-08	0.0E+00	3.3E-08	3.8E-08
1,3-Diphenylguanidine	102-06-7	0.0E+00	1.7E-07	7.8E-07	0.0E+00	5.4E-07	4.3E-06
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	7.3E-07	6.1E-07	6.4E-07	1.7E-06	2.7E-06
Methyl stearate	112-61-8	0.0E+00	4.5E-08	6.4E-08	2.5E-08	1.2E-07	3.5E-07
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	3.4E-08	4.1E-07	3.4E-07	2.9E-07	1.0E-06	1.6E-06
Phenol, 4-(1-phenylethyl)-	1988-89-2	4.0E-08	4.4E-07	5.2E-07	2.5E-07	1.7E-06	2.2E-06
4-tert-Octylphenol	140-66-9	0.0E+00	1.4E-07	2.9E-07	3.7E-08	6.7E-07	1.3E-06

^a 35 field-specific One-Day HQ_{der-DART-field} are included in this table.



Table G-12. Field-Specific^a One-Day Dermal Route Total Hazard Quotients for Individual Field-Related DARTs (One-Day HQ_{der-DART-field}, unitless)— Combined Gender Referees 16<30 years

Chemical	CASRN	OneDayHQ _{der-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
2-Azacyclotridecanone	947-04-6	0.0E+00	6.1E-10	2.7E-09	0.0E+00	1.9E-09	1.5E-08
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	0.0E+00	5.7E-07	2.4E-06	0.0E+00	2.1E-06	1.4E-05
Benzo[a]pyrene	50-32-8	0.0E+00	7.8E-07	7.7E-07	5.1E-07	2.1E-06	3.2E-06
Benzo[e]pyrene	192-97-2	2.2E-07	2.3E-06	1.7E-06	2.2E-06	5.5E-06	6.3E-06
Benzo[g,h,i]perylene	191-24-2	2.2E-07	1.7E-06	1.1E-06	1.6E-06	3.8E-06	4.6E-06
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	0.0E+00	2.3E-08	1.4E-07	0.0E+00	0.0E+00	8.2E-07
Bis(2-Ethylhexyl)adipate	103-23-1	8.2E-09	1.1E-07	1.9E-07	5.7E-08	2.5E-07	1.1E-06
Chrysene	218-01-9	7.3E-07	6.7E-06	4.3E-06	6.7E-06	1.3E-05	1.5E-05
Coronene	191-07-1	0.0E+00	5.4E-07	3.2E-06	0.0E+00	0.0E+00	1.9E-05
Cyclopenta[cd]pyrene	27208-37-3	1.2E-07	1.2E-06	7.1E-07	1.2E-06	2.3E-06	2.7E-06
Dicyclohexylamine	101-83-7	0.0E+00	3.0E-07	5.0E-07	2.3E-07	5.6E-07	3.0E-06
N,N-Dicyclohexylmethylamine	7560-83-0	0.0E+00	5.3E-10	1.1E-09	2.5E-10	2.2E-09	5.5E-09
Dimethyl phthalate	131-11-3	0.0E+00	3.1E-09	1.0E-08	0.0E+00	3.4E-08	4.0E-08
1,3-Diphenylguanidine	102-06-7	0.0E+00	1.8E-07	8.2E-07	0.0E+00	5.7E-07	4.5E-06
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	7.6E-07	6.4E-07	6.8E-07	1.8E-06	2.8E-06
Methyl stearate	112-61-8	0.0E+00	4.7E-08	6.7E-08	2.6E-08	1.2E-07	3.7E-07
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	3.6E-08	4.3E-07	3.5E-07	3.1E-07	1.1E-06	1.6E-06
Phenol, 4-(1-phenylethyl)-	1988-89-2	4.2E-08	4.7E-07	5.5E-07	2.6E-07	1.8E-06	2.3E-06
4-tert-Octylphenol	140-66-9	0.0E+00	1.4E-07	3.0E-07	3.9E-08	7.1E-07	1.3E-06

^a 35 field-specific One-Day HQ_{der-DART-field} are included in this table.



Table G-13. Field-Specific^a One-Day Dermal Route Total Hazard Quotients for Individual Field-Related DARTs (One-Day HQ_{der-DART-field}, unitless)— Combined Gender Referees 30<40 years

Chemical	CASRN	OneDayHQ _{der-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
2-Azacyclotridecanone	947-04-6	0.0E+00	5.7E-10	2.5E-09	0.0E+00	1.8E-09	1.4E-08
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	0.0E+00	5.3E-07	2.2E-06	0.0E+00	2.0E-06	1.3E-05
Benzo[a]pyrene	50-32-8	0.0E+00	7.3E-07	7.2E-07	4.8E-07	1.9E-06	3.0E-06
Benzo[e]pyrene	192-97-2	2.1E-07	2.2E-06	1.6E-06	2.0E-06	5.2E-06	5.9E-06
Benzo[g,h,i]perylene	191-24-2	2.0E-07	1.6E-06	1.1E-06	1.5E-06	3.6E-06	4.3E-06
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	0.0E+00	2.2E-08	1.3E-07	0.0E+00	0.0E+00	7.7E-07
Bis(2-Ethylhexyl)adipate	103-23-1	7.7E-09	1.0E-07	1.7E-07	5.3E-08	2.4E-07	9.9E-07
Chrysene	218-01-9	6.8E-07	6.3E-06	4.1E-06	6.3E-06	1.3E-05	1.4E-05
Coronene	191-07-1	0.0E+00	4.9E-07	2.9E-06	0.0E+00	0.0E+00	1.7E-05
Cyclopenta[cd]pyrene	27208-37-3	1.1E-07	1.1E-06	6.7E-07	1.1E-06	2.2E-06	2.6E-06
Dicyclohexylamine	101-83-7	0.0E+00	2.8E-07	4.6E-07	2.2E-07	5.2E-07	2.8E-06
N,N-Dicyclohexylmethylamine	7560-83-0	0.0E+00	5.0E-10	1.0E-09	2.3E-10	2.0E-09	5.2E-09
Dimethyl phthalate	131-11-3	0.0E+00	2.9E-09	9.8E-09	0.0E+00	3.2E-08	3.8E-08
1,3-Diphenylguanidine	102-06-7	0.0E+00	1.7E-07	7.6E-07	0.0E+00	5.4E-07	4.2E-06
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	7.1E-07	5.9E-07	6.3E-07	1.7E-06	2.6E-06
Methyl stearate	112-61-8	0.0E+00	4.4E-08	6.2E-08	2.5E-08	1.2E-07	3.4E-07
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	3.4E-08	4.0E-07	3.2E-07	2.9E-07	1.0E-06	1.5E-06
Phenol, 4-(1-phenylethyl)-	1988-89-2	4.0E-08	4.4E-07	5.2E-07	2.5E-07	1.7E-06	2.2E-06
4-tert-Octylphenol	140-66-9	0.0E+00	1.4E-07	2.9E-07	3.7E-08	6.6E-07	1.3E-06

^a 35 field-specific One-Day HQ_{der-DART-field} are included in this table.



Table G-14. Field-Specific^a One-Day Dermal Route Total Hazard Quotients for Individual Field-Related DARTs (One-Day HQ_{der-DART-field}, unitless)— Combined Gender Referees 40<50 years

Chemical	CASRN	OneDayHQ _{der-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
2-Azacyclotridecanone	947-04-6	0.0E+00	5.7E-10	2.5E-09	0.0E+00	1.8E-09	1.4E-08
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	0.0E+00	5.3E-07	2.2E-06	0.0E+00	2.0E-06	1.3E-05
Benzo[a]pyrene	50-32-8	0.0E+00	7.4E-07	7.2E-07	4.8E-07	1.9E-06	3.0E-06
Benzo[e]pyrene	192-97-2	2.1E-07	2.2E-06	1.6E-06	2.1E-06	5.2E-06	5.9E-06
Benzo[g,h,i]perylene	191-24-2	2.0E-07	1.7E-06	1.1E-06	1.5E-06	3.7E-06	4.4E-06
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	0.0E+00	2.2E-08	1.3E-07	0.0E+00	0.0E+00	7.8E-07
Bis(2-Ethylhexyl)adipate	103-23-1	7.8E-09	1.0E-07	1.7E-07	5.4E-08	2.4E-07	1.0E-06
Chrysene	218-01-9	6.9E-07	6.3E-06	4.1E-06	6.3E-06	1.3E-05	1.4E-05
Coronene	191-07-1	0.0E+00	5.1E-07	3.0E-06	0.0E+00	0.0E+00	1.8E-05
Cyclopenta[cd]pyrene	27208-37-3	1.2E-07	1.1E-06	6.7E-07	1.1E-06	2.2E-06	2.6E-06
Dicyclohexylamine	101-83-7	0.0E+00	2.9E-07	4.8E-07	2.2E-07	5.3E-07	2.9E-06
N,N-Dicyclohexylmethylamine	7560-83-0	0.0E+00	5.0E-10	1.0E-09	2.3E-10	2.1E-09	5.2E-09
Dimethyl phthalate	131-11-3	0.0E+00	3.0E-09	9.9E-09	0.0E+00	3.2E-08	3.8E-08
1,3-Diphenylguanidine	102-06-7	0.0E+00	1.7E-07	7.8E-07	0.0E+00	5.4E-07	4.3E-06
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	7.2E-07	6.0E-07	6.4E-07	1.7E-06	2.6E-06
Methyl stearate	112-61-8	0.0E+00	4.5E-08	6.4E-08	2.5E-08	1.2E-07	3.5E-07
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	3.4E-08	4.1E-07	3.4E-07	2.9E-07	1.0E-06	1.6E-06
Phenol, 4-(1-phenylethyl)-	1988-89-2	4.0E-08	4.4E-07	5.2E-07	2.5E-07	1.7E-06	2.2E-06
4-tert-Octylphenol	140-66-9	0.0E+00	1.4E-07	2.9E-07	3.7E-08	6.7E-07	1.3E-06

^a 35 field-specific One-Day HQ_{der-DART-field} are included in this table.



Table G-15. Field-Specific^a One-Day Dermal Route Total Hazard Quotients for Individual Field-Related DARTs (One-Day HQ_{der-DART-field}, unitless)— Combined Gender Referees 50<70 years

Chemical	CASRN	OneDayHQ _{der-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
2-Azacyclotridecanone	947-04-6	0.0E+00	5.7E-10	2.5E-09	0.0E+00	1.8E-09	1.4E-08
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	0.0E+00	5.3E-07	2.2E-06	0.0E+00	2.0E-06	1.3E-05
Benzo[a]pyrene	50-32-8	0.0E+00	7.4E-07	7.3E-07	4.9E-07	1.9E-06	3.0E-06
Benzo[e]pyrene	192-97-2	2.1E-07	2.2E-06	1.6E-06	2.1E-06	5.3E-06	6.0E-06
Benzo[g,h,i]perylene	191-24-2	2.1E-07	1.7E-06	1.1E-06	1.5E-06	3.7E-06	4.4E-06
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	0.0E+00	2.2E-08	1.3E-07	0.0E+00	0.0E+00	7.8E-07
Bis(2-Ethylhexyl)adipate	103-23-1	7.8E-09	1.0E-07	1.7E-07	5.4E-08	2.4E-07	1.0E-06
Chrysene	218-01-9	6.9E-07	6.3E-06	4.1E-06	6.3E-06	1.3E-05	1.4E-05
Coronene	191-07-1	0.0E+00	5.1E-07	3.0E-06	0.0E+00	0.0E+00	1.8E-05
Cyclopenta[cd]pyrene	27208-37-3	1.2E-07	1.1E-06	6.7E-07	1.1E-06	2.2E-06	2.6E-06
Dicyclohexylamine	101-83-7	0.0E+00	2.9E-07	4.8E-07	2.2E-07	5.3E-07	2.9E-06
N,N-Dicyclohexylmethylamine	7560-83-0	0.0E+00	5.0E-10	1.0E-09	2.3E-10	2.1E-09	5.2E-09
Dimethyl phthalate	131-11-3	0.0E+00	3.0E-09	1.0E-08	0.0E+00	3.3E-08	3.8E-08
1,3-Diphenylguanidine	102-06-7	0.0E+00	1.7E-07	7.8E-07	0.0E+00	5.4E-07	4.3E-06
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	7.3E-07	6.1E-07	6.4E-07	1.7E-06	2.7E-06
Methyl stearate	112-61-8	0.0E+00	4.5E-08	6.4E-08	2.5E-08	1.2E-07	3.5E-07
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	3.4E-08	4.1E-07	3.4E-07	2.9E-07	1.0E-06	1.6E-06
Phenol, 4-(1-phenylethyl)-	1988-89-2	4.0E-08	4.4E-07	5.2E-07	2.5E-07	1.7E-06	2.2E-06
4-tert-Octylphenol	140-66-9	0.0E+00	1.4E-07	2.9E-07	3.7E-08	6.7E-07	1.3E-06

^a 35 field-specific One-Day HQ_{der-DART-field} are included in this table.



Table G-16. Field-Specific^a One-Day Dermal Route Total Hazard Quotients for Individual Field-Related DARTs (One-Day HQ_{der-DART-field}, unitless)— Combined Gender Spectators Third Trimester Fetus

Chemical	CASRN	OneDayHQ _{der-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
2-Azacyclotridecanone	947-04-6	0.0E+00	4.5E-10	2.0E-09	0.0E+00	1.4E-09	1.1E-08
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	0.0E+00	4.1E-07	1.7E-06	0.0E+00	1.6E-06	1.0E-05
Benzo[a]pyrene	50-32-8	0.0E+00	5.9E-07	5.8E-07	3.9E-07	1.5E-06	2.4E-06
Benzo[e]pyrene	192-97-2	1.7E-07	1.7E-06	1.3E-06	1.6E-06	4.2E-06	4.7E-06
Benzo[g,h,i]perylene	191-24-2	1.6E-07	1.3E-06	8.6E-07	1.2E-06	3.0E-06	3.5E-06
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	0.0E+00	1.8E-08	1.0E-07	0.0E+00	0.0E+00	6.2E-07
Bis(2-Ethylhexyl)adipate	103-23-1	6.2E-09	8.4E-08	1.4E-07	4.3E-08	1.9E-07	8.0E-07
Chrysene	218-01-9	5.5E-07	5.0E-06	3.2E-06	5.0E-06	1.0E-05	1.1E-05
Coronene	191-07-1	0.0E+00	4.0E-07	2.4E-06	0.0E+00	0.0E+00	1.4E-05
Cyclopenta[cd]pyrene	27208-37-3	9.2E-08	9.1E-07	5.4E-07	8.7E-07	1.8E-06	2.1E-06
Dicyclohexylamine	101-83-7	0.0E+00	2.3E-07	3.8E-07	1.7E-07	4.3E-07	2.3E-06
N,N-Dicyclohexylmethylamine	7560-83-0	0.0E+00	4.0E-10	8.1E-10	1.9E-10	1.7E-09	4.2E-09
Dimethyl phthalate	131-11-3	0.0E+00	2.4E-09	8.0E-09	0.0E+00	2.6E-08	3.1E-08
1,3-Diphenylguanidine	102-06-7	0.0E+00	1.4E-07	6.2E-07	0.0E+00	4.2E-07	3.4E-06
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	5.8E-07	4.8E-07	5.1E-07	1.3E-06	2.1E-06
Methyl stearate	112-61-8	0.0E+00	3.6E-08	5.1E-08	2.0E-08	9.5E-08	2.8E-07
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	2.7E-08	3.2E-07	2.6E-07	2.3E-07	8.1E-07	1.2E-06
Phenol, 4-(1-phenylethyl)-	1988-89-2	3.2E-08	3.5E-07	4.1E-07	2.0E-07	1.3E-06	1.7E-06
4-tert-Octylphenol	140-66-9	0.0E+00	1.1E-07	2.3E-07	3.0E-08	5.3E-07	1.0E-06

^a 35 field-specific One-Day HQ_{der-DART-field} are included in this table.



Table G-17. Field-Specific^a One-Day Dermal Route Total Hazard Quotients for Individual Field-Related DARTs (One-Day HQ_{der-DART-field}, unitless)— Combined Gender Spectators 0<2 years

Chemical	CASRN	OneDayHQ _{der-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
2-Azacyclotridecanone	947-04-6	0.0E+00	2.5E-09	1.1E-08	0.0E+00	7.8E-09	6.1E-08
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	0.0E+00	2.3E-06	9.4E-06	0.0E+00	8.6E-06	5.5E-05
Benzo[a]pyrene	50-32-8	0.0E+00	3.2E-06	3.1E-06	2.1E-06	8.2E-06	1.3E-05
Benzo[e]pyrene	192-97-2	9.0E-07	9.4E-06	6.9E-06	8.8E-06	2.3E-05	2.5E-05
Benzo[g,h,i]perylene	191-24-2	8.7E-07	7.1E-06	4.7E-06	6.5E-06	1.6E-05	1.9E-05
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	0.0E+00	9.4E-08	5.6E-07	0.0E+00	0.0E+00	3.3E-06
Bis(2-Ethylhexyl)adipate	103-23-1	3.3E-08	4.5E-07	7.3E-07	2.3E-07	1.1E-06	4.3E-06
Chrysene	218-01-9	3.0E-06	2.7E-05	1.7E-05	2.7E-05	5.4E-05	6.1E-05
Coronene	191-07-1	0.0E+00	2.1E-06	1.3E-05	0.0E+00	0.0E+00	7.5E-05
Cyclopenta[cd]pyrene	27208-37-3	4.9E-07	4.8E-06	2.9E-06	4.7E-06	9.2E-06	1.1E-05
Dicyclohexylamine	101-83-7	0.0E+00	1.2E-06	2.0E-06	9.4E-07	2.3E-06	1.2E-05
N,N-Dicyclohexylmethylamine	7560-83-0	0.0E+00	2.1E-09	4.3E-09	9.9E-10	8.8E-09	2.2E-08
Dimethyl phthalate	131-11-3	0.0E+00	1.3E-08	4.2E-08	0.0E+00	1.4E-07	1.6E-07
1,3-Diphenylguanidine	102-06-7	0.0E+00	7.3E-07	3.3E-06	0.0E+00	2.3E-06	1.8E-05
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	3.1E-06	2.6E-06	2.7E-06	7.3E-06	1.1E-05
Methyl stearate	112-61-8	0.0E+00	1.9E-07	2.7E-07	1.1E-07	5.1E-07	1.5E-06
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	1.5E-07	1.7E-06	1.4E-06	1.2E-06	4.4E-06	6.6E-06
Phenol, 4-(1-phenylethyl)-	1988-89-2	1.7E-07	1.9E-06	2.2E-06	1.1E-06	7.1E-06	9.3E-06
4-tert-Octylphenol	140-66-9	0.0E+00	5.9E-07	1.2E-06	1.6E-07	2.9E-06	5.4E-06

^a 35 field-specific One-Day HQ_{der-DART-field} are included in this table.



Table G-18. Field-Specific^a One-Day Dermal Route Total Hazard Quotients for Individual Field-Related DARTs (One-Day HQ_{der-DART-field}, unitless)— Combined Gender Spectators 2<6 years

Chemical	CASRN	OneDayHQ _{der-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
2-Azacyclotridecanone	947-04-6	0.0E+00	1.8E-09	8.2E-09	0.0E+00	5.7E-09	4.5E-08
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	0.0E+00	1.6E-06	6.8E-06	0.0E+00	6.3E-06	4.0E-05
Benzo[a]pyrene	50-32-8	0.0E+00	2.3E-06	2.3E-06	1.5E-06	6.1E-06	9.5E-06
Benzo[e]pyrene	192-97-2	6.6E-07	6.8E-06	5.0E-06	6.5E-06	1.6E-05	1.9E-05
Benzo[g,h,i]perylene	191-24-2	6.4E-07	5.2E-06	3.4E-06	4.8E-06	1.2E-05	1.4E-05
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	0.0E+00	7.1E-08	4.2E-07	0.0E+00	0.0E+00	2.5E-06
Bis(2-Ethylhexyl)adipate	103-23-1	2.4E-08	3.3E-07	5.3E-07	1.7E-07	7.6E-07	3.1E-06
Chrysene	218-01-9	2.2E-06	2.0E-05	1.3E-05	2.0E-05	4.0E-05	4.5E-05
Coronene	191-07-1	0.0E+00	1.6E-06	9.3E-06	0.0E+00	0.0E+00	5.5E-05
Cyclopenta[cd]pyrene	27208-37-3	3.6E-07	3.6E-06	2.1E-06	3.4E-06	6.8E-06	8.1E-06
Dicyclohexylamine	101-83-7	0.0E+00	9.0E-07	1.5E-06	6.9E-07	1.7E-06	9.0E-06
N,N-Dicyclohexylmethylamine	7560-83-0	0.0E+00	1.6E-09	3.2E-09	7.3E-10	6.7E-09	1.6E-08
Dimethyl phthalate	131-11-3	0.0E+00	9.4E-09	3.1E-08	0.0E+00	1.0E-07	1.2E-07
1,3-Diphenylguanidine	102-06-7	0.0E+00	5.3E-07	2.4E-06	0.0E+00	1.7E-06	1.3E-05
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	2.3E-06	1.9E-06	2.0E-06	5.3E-06	8.3E-06
Methyl stearate	112-61-8	0.0E+00	1.4E-07	2.0E-07	7.8E-08	3.8E-07	1.1E-06
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	1.1E-07	1.3E-06	1.0E-06	9.2E-07	3.2E-06	4.9E-06
Phenol, 4-(1-phenylethyl)-	1988-89-2	1.3E-07	1.4E-06	1.6E-06	7.9E-07	5.2E-06	6.9E-06
4-tert-Octylphenol	140-66-9	0.0E+00	4.3E-07	9.1E-07	1.2E-07	2.1E-06	4.0E-06

^a 35 field-specific One-Day HQ_{der-DART-field} are included in this table.



Table G-19. Field-Specific^a One-Day Dermal Route Total Hazard Quotients for Individual Field-Related DARTs (One-Day HQ_{der-DART-field}, unitless)— Combined Gender Spectators 6<11 years

Chemical	CASRN	OneDayHQ _{der-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
2-Azacyclotridecanone	947-04-6	0.0E+00	1.7E-09	7.4E-09	0.0E+00	5.1E-09	4.1E-08
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	0.0E+00	1.5E-06	6.3E-06	0.0E+00	5.7E-06	3.7E-05
Benzo[a]pyrene	50-32-8	0.0E+00	2.1E-06	2.1E-06	1.4E-06	5.5E-06	8.6E-06
Benzo[e]pyrene	192-97-2	6.0E-07	6.2E-06	4.6E-06	5.9E-06	1.5E-05	1.7E-05
Benzo[g,h,i]perylene	191-24-2	5.8E-07	4.7E-06	3.0E-06	4.4E-06	1.0E-05	1.2E-05
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	0.0E+00	6.3E-08	3.7E-07	0.0E+00	0.0E+00	2.2E-06
Bis(2-Ethylhexyl)adipate	103-23-1	2.2E-08	3.0E-07	4.8E-07	1.5E-07	6.9E-07	2.8E-06
Chrysene	218-01-9	2.0E-06	1.8E-05	1.2E-05	1.8E-05	3.6E-05	4.1E-05
Coronene	191-07-1	0.0E+00	1.4E-06	8.5E-06	0.0E+00	0.0E+00	5.0E-05
Cyclopenta[cd]pyrene	27208-37-3	3.3E-07	3.2E-06	1.9E-06	3.1E-06	6.1E-06	7.4E-06
Dicyclohexylamine	101-83-7	0.0E+00	8.2E-07	1.4E-06	6.3E-07	1.5E-06	8.2E-06
N,N-Dicyclohexylmethylamine	7560-83-0	0.0E+00	1.4E-09	2.9E-09	6.6E-10	6.0E-09	1.5E-08
Dimethyl phthalate	131-11-3	0.0E+00	8.5E-09	2.8E-08	0.0E+00	9.3E-08	1.1E-07
1,3-Diphenylguanidine	102-06-7	0.0E+00	4.9E-07	2.2E-06	0.0E+00	1.5E-06	1.2E-05
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	2.1E-06	1.7E-06	1.8E-06	4.8E-06	7.5E-06
Methyl stearate	112-61-8	0.0E+00	1.3E-07	1.8E-07	7.1E-08	3.3E-07	9.9E-07
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	9.8E-08	1.2E-06	9.4E-07	8.3E-07	2.9E-06	4.4E-06
Phenol, 4-(1-phenylethyl)-	1988-89-2	1.1E-07	1.3E-06	1.5E-06	7.1E-07	4.7E-06	6.2E-06
4-tert-Octylphenol	140-66-9	0.0E+00	3.9E-07	8.2E-07	1.1E-07	1.9E-06	3.6E-06

^a 35 field-specific One-Day HQ_{der-DART-field} are included in this table.



Table G-20. Field-Specific^a One-Day Dermal Route Total Hazard Quotients for Individual Field-Related DARTs (One-Day HQ_{der-DART-field}, unitless)— Combined Gender Spectators 11<16 years

Chemical	CASRN	OneDayHQ _{der-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
2-Azacyclotridecanone	947-04-6	0.0E+00	1.4E-09	6.4E-09	0.0E+00	4.5E-09	3.5E-08
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	0.0E+00	1.3E-06	5.3E-06	0.0E+00	4.9E-06	3.1E-05
Benzo[a]pyrene	50-32-8	0.0E+00	1.8E-06	1.8E-06	1.2E-06	4.7E-06	7.4E-06
Benzo[e]pyrene	192-97-2	5.1E-07	5.3E-06	3.9E-06	5.1E-06	1.3E-05	1.5E-05
Benzo[g,h,i]perylene	191-24-2	5.0E-07	4.0E-06	2.6E-06	3.7E-06	8.9E-06	1.1E-05
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	0.0E+00	5.4E-08	3.2E-07	0.0E+00	0.0E+00	1.9E-06
Bis(2-Ethylhexyl)adipate	103-23-1	1.9E-08	2.5E-07	4.1E-07	1.3E-07	5.9E-07	2.4E-06
Chrysene	218-01-9	1.7E-06	1.5E-05	9.9E-06	1.5E-05	3.1E-05	3.5E-05
Coronene	191-07-1	0.0E+00	1.2E-06	7.3E-06	0.0E+00	0.0E+00	4.3E-05
Cyclopenta[cd]pyrene	27208-37-3	2.8E-07	2.8E-06	1.6E-06	2.7E-06	5.3E-06	6.3E-06
Dicyclohexylamine	101-83-7	0.0E+00	7.0E-07	1.2E-06	5.4E-07	1.3E-06	7.0E-06
N,N-Dicyclohexylmethylamine	7560-83-0	0.0E+00	1.2E-09	2.5E-09	5.7E-10	5.1E-09	1.3E-08
Dimethyl phthalate	131-11-3	0.0E+00	7.3E-09	2.4E-08	0.0E+00	7.9E-08	9.3E-08
1,3-Diphenylguanidine	102-06-7	0.0E+00	4.1E-07	1.8E-06	0.0E+00	1.3E-06	1.0E-05
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	1.8E-06	1.5E-06	1.6E-06	4.1E-06	6.5E-06
Methyl stearate	112-61-8	0.0E+00	1.1E-07	1.5E-07	6.1E-08	2.9E-07	8.4E-07
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	8.4E-08	9.9E-07	8.1E-07	7.1E-07	2.5E-06	3.8E-06
Phenol, 4-(1-phenylethyl)-	1988-89-2	9.8E-08	1.1E-06	1.3E-06	6.1E-07	4.0E-06	5.3E-06
4-tert-Octylphenol	140-66-9	0.0E+00	3.4E-07	7.0E-07	9.1E-08	1.6E-06	3.1E-06

^a 35 field-specific One-Day HQ_{der-DART-field} are included in this table.



Table G-21. Field-Specific^a One-Day Dermal Route Total Hazard Quotients for Individual Field-Related DARTs (One-Day HQ_{der-DART-field}, unitless)— Combined Gender Spectators 16<30 years

Chemical	CASRN	OneDayHQ _{der-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
2-Azacyclotridecanone	947-04-6	0.0E+00	6.1E-10	2.7E-09	0.0E+00	1.9E-09	1.5E-08
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	0.0E+00	5.7E-07	2.4E-06	0.0E+00	2.1E-06	1.4E-05
Benzo[a]pyrene	50-32-8	0.0E+00	7.9E-07	7.7E-07	5.2E-07	2.1E-06	3.2E-06
Benzo[e]pyrene	192-97-2	2.2E-07	2.3E-06	1.7E-06	2.2E-06	5.6E-06	6.4E-06
Benzo[g,h,i]perylene	191-24-2	2.2E-07	1.8E-06	1.2E-06	1.6E-06	3.9E-06	4.7E-06
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	0.0E+00	2.4E-08	1.4E-07	0.0E+00	0.0E+00	8.3E-07
Bis(2-Ethylhexyl)adipate	103-23-1	8.3E-09	1.1E-07	1.9E-07	5.8E-08	2.6E-07	1.1E-06
Chrysene	218-01-9	7.4E-07	6.7E-06	4.3E-06	6.8E-06	1.4E-05	1.5E-05
Coronene	191-07-1	0.0E+00	5.4E-07	3.2E-06	0.0E+00	0.0E+00	1.9E-05
Cyclopenta[cd]pyrene	27208-37-3	1.2E-07	1.2E-06	7.2E-07	1.2E-06	2.3E-06	2.8E-06
Dicyclohexylamine	101-83-7	0.0E+00	3.1E-07	5.1E-07	2.3E-07	5.7E-07	3.1E-06
N,N-Dicyclohexylmethylamine	7560-83-0	0.0E+00	5.4E-10	1.1E-09	2.5E-10	2.3E-09	5.6E-09
Dimethyl phthalate	131-11-3	0.0E+00	3.2E-09	1.1E-08	0.0E+00	3.5E-08	4.1E-08
1,3-Diphenylguanidine	102-06-7	0.0E+00	1.9E-07	8.3E-07	0.0E+00	5.7E-07	4.6E-06
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	7.7E-07	6.4E-07	6.9E-07	1.8E-06	2.8E-06
Methyl stearate	112-61-8	0.0E+00	4.8E-08	6.8E-08	2.7E-08	1.3E-07	3.7E-07
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	3.7E-08	4.4E-07	3.6E-07	3.1E-07	1.1E-06	1.7E-06
Phenol, 4-(1-phenylethyl)-	1988-89-2	4.3E-08	4.7E-07	5.5E-07	2.7E-07	1.8E-06	2.3E-06
4-tert-Octylphenol	140-66-9	0.0E+00	1.5E-07	3.2E-07	4.0E-08	7.2E-07	1.4E-06

^a 35 field-specific One-Day HQ_{der-DART-field} are included in this table.



Table G-22. Field-Specific^a One-Day Dermal Route Total Hazard Quotients for Individual Field-Related DARTs (One-Day HQ_{der-DART-field}, unitless)— Combined Gender Spectators 30<40 years

Chemical	CASRN	OneDayHQ _{der-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
2-Azacyclotridecanone	947-04-6	0.0E+00	5.3E-10	2.4E-09	0.0E+00	1.6E-09	1.3E-08
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	0.0E+00	4.9E-07	2.1E-06	0.0E+00	1.8E-06	1.2E-05
Benzo[a]pyrene	50-32-8	0.0E+00	6.8E-07	6.7E-07	4.5E-07	1.8E-06	2.8E-06
Benzo[e]pyrene	192-97-2	1.9E-07	2.0E-06	1.5E-06	1.9E-06	4.8E-06	5.5E-06
Benzo[g,h,i]perylene	191-24-2	1.9E-07	1.5E-06	9.9E-07	1.4E-06	3.4E-06	4.0E-06
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	0.0E+00	2.1E-08	1.2E-07	0.0E+00	0.0E+00	7.2E-07
Bis(2-Ethylhexyl)adipate	103-23-1	7.2E-09	9.6E-08	1.6E-07	5.0E-08	2.2E-07	9.2E-07
Chrysene	218-01-9	6.4E-07	5.8E-06	3.8E-06	5.8E-06	1.2E-05	1.3E-05
Coronene	191-07-1	0.0E+00	4.6E-07	2.7E-06	0.0E+00	0.0E+00	1.6E-05
Cyclopenta[cd]pyrene	27208-37-3	1.1E-07	1.0E-06	6.3E-07	1.0E-06	2.0E-06	2.4E-06
Dicyclohexylamine	101-83-7	0.0E+00	2.6E-07	4.3E-07	2.0E-07	4.9E-07	2.6E-06
N,N-Dicyclohexylmethylamine	7560-83-0	0.0E+00	4.6E-10	9.3E-10	2.1E-10	1.9E-09	4.8E-09
Dimethyl phthalate	131-11-3	0.0E+00	2.7E-09	9.1E-09	0.0E+00	3.0E-08	3.5E-08
1,3-Diphenylguanidine	102-06-7	0.0E+00	1.6E-07	7.1E-07	0.0E+00	5.1E-07	3.9E-06
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	6.7E-07	5.5E-07	5.9E-07	1.5E-06	2.4E-06
Methyl stearate	112-61-8	0.0E+00	4.1E-08	5.8E-08	2.3E-08	1.1E-07	3.2E-07
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	3.2E-08	3.7E-07	3.0E-07	2.7E-07	9.4E-07	1.4E-06
Phenol, 4-(1-phenylethyl)-	1988-89-2	3.7E-08	4.0E-07	4.7E-07	2.3E-07	1.5E-06	2.0E-06
4-tert-Octylphenol	140-66-9	0.0E+00	1.3E-07	2.7E-07	3.4E-08	6.1E-07	1.2E-06

^a 35 field-specific One-Day HQ_{der-DART-field} are included in this table.



Table G-23. Field-Specific^a One-Day Dermal Route Total Hazard Quotients for Individual Field-Related DARTs (One-Day HQ_{der-DART-field}, unitless)— Combined Gender Spectators 40<50 years

Chemical	CASRN	OneDayHQ _{der-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
2-Azacyclotridecanone	947-04-6	0.0E+00	5.3E-10	2.4E-09	0.0E+00	1.7E-09	1.3E-08
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	0.0E+00	4.9E-07	2.1E-06	0.0E+00	1.8E-06	1.2E-05
Benzo[a]pyrene	50-32-8	0.0E+00	6.9E-07	6.8E-07	4.5E-07	1.8E-06	2.8E-06
Benzo[e]pyrene	192-97-2	2.0E-07	2.0E-06	1.5E-06	1.9E-06	4.9E-06	5.5E-06
Benzo[g,h,i]perylene	191-24-2	1.9E-07	1.5E-06	1.0E-06	1.4E-06	3.4E-06	4.1E-06
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	0.0E+00	2.1E-08	1.2E-07	0.0E+00	0.0E+00	7.3E-07
Bis(2-Ethylhexyl)adipate	103-23-1	7.3E-09	9.8E-08	1.6E-07	5.0E-08	2.3E-07	9.3E-07
Chrysene	218-01-9	6.4E-07	5.9E-06	3.8E-06	5.9E-06	1.2E-05	1.3E-05
Coronene	191-07-1	0.0E+00	4.6E-07	2.7E-06	0.0E+00	0.0E+00	1.6E-05
Cyclopenta[cd]pyrene	27208-37-3	1.1E-07	1.1E-06	6.3E-07	1.0E-06	2.0E-06	2.4E-06
Dicyclohexylamine	101-83-7	0.0E+00	2.7E-07	4.5E-07	2.0E-07	5.0E-07	2.7E-06
N,N-Dicyclohexylmethylamine	7560-83-0	0.0E+00	4.7E-10	9.4E-10	2.2E-10	1.9E-09	4.9E-09
Dimethyl phthalate	131-11-3	0.0E+00	2.8E-09	9.2E-09	0.0E+00	3.0E-08	3.6E-08
1,3-Diphenylguanidine	102-06-7	0.0E+00	1.6E-07	7.3E-07	0.0E+00	5.1E-07	4.0E-06
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	6.8E-07	5.7E-07	6.0E-07	1.6E-06	2.5E-06
Methyl stearate	112-61-8	0.0E+00	4.2E-08	5.9E-08	2.3E-08	1.1E-07	3.2E-07
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	3.2E-08	3.8E-07	3.0E-07	2.7E-07	9.5E-07	1.4E-06
Phenol, 4-(1-phenylethyl)-	1988-89-2	3.7E-08	4.1E-07	4.9E-07	2.3E-07	1.6E-06	2.0E-06
4-tert-Octylphenol	140-66-9	0.0E+00	1.3E-07	2.7E-07	3.5E-08	6.2E-07	1.2E-06

^a 35 field-specific One-Day HQ_{der-DART-field} are included in this table.



Table G-24. Field-Specific^a One-Day Dermal Route Total Hazard Quotients for Individual Field-Related DARTs (One-Day HQ_{der-DART-field}, unitless)— Combined Gender Spectators 50<70 years

Chemical	CASRN	OneDayHQ _{der-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
2-Azacyclotridecanone	947-04-6	0.0E+00	5.2E-10	2.3E-09	0.0E+00	1.6E-09	1.3E-08
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	0.0E+00	4.5E-07	1.9E-06	0.0E+00	1.7E-06	1.1E-05
Benzo[a]pyrene	50-32-8	0.0E+00	6.5E-07	6.3E-07	4.3E-07	1.7E-06	2.6E-06
Benzo[e]pyrene	192-97-2	1.8E-07	1.9E-06	1.4E-06	1.8E-06	4.6E-06	5.2E-06
Benzo[g,h,i]perylene	191-24-2	1.8E-07	1.5E-06	9.4E-07	1.3E-06	3.2E-06	3.8E-06
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	0.0E+00	2.0E-08	1.2E-07	0.0E+00	0.0E+00	6.9E-07
Bis(2-Ethylhexyl)adipate	103-23-1	6.8E-09	9.2E-08	1.5E-07	4.8E-08	2.1E-07	8.8E-07
Chrysene	218-01-9	6.1E-07	5.5E-06	3.6E-06	5.6E-06	1.1E-05	1.3E-05
Coronene	191-07-1	0.0E+00	4.3E-07	2.5E-06	0.0E+00	0.0E+00	1.5E-05
Cyclopenta[cd]pyrene	27208-37-3	1.0E-07	1.0E-06	6.0E-07	9.6E-07	1.9E-06	2.3E-06
Dicyclohexylamine	101-83-7	0.0E+00	2.5E-07	4.1E-07	1.9E-07	4.6E-07	2.5E-06
N,N-Dicyclohexylmethylamine	7560-83-0	0.0E+00	4.4E-10	8.9E-10	2.0E-10	1.9E-09	4.6E-09
Dimethyl phthalate	131-11-3	0.0E+00	2.7E-09	8.8E-09	0.0E+00	2.9E-08	3.4E-08
1,3-Diphenylguanidine	102-06-7	0.0E+00	1.5E-07	6.7E-07	0.0E+00	4.8E-07	3.7E-06
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	6.4E-07	5.3E-07	5.6E-07	1.5E-06	2.3E-06
Methyl stearate	112-61-8	0.0E+00	3.9E-08	5.5E-08	2.2E-08	1.0E-07	3.0E-07
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	3.0E-08	3.6E-07	2.9E-07	2.6E-07	9.0E-07	1.4E-06
Phenol, 4-(1-phenylethyl)-	1988-89-2	3.5E-08	3.9E-07	4.6E-07	2.2E-07	1.5E-06	1.9E-06
4-tert-Octylphenol	140-66-9	0.0E+00	1.2E-07	2.6E-07	3.3E-08	6.0E-07	1.1E-06

^a 35 field-specific One-Day HQ_{der-DART-field} are included in this table.

INDIVIDUAL FIELD ASSESSMENT (Table G-93)



Table G-25. Field-Specific^a One-Day Dermal Route Total Hazard Quotients for **Field-Related DARTs** (One-Day HQ_{der-DART-sum-field}, unitless)—Combined Gender

Receptor Category and Age Group	One-Day HQ _{der-DART-sum-field}					
	Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Athletes 2<6 years	6.3E-06	4.8E-05	3.1E-05	4.3E-05	9.7E-05	1.2E-04
Athletes 6<11 years	5.7E-06	4.4E-05	2.8E-05	3.9E-05	8.8E-05	1.0E-04
Athletes 11<16 years	4.9E-06	3.8E-05	2.4E-05	3.3E-05	7.6E-05	9.0E-05
Athletes 16<30 years	4.3E-06	3.3E-05	2.1E-05	2.9E-05	6.6E-05	7.8E-05
Athletes 30<40 years	4.0E-06	3.1E-05	2.0E-05	2.7E-05	6.2E-05	7.3E-05
Athletes 40<50 years	4.0E-06	3.1E-05	2.0E-05	2.7E-05	6.2E-05	7.4E-05
Athletes 50<70 years	4.0E-06	3.1E-05	2.0E-05	2.7E-05	6.2E-05	7.4E-05
Coaches 16<30 years	2.1E-06	1.6E-05	1.0E-05	1.4E-05	3.3E-05	3.9E-05
Coaches 30<40 years	2.0E-06	1.5E-05	9.8E-06	1.3E-05	3.1E-05	3.6E-05
Coaches 40<50 years	2.0E-06	1.5E-05	9.9E-06	1.4E-05	3.1E-05	3.7E-05
Coaches 50<70 years	2.0E-06	1.5E-05	1.0E-05	1.4E-05	3.1E-05	3.7E-05
Referees 16<30 years	2.1E-06	1.6E-05	1.0E-05	1.4E-05	3.3E-05	3.9E-05
Referees 30<40 years	2.0E-06	1.5E-05	9.8E-06	1.3E-05	3.1E-05	3.6E-05
Referees 40<50 years	2.0E-06	1.5E-05	9.9E-06	1.4E-05	3.1E-05	3.7E-05
Referees 50<70 years	2.0E-06	1.5E-05	1.0E-05	1.4E-05	3.1E-05	3.7E-05
Spectators Third trimester fetus	1.6E-06	1.2E-05	7.9E-06	1.1E-05	2.5E-05	2.9E-05
Spectators 0<2 years	8.5E-06	6.6E-05	4.2E-05	5.8E-05	1.3E-04	1.6E-04
Spectators 2<6 years	6.3E-06	4.8E-05	3.1E-05	4.3E-05	9.7E-05	1.2E-04
Spectators 6<11 years	5.7E-06	4.4E-05	2.8E-05	3.9E-05	8.8E-05	1.0E-04
Spectators 11<16 years	4.9E-06	3.8E-05	2.4E-05	3.3E-05	7.6E-05	9.0E-05
Spectators 16<30 years	2.1E-06	1.6E-05	1.1E-05	1.5E-05	3.3E-05	3.9E-05
Spectators 30<40 years	1.8E-06	1.4E-05	9.2E-06	1.3E-05	2.9E-05	3.4E-05
Spectators 40<50 years	1.9E-06	1.4E-05	9.3E-06	1.3E-05	2.9E-05	3.4E-05
Spectators 50<70 years	1.8E-06	1.4E-05	8.7E-06	1.2E-05	2.7E-05	3.2E-05

^a 35 field-specific One-Day HQ_{der-DART-sum-field} are included in this table.



G.2.6. Chronic Dermal Hazard Quotient for General Chemicals (Chronic HQ_{der})

Table G-1. Chronic Dermal Hazard Quotient for Individual Chemical (Chronic HQ_{der}, unitless), Chronic Dermal Route Total Hazard Quotients (Chronic HQ_{der-sum}, unitless) for Field-Related General Chemicals—Combined Gender Athletes

Chemical	CASRN	Chronic HQ _{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	1.3E-10	1.1E-10	1.1E-10	1.4E-10	1.0E-10	8.4E-11	8.5E-11
Aniline	62-53-3	3.7E-08	2.9E-08	3.1E-08	3.9E-08	2.7E-08	2.3E-08	2.3E-08
Anthracene	120-12-7	3.0E-10	2.3E-10	2.5E-10	3.1E-10	2.2E-10	1.9E-10	1.9E-10
Anthracene, 2-methyl-	613-12-7	4.3E-10	3.4E-10	3.5E-10	4.5E-10	3.2E-10	2.7E-10	2.7E-10
Anthracene, 9,10-diphenyl-	1499-10-1	5.8E-11	4.6E-11	4.9E-11	6.1E-11	4.3E-11	3.7E-11	3.7E-11
Anthracene, 9-phenyl	602-55-1	1.4E-10	1.1E-10	1.2E-10	1.5E-10	1.1E-10	9.2E-11	9.2E-11
Benz[a]anthracene	56-55-3	1.2E-09	9.3E-10	9.8E-10	1.2E-09	8.7E-10	7.4E-10	7.5E-10
Benzene, n-butyl-	104-51-8	1.1E-11	8.3E-12	8.8E-12	1.1E-11	7.9E-12	6.7E-12	6.7E-12
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	7.9E-06	6.3E-06	6.6E-06	8.3E-06	5.9E-06	5.0E-06	5.1E-06
Benzo[b]fluoranthene	205-99-2	1.2E-08	9.9E-09	1.0E-08	1.3E-08	9.3E-09	7.9E-09	8.0E-09
7H-Benzo[c]fluorene	205-12-9	1.1E-09	8.6E-10	9.1E-10	1.1E-09	8.1E-10	6.9E-10	6.9E-10
Benzo[k]fluoranthene	207-08-9	5.4E-09	4.3E-09	4.5E-09	5.7E-09	4.1E-09	3.5E-09	3.5E-09
Benzothiazole	95-16-9	5.7E-04	4.5E-04	4.7E-04	6.0E-04	4.2E-04	3.6E-04	3.6E-04
Benzothiazole, 2-phenyl-	883-93-2	1.4E-05	1.1E-05	1.2E-05	1.5E-05	1.0E-05	8.7E-06	8.8E-06
1,3-Benzothiazole-2-thiol	149-30-4	4.7E-07	3.7E-07	3.9E-07	5.0E-07	3.5E-07	3.0E-07	3.0E-07
Benzothiazolone	934-34-9	1.6E-03	1.3E-03	1.3E-03	1.7E-03	1.2E-03	1.0E-03	1.0E-03
Benzyl butyl phthalate	85-68-7	1.6E-08	1.3E-08	1.4E-08	1.7E-08	1.2E-08	1.0E-08	1.0E-08
Cyclohexyl isothiocyanate	1122-82-3	6.0E-08	4.7E-08	5.0E-08	6.3E-08	4.5E-08	3.8E-08	3.8E-08
Dibenz[a,h]anthracene	53-70-3	4.3E-10	3.4E-10	3.6E-10	4.5E-10	3.2E-10	2.7E-10	2.8E-10
Dibenzothiophene	132-65-0	7.8E-09	6.1E-09	6.5E-09	8.2E-09	5.8E-09	4.9E-09	5.0E-09
Diethyl Phthalate	84-66-2	7.4E-10	5.8E-10	6.2E-10	7.8E-10	5.5E-10	4.7E-10	4.7E-10
Diisobutyl Phthalate	84-69-5	4.9E-08	3.9E-08	4.1E-08	5.2E-08	3.7E-08	3.1E-08	3.2E-08



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Chemical	CASRN	Chronic HQ _{der}						
		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	1.6E-06	1.3E-06	1.4E-06	1.7E-06	1.2E-06	1.0E-06	1.0E-06
Di-n-octyl phthalate	117-84-0	3.5E-07	2.7E-07	2.9E-07	3.6E-07	2.6E-07	2.2E-07	2.2E-07
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	1.5E-09	1.2E-09	1.3E-09	1.6E-09	1.1E-09	9.6E-10	9.7E-10
3,5-Di-tert-butyl-4-hydroxybenzaldehyde	1620-98-0	5.0E-08	4.0E-08	4.2E-08	5.3E-08	3.8E-08	3.2E-08	3.2E-08
Fluoranthene	206-44-0	6.7E-08	5.3E-08	5.6E-08	7.1E-08	5.0E-08	4.3E-08	4.3E-08
Fluorene	86-73-7	2.9E-10	2.3E-10	2.4E-10	3.0E-10	2.1E-10	1.8E-10	1.8E-10
Hexanoic Acid, 2-ethyl	149-57-5	6.5E-12	5.2E-12	5.5E-12	6.9E-12	4.9E-12	4.1E-12	4.2E-12
1-Hydroxypyrene	5315-79-7	2.5E-08	2.0E-08	2.1E-08	2.7E-08	1.9E-08	1.6E-08	1.6E-08
2-(Methylthio)benzothiazole	615-22-5	2.6E-06	2.1E-06	2.2E-06	2.7E-06	1.9E-06	1.7E-06	1.7E-06
Naphthalene	91-20-3	8.4E-10	6.6E-10	7.0E-10	8.8E-10	6.2E-10	5.3E-10	5.3E-10
Naphthalene, 1,2-dimethyl-	573-98-8	5.9E-11	4.7E-11	4.9E-11	6.2E-11	4.4E-11	3.7E-11	3.8E-11
Naphthalene, 1,6-dimethyl-	575-43-9	6.2E-10	4.9E-10	5.2E-10	6.6E-10	4.7E-10	3.9E-10	4.0E-10
Naphthalene, 1-methyl-	90-12-0	3.8E-10	3.0E-10	3.2E-10	4.0E-10	2.8E-10	2.4E-10	2.4E-10
Naphthalene, 2-(bromomethyl)-	939-26-4	2.4E-08	1.9E-08	2.0E-08	2.6E-08	1.8E-08	1.6E-08	1.6E-08
Naphthalene, 2,3-dimethyl-	581-40-8	7.3E-09	5.7E-09	6.1E-09	7.6E-09	5.4E-09	4.6E-09	4.6E-09
Naphthalene, 2-methyl	91-57-6	6.4E-10	5.1E-10	5.4E-10	6.8E-10	4.8E-10	4.1E-10	4.1E-10
1-Octadecene	112-88-9	2.8E-06	2.2E-06	2.3E-06	2.9E-06	2.1E-06	1.8E-06	1.8E-06
Phenanthrene	85-01-8	1.9E-09	1.5E-09	1.6E-09	2.0E-09	1.4E-09	1.2E-09	1.2E-09
Phenanthrene, 1-methyl	832-69-9	1.0E-09	8.0E-10	8.4E-10	1.1E-09	7.5E-10	6.4E-10	6.4E-10
Phenanthrene, 2-methyl-	2531-84-2	1.2E-09	9.6E-10	1.0E-09	1.3E-09	9.1E-10	7.7E-10	7.8E-10
Phenanthrene, 3-methyl	832-71-3	4.4E-10	3.5E-10	3.7E-10	4.7E-10	3.3E-10	2.8E-10	2.8E-10
N-Phenylbenzamide	93-98-1	1.2E-07	9.4E-08	9.9E-08	1.3E-07	8.9E-08	7.5E-08	7.6E-08
Phthalimide	85-41-6	5.4E-08	4.3E-08	4.5E-08	5.7E-08	4.0E-08	3.4E-08	3.5E-08
Pyrene	129-00-0	2.4E-07	1.9E-07	2.0E-07	2.6E-07	1.8E-07	1.5E-07	1.6E-07
Pyridine, 2-(4-methylphenyl)-	4467-06-5	2.7E-07	2.1E-07	2.2E-07	2.8E-07	2.0E-07	1.7E-07	1.7E-07



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Chemical	CASRN	Chronic HQ _{der}						
		2<6 years	6<11 years	11<16 years	16<30 years	30<40 years	40<50 years	50<70 years
Triethylene glycol monobutyl ether	143-22-6	1.4E-08	1.1E-08	1.2E-08	1.5E-08	1.0E-08	8.9E-09	8.9E-09
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	1.1E-08	8.8E-09	9.2E-09	1.2E-08	8.3E-09	7.0E-09	7.1E-09
Field-Related Chronic HQ _{der-sum}		2.2E-03	1.7E-03	1.8E-03	2.3E-03	1.6E-03	1.4E-03	1.4E-03

Table G-2. Chronic Dermal Hazard Quotient for Individual Chemical (Chronic HQ_{der}, unitless), Chronic Dermal Route Total Hazard Quotients (Chronic HQ_{der-sum}, unitless) for **Field-Related General Chemicals—Combined Gender Coaches**

Chemical	CASRN	Chronic HQ _{der}			
		16<30 years	30<40 years	40<50 years	50<70 years
Acenaphthylene	208-96-8	6.9E-11	6.5E-11	6.6E-11	6.6E-11
Aniline	62-53-3	1.9E-08	1.8E-08	1.8E-08	1.8E-08
Anthracene	120-12-7	1.5E-10	1.4E-10	1.5E-10	1.5E-10
Anthracene, 2-methyl-	613-12-7	2.2E-10	2.1E-10	2.1E-10	2.1E-10
Anthracene, 9,10-diphenyl-	1499-10-1	3.0E-11	2.8E-11	2.9E-11	2.9E-11
Anthracene, 9-phenyl	602-55-1	7.5E-11	7.0E-11	7.1E-11	7.1E-11
Benz[a]anthracene	56-55-3	6.1E-10	5.7E-10	5.8E-10	5.8E-10
Benzene, n-butyl-	104-51-8	5.5E-12	5.1E-12	5.2E-12	5.2E-12
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	4.1E-06	3.9E-06	3.9E-06	3.9E-06
Benzo[b]fluoranthene	205-99-2	6.5E-09	6.1E-09	6.1E-09	6.1E-09
7H-Benzo[c]fluorene	205-12-9	5.7E-10	5.3E-10	5.4E-10	5.4E-10
Benzo[k]fluoranthene	207-08-9	2.8E-09	2.7E-09	2.7E-09	2.7E-09
Benzothiazole	95-16-9	3.0E-04	2.8E-04	2.8E-04	2.8E-04
Benzothiazole, 2-phenyl-	883-93-2	7.2E-06	6.7E-06	6.8E-06	6.8E-06
1,3-Benzothiazole-2-thiol	149-30-4	2.4E-07	2.3E-07	2.3E-07	2.3E-07
Benzothiazolone	934-34-9	8.3E-04	7.8E-04	7.8E-04	7.9E-04
Benzyl butyl phthalate	85-68-7	8.4E-09	7.9E-09	8.0E-09	8.0E-09
Cyclohexyl isothiocyanate	1122-82-3	3.1E-08	2.9E-08	2.9E-08	3.0E-08



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Chemical	CASRN	Chronic HQ _{der}			
		16<30 years	30<40 years	40<50 years	50<70 years
Dibenz[a,h]anthracene	53-70-3	2.2E-10	2.1E-10	2.1E-10	2.1E-10
Dibenzothiophene	132-65-0	4.0E-09	3.8E-09	3.8E-09	3.8E-09
Diethyl Phthalate	84-66-2	3.8E-10	3.6E-10	3.6E-10	3.6E-10
Diisobutyl Phthalate	84-69-5	2.6E-08	2.4E-08	2.4E-08	2.4E-08
Diisoctylphthalate	27554-26-3	8.5E-07	7.9E-07	8.0E-07	8.0E-07
Di-n-octyl phthalate	117-84-0	1.8E-07	1.7E-07	1.7E-07	1.7E-07
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	7.9E-10	7.4E-10	7.5E-10	7.5E-10
3,5-Di-tert-butyl-4-hydroxybenzaldehyde	1620-98-0	2.6E-08	2.5E-08	2.5E-08	2.5E-08
Fluoranthene	206-44-0	3.5E-08	3.3E-08	3.3E-08	3.3E-08
Fluorene	86-73-7	1.5E-10	1.4E-10	1.4E-10	1.4E-10
Hexanoic Acid, 2-ethyl	149-57-5	3.4E-12	3.2E-12	3.2E-12	3.2E-12
1-Hydroxypyrene	5315-79-7	1.3E-08	1.2E-08	1.2E-08	1.2E-08
2-(Methylthio)benzothiazole	615-22-5	1.4E-06	1.3E-06	1.3E-06	1.3E-06
Naphthalene	91-20-3	4.3E-10	4.1E-10	4.1E-10	4.1E-10
Naphthalene, 1,2-dimethyl-	573-98-8	3.1E-11	2.9E-11	2.9E-11	2.9E-11
Naphthalene, 1,6-dimethyl-	575-43-9	3.2E-10	3.0E-10	3.1E-10	3.1E-10
Naphthalene, 1-methyl-	90-12-0	2.0E-10	1.8E-10	1.9E-10	1.9E-10
Naphthalene, 2-(bromomethyl)-	939-26-4	1.3E-08	1.2E-08	1.2E-08	1.2E-08
Naphthalene, 2,3-dimethyl-	581-40-8	3.8E-09	3.5E-09	3.6E-09	3.6E-09
Naphthalene, 2-methyl	91-57-6	3.3E-10	3.1E-10	3.2E-10	3.2E-10
1-Octadecene	112-88-9	1.5E-06	1.4E-06	1.4E-06	1.4E-06
Phenanthrene	85-01-8	1.0E-09	9.4E-10	9.5E-10	9.5E-10
Phenanthrene, 1-methyl	832-69-9	5.2E-10	4.9E-10	5.0E-10	5.0E-10
Phenanthrene, 2-methyl-	2531-84-2	6.3E-10	5.9E-10	6.0E-10	6.0E-10
Phenanthrene, 3-methyl	832-71-3	2.3E-10	2.2E-10	2.2E-10	2.2E-10
N-Phenylbenzamide	93-98-1	6.2E-08	5.8E-08	5.9E-08	5.9E-08



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Chemical	CASRN	Chronic HQ _{der}			
		16<30 years	30<40 years	40<50 years	50<70 years
Phthalimide	85-41-6	2.8E-08	2.6E-08	2.7E-08	2.7E-08
Pyrene	129-00-0	1.3E-07	1.2E-07	1.2E-07	1.2E-07
Pyridine, 2-(4-methylphenyl)-	4467-06-5	1.4E-07	1.3E-07	1.3E-07	1.3E-07
Triethylene glycol monobutyl ether	143-22-6	7.3E-09	6.8E-09	6.9E-09	6.9E-09
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	5.8E-09	5.4E-09	5.4E-09	5.5E-09
Field-Related Chronic HQ _{der-sum}		1.1E-03	1.1E-03	1.1E-03	1.1E-03

Table G-3. Chronic Dermal Hazard Quotient for Individual Chemical (Chronic HQ_{der}, unitless), Chronic Dermal Route Total Hazard Quotients (Chronic HQ_{der-sum}, unitless) for **Field-Related General Chemicals—Combined Gender Referees**

Chemical	CASRN	Chronic HQ _{der}			
		16<30 years	30<40 years	40<50 years	50<70 years
Acenaphthylene	208-96-8	2.8E-11	2.6E-11	2.6E-11	2.6E-11
Aniline	62-53-3	7.7E-09	7.2E-09	7.3E-09	7.3E-09
Anthracene	120-12-7	6.2E-11	5.8E-11	5.9E-11	5.9E-11
Anthracene, 2-methyl-	613-12-7	8.9E-11	8.3E-11	8.4E-11	8.4E-11
Anthracene, 9,10-diphenyl-	1499-10-1	1.2E-11	1.1E-11	1.2E-11	1.2E-11
Anthracene, 9-phenyl	602-55-1	3.0E-11	2.8E-11	2.9E-11	2.9E-11
Benz[a]anthracene	56-55-3	2.4E-10	2.3E-10	2.3E-10	2.3E-10
Benzene, n-butyl-	104-51-8	2.2E-12	2.1E-12	2.1E-12	2.1E-12
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	1.7E-06	1.6E-06	1.6E-06	1.6E-06
Benzo[b]fluoranthene	205-99-2	2.6E-09	2.4E-09	2.5E-09	2.5E-09
7H-Benzo[c]fluorene	205-12-9	2.3E-10	2.1E-10	2.2E-10	2.2E-10
Benzo[k]fluoranthene	207-08-9	1.1E-09	1.1E-09	1.1E-09	1.1E-09
Benzothiazole	95-16-9	1.2E-04	1.1E-04	1.1E-04	1.1E-04
Benzothiazole, 2-phenyl-	883-93-2	2.9E-06	2.7E-06	2.7E-06	2.7E-06
1,3-Benzothiazole-2-thiol	149-30-4	9.9E-08	9.2E-08	9.3E-08	9.4E-08



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Chemical	CASRN	Chronic HQ _{der}			
		16<30 years	30<40 years	40<50 years	50<70 years
Benzothiazolone	934-34-9	3.3E-04	3.1E-04	3.2E-04	3.2E-04
Benzyl butyl phthalate	85-68-7	3.4E-09	3.2E-09	3.2E-09	3.2E-09
Cyclohexyl isothiocyanate	1122-82-3	1.3E-08	1.2E-08	1.2E-08	1.2E-08
Dibenz[a,h]anthracene	53-70-3	9.0E-11	8.5E-11	8.5E-11	8.6E-11
Dibenzothiophene	132-65-0	1.6E-09	1.5E-09	1.5E-09	1.5E-09
Diethyl Phthalate	84-66-2	1.5E-10	1.4E-10	1.5E-10	1.5E-10
Diisobutyl Phthalate	84-69-5	1.0E-08	9.7E-09	9.8E-09	9.8E-09
Diisoctylphthalate	27554-26-3	3.4E-07	3.2E-07	3.2E-07	3.2E-07
Di-n-octyl phthalate	117-84-0	7.2E-08	6.8E-08	6.8E-08	6.9E-08
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	3.2E-10	3.0E-10	3.0E-10	3.0E-10
3,5-Di-tert-butyl-4-hydroxybenzaldehyde	1620-98-0	1.1E-08	9.9E-09	1.0E-08	1.0E-08
Fluoranthene	206-44-0	1.4E-08	1.3E-08	1.3E-08	1.3E-08
Fluorene	86-73-7	6.0E-11	5.6E-11	5.7E-11	5.7E-11
Hexanoic Acid, 2-ethyl	149-57-5	1.4E-12	1.3E-12	1.3E-12	1.3E-12
1-Hydroxypyrene	5315-79-7	5.3E-09	5.0E-09	5.0E-09	5.0E-09
2-(Methylthio)benzothiazole	615-22-5	5.4E-07	5.1E-07	5.2E-07	5.2E-07
Naphthalene	91-20-3	1.7E-10	1.6E-10	1.7E-10	1.7E-10
Naphthalene, 1,2-dimethyl-	573-98-8	1.2E-11	1.2E-11	1.2E-11	1.2E-11
Naphthalene, 1,6-dimethyl-	575-43-9	1.3E-10	1.2E-10	1.2E-10	1.2E-10
Naphthalene, 1-methyl-	90-12-0	7.9E-11	7.4E-11	7.5E-11	7.5E-11
Naphthalene, 2-(bromomethyl)-	939-26-4	5.1E-09	4.8E-09	4.8E-09	4.9E-09
Naphthalene, 2,3-dimethyl-	581-40-8	1.5E-09	1.4E-09	1.4E-09	1.4E-09
Naphthalene, 2-methyl	91-57-6	1.3E-10	1.3E-10	1.3E-10	1.3E-10
1-Octadecene	112-88-9	5.8E-07	5.5E-07	5.5E-07	5.5E-07
Phenanthrene	85-01-8	4.0E-10	3.8E-10	3.8E-10	3.8E-10
Phenanthrene, 1-methyl	832-69-9	2.1E-10	2.0E-10	2.0E-10	2.0E-10



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Chemical	CASRN	Chronic HQ _{der}			
		16<30 years	30<40 years	40<50 years	50<70 years
Phenanthrene, 2-methyl-	2531-84-2	2.6E-10	2.4E-10	2.4E-10	2.4E-10
Phenanthrene, 3-methyl	832-71-3	9.3E-11	8.7E-11	8.8E-11	8.8E-11
N-Phenylbenzamide	93-98-1	2.5E-08	2.3E-08	2.4E-08	2.4E-08
Phthalimide	85-41-6	1.1E-08	1.1E-08	1.1E-08	1.1E-08
Pyrene	129-00-0	5.1E-08	4.8E-08	4.8E-08	4.8E-08
Pyridine, 2-(4-methylphenyl)-	4467-06-5	5.6E-08	5.3E-08	5.3E-08	5.3E-08
Triethylene glycol monobutyl ether	143-22-6	2.9E-09	2.7E-09	2.8E-09	2.8E-09
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	2.3E-09	2.2E-09	2.2E-09	2.2E-09
Field-Related Chronic HQ _{der-sum}		4.6E-04	4.3E-04	4.3E-04	4.3E-04

Table G-4. Chronic Dermal Hazard Quotient for Individual Chemical (Chronic HQ_{der}, unitless), Chronic Dermal Route Total Hazard Quotients (Chronic HQ_{der-sum}, unitless) for **Field-Related General Chemicals—Combined Gender Spectators**

Chemical	CASRN	Chronic HQ _{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	3.9E-11	2.1E-10	1.5E-10	1.4E-10	1.2E-10	5.3E-11	4.5E-11	4.6E-11	4.3E-11
Aniline	62-53-3	1.1E-08	5.8E-08	4.3E-08	3.9E-08	3.3E-08	1.4E-08	1.2E-08	1.3E-08	1.2E-08
Anthracene	120-12-7	8.7E-11	4.7E-10	3.4E-10	3.1E-10	2.7E-10	1.2E-10	1.0E-10	1.0E-10	9.6E-11
Anthracene, 2-methyl-	613-12-7	1.3E-10	6.7E-10	4.9E-10	4.5E-10	3.8E-10	1.7E-10	1.5E-10	1.5E-10	1.4E-10
Anthracene, 9,10-diphenyl-	1499-10-1	1.7E-11	9.2E-11	6.8E-11	6.1E-11	5.3E-11	2.3E-11	2.0E-11	2.0E-11	1.9E-11
Anthracene, 9-phenyl	602-55-1	4.3E-11	2.3E-10	1.7E-10	1.5E-10	1.3E-10	5.7E-11	4.9E-11	5.0E-11	4.7E-11
Benz[a]anthracene	56-55-3	3.5E-10	1.9E-09	1.4E-09	1.2E-09	1.1E-09	4.6E-10	4.0E-10	4.0E-10	3.8E-10
Benzene, n-butyl-	104-51-8	3.1E-12	1.7E-11	1.2E-11	1.1E-11	9.5E-12	4.2E-12	3.6E-12	3.6E-12	3.4E-12
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	2.3E-06	1.3E-05	9.2E-06	8.4E-06	7.1E-06	3.1E-06	2.7E-06	2.7E-06	2.6E-06



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Chemical	CASRN	Chronic HQ _{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
Benzo[b]fluoranthene	205-99-2	3.7E-09	2.0E-08	1.4E-08	1.3E-08	1.1E-08	4.9E-09	4.3E-09	4.3E-09	4.0E-09
7H-Benzo[c]fluorene	205-12-9	3.2E-10	1.7E-09	1.3E-09	1.1E-09	9.8E-10	4.3E-10	3.7E-10	3.8E-10	3.5E-10
Benzo[k]fluoranthene	207-08-9	1.6E-09	8.6E-09	6.3E-09	5.7E-09	4.9E-09	2.2E-09	1.9E-09	1.9E-09	1.8E-09
Benzothiazole	95-16-9	1.7E-04	9.0E-04	6.6E-04	6.0E-04	5.1E-04	2.2E-04	1.9E-04	2.0E-04	1.8E-04
Benzothiazole, 2-phenyl-	883-93-2	4.1E-06	2.2E-05	1.6E-05	1.5E-05	1.2E-05	5.5E-06	4.7E-06	4.8E-06	4.5E-06
1,3-Benzothiazole-2-thiol	149-30-4	1.4E-07	7.4E-07	5.5E-07	5.0E-07	4.3E-07	1.9E-07	1.6E-07	1.6E-07	1.5E-07
Benzothiazolone	934-34-9	4.7E-04	2.5E-03	1.9E-03	1.7E-03	1.4E-03	6.3E-04	5.4E-04	5.5E-04	5.2E-04
Benzyl butyl phthalate	85-68-7	4.8E-09	2.6E-08	1.9E-08	1.7E-08	1.5E-08	6.4E-09	5.5E-09	5.6E-09	5.3E-09
Cyclohexyl isothiocyanate	1122-82-3	1.8E-08	9.5E-08	7.0E-08	6.3E-08	5.4E-08	2.4E-08	2.0E-08	2.1E-08	1.9E-08
Dibenz[a,h]anthracene	53-70-3	1.3E-10	6.8E-10	5.0E-10	4.6E-10	3.9E-10	1.7E-10	1.5E-10	1.5E-10	1.4E-10
Dibenzothiophene	132-65-0	2.3E-09	1.2E-08	9.0E-09	8.2E-09	7.0E-09	3.1E-09	2.7E-09	2.7E-09	2.5E-09
Diethyl Phthalate	84-66-2	2.2E-10	1.2E-09	8.6E-10	7.8E-10	6.7E-10	2.9E-10	2.5E-10	2.5E-10	2.4E-10
Diisobutyl Phthalate	84-69-5	1.5E-08	7.8E-08	5.7E-08	5.2E-08	4.5E-08	2.0E-08	1.7E-08	1.7E-08	1.6E-08
Diisooctylphthalate	27554-26-3	4.8E-07	2.6E-06	1.9E-06	1.7E-06	1.5E-06	6.4E-07	5.6E-07	5.6E-07	5.3E-07
Di-n-octyl phthalate	117-84-0	1.0E-07	5.5E-07	4.0E-07	3.6E-07	3.1E-07	1.4E-07	1.2E-07	1.2E-07	1.1E-07
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	4.5E-10	2.4E-09	1.8E-09	1.6E-09	1.4E-09	6.0E-10	5.2E-10	5.2E-10	4.9E-10
3,5-Di-tert-butyl-4-hydroxybenzaldehyde	1620-98-0	1.5E-08	8.0E-08	5.9E-08	5.3E-08	4.5E-08	2.0E-08	1.7E-08	1.7E-08	1.6E-08
Fluoranthene	206-44-0	2.0E-08	1.1E-07	7.8E-08	7.1E-08	6.1E-08	2.7E-08	2.3E-08	2.3E-08	2.2E-08
Fluorene	86-73-7	8.4E-11	4.5E-10	3.3E-10	3.0E-10	2.6E-10	1.1E-10	9.8E-11	9.9E-11	9.3E-11
Hexanoic Acid, 2-ethyl	149-57-5	1.9E-12	1.0E-11	7.6E-12	6.9E-12	5.9E-12	2.6E-12	2.2E-12	2.3E-12	2.1E-12
1-Hydroxypyrene	5315-79-7	7.5E-09	4.0E-08	2.9E-08	2.7E-08	2.3E-08	1.0E-08	8.6E-09	8.7E-09	8.2E-09
2-(Methylthio)benzothiazole	615-22-5	7.7E-07	4.1E-06	3.0E-06	2.7E-06	2.4E-06	1.0E-06	8.9E-07	9.0E-07	8.5E-07



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Chemical	CASRN	Chronic HQ _{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	91-20-3	2.5E-10	1.3E-09	9.7E-10	8.8E-10	7.5E-10	3.3E-10	2.9E-10	2.9E-10	2.7E-10
Naphthalene, 1,2-dimethyl-	573-98-8	1.7E-11	9.3E-11	6.9E-11	6.2E-11	5.3E-11	2.3E-11	2.0E-11	2.0E-11	1.9E-11
Naphthalene, 1,6-dimethyl-	575-43-9	1.8E-10	9.9E-10	7.2E-10	6.6E-10	5.6E-10	2.5E-10	2.1E-10	2.1E-10	2.0E-10
Naphthalene, 1-methyl-	90-12-0	1.1E-10	6.0E-10	4.4E-10	4.0E-10	3.4E-10	1.5E-10	1.3E-10	1.3E-10	1.2E-10
Naphthalene, 2-(bromomethyl)-	939-26-4	7.2E-09	3.9E-08	2.8E-08	2.6E-08	2.2E-08	9.7E-09	8.4E-09	8.4E-09	8.0E-09
Naphthalene, 2,3-dimethyl-	581-40-8	2.1E-09	1.1E-08	8.4E-09	7.7E-09	6.6E-09	2.9E-09	2.5E-09	2.5E-09	2.4E-09
Naphthalene, 2-methyl	91-57-6	1.9E-10	1.0E-09	7.5E-10	6.8E-10	5.8E-10	2.5E-10	2.2E-10	2.2E-10	2.1E-10
1-Octadecene	112-88-9	8.2E-07	4.4E-06	3.2E-06	2.9E-06	2.5E-06	1.1E-06	9.5E-07	9.6E-07	9.1E-07
Phenanthrene	85-01-8	5.7E-10	3.0E-09	2.2E-09	2.0E-09	1.7E-09	7.6E-10	6.6E-10	6.6E-10	6.3E-10
Phenanthrene, 1-methyl	832-69-9	3.0E-10	1.6E-09	1.2E-09	1.1E-09	9.1E-10	4.0E-10	3.4E-10	3.5E-10	3.3E-10
Phenanthrene, 2-methyl-	2531-84-2	3.6E-10	1.9E-09	1.4E-09	1.3E-09	1.1E-09	4.8E-10	4.2E-10	4.2E-10	4.0E-10
Phenanthrene, 3-methyl	832-71-3	1.3E-10	7.0E-10	5.2E-10	4.7E-10	4.0E-10	1.8E-10	1.5E-10	1.5E-10	1.4E-10
N-Phenylbenzamide	93-98-1	3.5E-08	1.9E-07	1.4E-07	1.3E-07	1.1E-07	4.7E-08	4.1E-08	4.1E-08	3.9E-08
Phthalimide	85-41-6	1.6E-08	8.6E-08	6.3E-08	5.7E-08	4.9E-08	2.1E-08	1.9E-08	1.9E-08	1.8E-08
Pyrene	129-00-0	7.2E-08	3.8E-07	2.8E-07	2.6E-07	2.2E-07	9.6E-08	8.3E-08	8.4E-08	7.9E-08
Pyridine, 2-(4-methylphenyl)-	4467-06-5	7.9E-08	4.3E-07	3.1E-07	2.8E-07	2.4E-07	1.1E-07	9.2E-08	9.3E-08	8.7E-08
Triethylene glycol monobutyl ether	143-22-6	4.1E-09	2.2E-08	1.6E-08	1.5E-08	1.3E-08	5.5E-09	4.8E-09	4.8E-09	4.5E-09
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	3.3E-09	1.7E-08	1.3E-08	1.2E-08	1.0E-08	4.4E-09	3.8E-09	3.8E-09	3.6E-09
Field-Related Chronic HQ _{der-sum}		6.5E-04	3.5E-03	2.5E-03	2.3E-03	2.0E-03	8.7E-04	7.5E-04	7.6E-04	7.1E-04

INDIVIDUAL FIELD ASSESSMENT (Table G-98)



Table G-5. Field-Specific^a Chronic Dermal Route Total Hazard Quotients for **Field-Related General Chemicals** (Chronic HQ_{der-sum-field}, unitless)—Combined Gender

Receptor Category and Age Group	Chronic HQ _{der-sum-field}					
	Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Athletes 2<6 years	8.4E-04	2.2E-03	6.2E-04	2.3E-03	2.9E-03	3.4E-03
Athletes 6<11 years	6.6E-04	1.7E-03	4.9E-04	1.9E-03	2.3E-03	2.7E-03
Athletes 11<16 years	7.0E-04	1.8E-03	5.2E-04	2.0E-03	2.4E-03	2.8E-03
Athletes 16<30 years	8.8E-04	2.3E-03	6.5E-04	2.5E-03	3.0E-03	3.6E-03
Athletes 30<40 years	6.2E-04	1.6E-03	4.6E-04	1.8E-03	2.2E-03	2.5E-03
Athletes 40<50 years	5.3E-04	1.4E-03	3.9E-04	1.5E-03	1.8E-03	2.1E-03
Athletes 50<70 years	5.3E-04	1.4E-03	4.0E-04	1.5E-03	1.8E-03	2.2E-03
Coaches 16<30 years	4.3E-04	1.1E-03	3.2E-04	1.2E-03	1.5E-03	1.8E-03
Coaches 30<40 years	4.1E-04	1.1E-03	3.0E-04	1.1E-03	1.4E-03	1.6E-03
Coaches 40<50 years	4.1E-04	1.1E-03	3.1E-04	1.2E-03	1.4E-03	1.7E-03
Coaches 50<70 years	4.1E-04	1.1E-03	3.1E-04	1.2E-03	1.4E-03	1.7E-03
Referees 16<30 years	1.7E-04	4.6E-04	1.3E-04	4.9E-04	6.0E-04	7.1E-04
Referees 30<40 years	1.6E-04	4.3E-04	1.2E-04	4.6E-04	5.7E-04	6.6E-04
Referees 40<50 years	1.7E-04	4.3E-04	1.2E-04	4.7E-04	5.7E-04	6.7E-04
Referees 50<70 years	1.7E-04	4.3E-04	1.2E-04	4.7E-04	5.7E-04	6.7E-04
Spectators Third trimester fetus	2.5E-04	6.5E-04	1.8E-04	6.9E-04	8.5E-04	1.0E-03
Spectators 0<2 years	1.3E-03	3.5E-03	9.8E-04	3.7E-03	4.6E-03	5.3E-03
Spectators 2<6 years	9.7E-04	2.5E-03	7.2E-04	2.7E-03	3.4E-03	3.9E-03
Spectators 6<11 years	8.8E-04	2.3E-03	6.5E-04	2.5E-03	3.1E-03	3.6E-03
Spectators 11<16 years	7.6E-04	2.0E-03	5.6E-04	2.1E-03	2.6E-03	3.1E-03
Spectators 16<30 years	3.3E-04	8.7E-04	2.5E-04	9.3E-04	1.1E-03	1.3E-03
Spectators 30<40 years	2.9E-04	7.5E-04	2.1E-04	8.0E-04	9.9E-04	1.2E-03
Spectators 40<50 years	2.9E-04	7.6E-04	2.1E-04	8.1E-04	1.0E-03	1.2E-03
Spectators 50<70 years	2.7E-04	7.1E-04	2.0E-04	7.6E-04	9.4E-04	1.1E-03

^a 35 field-specific Chronic HQ_{der-sum-field} are included in this table.

G.2.7. One-Day Ingestion Hazard Quotient for DARTs (One-Day HQ_{ing-DART})

Table G-1. Field-Specific^a One-Day Ingestion Route Total Hazard Quotients for Individual **Field-Related DARTs** (One-Day HQ_{ing-DART-field}, unitless)— Combined Gender **Athletes 2<6 years**

Chemical	CASRN	OneDayHQ _{ing-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Arsenic		5.1E-03	4.4E-02	3.1E-02	3.9E-02	7.9E-02	1.7E-01
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	0.0E+00	1.0E-05	4.2E-05	0.0E+00	3.8E-05	2.3E-04



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Chemical	CASRN	OneDayHQ _{ing-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Benzo[a]pyrene	50-32-8	2.3E-05	1.2E-04	9.7E-05	8.4E-05	3.3E-04	3.5E-04
Benzo[e]pyrene	192-97-2	1.1E-04	3.5E-04	2.1E-04	2.7E-04	7.2E-04	7.9E-04
Benzo[g,h,i]perylene	191-24-2	1.6E-05	2.4E-04	1.5E-04	2.1E-04	4.8E-04	6.6E-04
Bis(2-Ethylhexyl)adipate	103-23-1	0.0E+00	8.2E-06	7.5E-06	5.8E-06	2.5E-05	3.0E-05
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	0.0E+00	6.5E-06	1.9E-05	0.0E+00	6.0E-05	7.0E-05
Boron		0.0E+00	3.4E-06	3.8E-06	1.5E-06	9.9E-06	1.3E-05
n-Caproic acid vinyl ester	3050-69-9	0.0E+00	7.2E-08	4.2E-07	0.0E+00	0.0E+00	2.5E-06
Chrysene	218-01-9	1.6E-04	6.4E-04	3.4E-04	6.4E-04	1.1E-03	1.8E-03
Coronene	191-07-1	0.0E+00	8.8E-05	2.5E-04	0.0E+00	3.7E-04	1.4E-03
Cyclopenta[cd]pyrene	27208-37-3	2.4E-05	1.4E-04	1.3E-04	1.2E-04	3.6E-04	6.5E-04
Dicyclohexylamine	101-83-7	0.0E+00	3.0E-06	2.5E-06	2.9E-06	7.0E-06	8.4E-06
Dimethyl phthalate	131-11-3	0.0E+00	1.4E-07	4.7E-07	0.0E+00	1.2E-06	2.2E-06
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	2.4E-05	4.2E-05	0.0E+00	1.0E-04	1.6E-04
Methyl stearate	112-61-8	1.3E-06	5.3E-06	4.7E-06	4.1E-06	1.3E-05	2.5E-05
Nickel		2.8E-05	1.3E-04	1.1E-04	9.1E-05	3.7E-04	5.0E-04
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	1.2E-06	9.5E-06	5.8E-06	8.5E-06	1.9E-05	2.6E-05
Phenol, 4-(1-phenylethyl)-	1988-89-2	0.0E+00	5.4E-06	7.0E-06	3.0E-06	1.8E-05	3.5E-05
4-tert-Octylphenol	140-66-9	2.0E-06	2.6E-05	3.5E-05	1.1E-05	1.0E-04	1.6E-04

^a 35 field-specific One-Day HQ_{ing-DART-field} are included in this table.

Table G-2. Field-Specific^a One-Day Ingestion Route Total Hazard Quotients for Individual Field-Related DARTs (One-Day HQ_{der-DART-sum-field}, unitless)— Combined Gender Athletes 6<11 years

Chemical	CASRN	OneDayHQ _{ing-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Arsenic		3.3E-03	2.8E-02	2.0E-02	2.5E-02	5.0E-02	1.1E-01
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	0.0E+00	6.5E-06	2.6E-05	0.0E+00	2.4E-05	1.5E-04



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Chemical	CASRN	OneDayHQ _{ing-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Benzo[a]pyrene	50-32-8	1.5E-05	7.5E-05	6.2E-05	5.3E-05	2.1E-04	2.2E-04
Benzo[e]pyrene	192-97-2	6.7E-05	2.2E-04	1.3E-04	1.7E-04	4.6E-04	5.0E-04
Benzo[g,h,i]perylene	191-24-2	1.0E-05	1.5E-04	9.5E-05	1.4E-04	3.0E-04	4.2E-04
Bis(2-Ethylhexyl)adipate	103-23-1	0.0E+00	5.2E-06	4.8E-06	3.7E-06	1.6E-05	1.9E-05
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	0.0E+00	4.2E-06	1.2E-05	0.0E+00	3.8E-05	4.4E-05
Boron		0.0E+00	2.1E-06	2.4E-06	9.6E-07	6.3E-06	8.4E-06
n-Caproic acid vinyl ester	3050-69-9	0.0E+00	4.6E-08	2.7E-07	0.0E+00	0.0E+00	1.6E-06
Chrysene	218-01-9	1.0E-04	4.1E-04	2.2E-04	4.1E-04	7.0E-04	1.1E-03
Coronene	191-07-1	0.0E+00	5.6E-05	1.6E-04	0.0E+00	2.4E-04	8.7E-04
Cyclopenta[cd]pyrene	27208-37-3	1.5E-05	8.7E-05	8.1E-05	7.5E-05	2.3E-04	4.1E-04
Dicyclohexylamine	101-83-7	0.0E+00	1.9E-06	1.6E-06	1.9E-06	4.4E-06	5.3E-06
Dimethyl phthalate	131-11-3	0.0E+00	8.8E-08	3.0E-07	0.0E+00	7.9E-07	1.4E-06
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	1.5E-05	2.7E-05	0.0E+00	6.5E-05	1.0E-04
Methyl stearate	112-61-8	8.4E-07	3.4E-06	3.0E-06	2.6E-06	8.0E-06	1.6E-05
Nickel		1.8E-05	8.3E-05	6.8E-05	5.8E-05	2.3E-04	3.2E-04
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	7.4E-07	6.0E-06	3.7E-06	5.4E-06	1.2E-05	1.7E-05
Phenol, 4-(1-phenylethyl)-	1988-89-2	0.0E+00	3.4E-06	4.5E-06	1.9E-06	1.2E-05	2.2E-05
4-tert-Octylphenol	140-66-9	1.2E-06	1.6E-05	2.2E-05	7.2E-06	6.4E-05	1.0E-04

^a 35 field-specific One-Day HQ_{ing-DART-field} are included in this table.

Table G-3. Field-Specific^a One-Day Ingestion Route Total Hazard Quotients for Individual **Field-Related DARTs** (One-Day HQ_{der-DART-sum-field}, unitless)— Combined Gender **Athletes 11<16 years**

Chemical	CASRN	OneDayHQ _{ing-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Arsenic		2.1E-03	1.8E-02	1.2E-02	1.6E-02	3.2E-02	6.8E-02
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	0.0E+00	4.1E-06	1.7E-05	0.0E+00	1.5E-05	9.4E-05



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Chemical	CASRN	OneDayHQ _{ing-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Benzo[a]pyrene	50-32-8	9.4E-06	4.8E-05	3.9E-05	3.4E-05	1.3E-04	1.4E-04
Benzo[e]pyrene	192-97-2	4.3E-05	1.4E-04	8.5E-05	1.1E-04	2.9E-04	3.2E-04
Benzo[g,h,i]perylene	191-24-2	6.6E-06	9.7E-05	6.0E-05	8.7E-05	1.9E-04	2.7E-04
Bis(2-Ethylhexyl)adipate	103-23-1	0.0E+00	3.3E-06	3.0E-06	2.3E-06	9.9E-06	1.2E-05
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	0.0E+00	2.6E-06	7.7E-06	0.0E+00	2.4E-05	2.8E-05
Boron		0.0E+00	1.4E-06	1.5E-06	6.1E-07	4.0E-06	5.3E-06
n-Caproic acid vinyl ester	3050-69-9	0.0E+00	2.9E-08	1.7E-07	0.0E+00	0.0E+00	1.0E-06
Chrysene	218-01-9	6.5E-05	2.6E-04	1.4E-04	2.6E-04	4.4E-04	7.1E-04
Coronene	191-07-1	0.0E+00	3.5E-05	1.0E-04	0.0E+00	1.5E-04	5.5E-04
Cyclopenta[cd]pyrene	27208-37-3	9.8E-06	5.5E-05	5.1E-05	4.8E-05	1.5E-04	2.6E-04
Dicyclohexylamine	101-83-7	0.0E+00	1.2E-06	1.0E-06	1.2E-06	2.8E-06	3.4E-06
Dimethyl phthalate	131-11-3	0.0E+00	5.6E-08	1.9E-07	0.0E+00	5.0E-07	8.8E-07
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	9.7E-06	1.7E-05	0.0E+00	4.1E-05	6.6E-05
Methyl stearate	112-61-8	5.3E-07	2.1E-06	1.9E-06	1.7E-06	5.1E-06	1.0E-05
Nickel		1.1E-05	5.3E-05	4.3E-05	3.7E-05	1.5E-04	2.0E-04
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	4.7E-07	3.8E-06	2.3E-06	3.4E-06	7.8E-06	1.0E-05
Phenol, 4-(1-phenylethyl)-	1988-89-2	0.0E+00	2.2E-06	2.8E-06	1.2E-06	7.4E-06	1.4E-05
4-tert-Octylphenol	140-66-9	7.9E-07	1.0E-05	1.4E-05	4.6E-06	4.0E-05	6.5E-05

^a 35 field-specific One-Day HQ_{ing-DART-field} are included in this table.

Table G-4. Field-Specific^a One-Day Ingestion Route Total Hazard Quotients for Individual **Field-Related DARTs** (One-Day HQ_{der-DART-sum-field}, unitless)— Combined Gender **Athletes 16<30 years**

Chemical	CASRN	OneDayHQ _{ing-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Arsenic		1.6E-03	1.4E-02	9.9E-03	1.3E-02	2.5E-02	5.4E-02
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	0.0E+00	3.3E-06	1.3E-05	0.0E+00	1.2E-05	7.5E-05



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Chemical	CASRN	OneDayHQ _{ing-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Benzo[a]pyrene	50-32-8	7.5E-06	3.8E-05	3.1E-05	2.7E-05	1.1E-04	1.1E-04
Benzo[e]pyrene	192-97-2	3.4E-05	1.1E-04	6.7E-05	8.8E-05	2.3E-04	2.5E-04
Benzo[g,h,i]perylene	191-24-2	5.3E-06	7.7E-05	4.8E-05	6.9E-05	1.5E-04	2.1E-04
Bis(2-Ethylhexyl)adipate	103-23-1	0.0E+00	2.7E-06	2.4E-06	1.9E-06	7.9E-06	9.7E-06
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	0.0E+00	2.1E-06	6.1E-06	0.0E+00	1.9E-05	2.3E-05
Boron		0.0E+00	1.1E-06	1.2E-06	4.9E-07	3.2E-06	4.2E-06
n-Caproic acid vinyl ester	3050-69-9	0.0E+00	2.3E-08	1.4E-07	0.0E+00	0.0E+00	8.1E-07
Chrysene	218-01-9	5.2E-05	2.1E-04	1.1E-04	2.1E-04	3.5E-04	5.7E-04
Coronene	191-07-1	0.0E+00	2.8E-05	8.2E-05	0.0E+00	1.2E-04	4.4E-04
Cyclopenta[cd]pyrene	27208-37-3	7.8E-06	4.4E-05	4.1E-05	3.8E-05	1.2E-04	2.1E-04
Dicyclohexylamine	101-83-7	0.0E+00	9.8E-07	8.1E-07	9.4E-07	2.2E-06	2.7E-06
Dimethyl phthalate	131-11-3	0.0E+00	4.4E-08	1.5E-07	0.0E+00	4.0E-07	7.1E-07
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	7.7E-06	1.3E-05	0.0E+00	3.3E-05	5.3E-05
Methyl stearate	112-61-8	4.3E-07	1.7E-06	1.5E-06	1.3E-06	4.1E-06	8.1E-06
Nickel		9.0E-06	4.2E-05	3.4E-05	2.9E-05	1.2E-04	1.6E-04
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	3.8E-07	3.1E-06	1.9E-06	2.7E-06	6.2E-06	8.3E-06
Phenol, 4-(1-phenylethyl)-	1988-89-2	0.0E+00	1.7E-06	2.3E-06	9.7E-07	5.9E-06	1.1E-05
4-tert-Octylphenol	140-66-9	6.3E-07	8.2E-06	1.1E-05	3.6E-06	3.2E-05	5.2E-05

^a 35 field-specific One-Day HQ_{ing-DART-field} are included in this table.

Table G-5. Field-Specific^a One-Day Ingestion Route Total Hazard Quotients for Individual **Field-Related DARTs** (One-Day HQ_{der-DART-sum-field}, unitless)— Combined Gender **Athletes 30<40 years**

Chemical	CASRN	OneDayHQ _{ing-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Arsenic		1.4E-03	1.2E-02	8.5E-03	1.1E-02	2.2E-02	4.6E-02
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	0.0E+00	2.8E-06	1.1E-05	0.0E+00	1.1E-05	6.4E-05



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Chemical	CASRN	OneDayHQ _{ing-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Benzo[a]pyrene	50-32-8	6.4E-06	3.3E-05	2.7E-05	2.3E-05	9.0E-05	9.6E-05
Benzo[e]pyrene	192-97-2	2.9E-05	9.7E-05	5.8E-05	7.6E-05	2.0E-04	2.2E-04
Benzo[g,h,i]perylene	191-24-2	4.5E-06	6.6E-05	4.1E-05	5.9E-05	1.3E-04	1.8E-04
Bis(2-Ethylhexyl)adipate	103-23-1	0.0E+00	2.3E-06	2.1E-06	1.6E-06	6.8E-06	8.3E-06
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	0.0E+00	1.8E-06	5.3E-06	0.0E+00	1.7E-05	1.9E-05
Boron		0.0E+00	9.3E-07	1.0E-06	4.2E-07	2.7E-06	3.6E-06
n-Caproic acid vinyl ester	3050-69-9	0.0E+00	2.0E-08	1.2E-07	0.0E+00	0.0E+00	6.9E-07
Chrysene	218-01-9	4.5E-05	1.8E-04	9.4E-05	1.8E-04	3.0E-04	4.8E-04
Coronene	191-07-1	0.0E+00	2.4E-05	7.0E-05	0.0E+00	1.0E-04	3.8E-04
Cyclopenta[cd]pyrene	27208-37-3	6.7E-06	3.8E-05	3.5E-05	3.3E-05	1.0E-04	1.8E-04
Dicyclohexylamine	101-83-7	0.0E+00	8.4E-07	6.9E-07	8.0E-07	1.9E-06	2.3E-06
Dimethyl phthalate	131-11-3	0.0E+00	3.8E-08	1.3E-07	0.0E+00	3.4E-07	6.1E-07
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	6.6E-06	1.2E-05	0.0E+00	2.8E-05	4.5E-05
Methyl stearate	112-61-8	3.7E-07	1.5E-06	1.3E-06	1.1E-06	3.5E-06	6.9E-06
Nickel		7.7E-06	3.6E-05	3.0E-05	2.5E-05	1.0E-04	1.4E-04
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	3.2E-07	2.6E-06	1.6E-06	2.4E-06	5.3E-06	7.2E-06
Phenol, 4-(1-phenylethyl)-	1988-89-2	0.0E+00	1.5E-06	1.9E-06	8.3E-07	5.1E-06	9.7E-06
4-tert-Octylphenol	140-66-9	5.4E-07	7.1E-06	9.7E-06	3.1E-06	2.8E-05	4.4E-05

^a 35 field-specific One-Day HQ_{ing-DART-field} are included in this table.

Table G-6. Field-Specific^a One-Day Ingestion Route Total Hazard Quotients for Individual **Field-Related DARTs** (One-Day HQ_{der-DART-sum-field}, unitless)— Combined Gender **Athletes 40<50 years**

Chemical	CASRN	OneDayHQ _{ing-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Arsenic		1.4E-03	1.2E-02	8.3E-03	1.1E-02	2.1E-02	4.5E-02
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	0.0E+00	2.8E-06	1.1E-05	0.0E+00	1.0E-05	6.3E-05



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Chemical	CASRN	OneDayHQ _{ing-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Benzo[a]pyrene	50-32-8	6.3E-06	3.2E-05	2.6E-05	2.3E-05	8.8E-05	9.4E-05
Benzo[e]pyrene	192-97-2	2.9E-05	9.5E-05	5.7E-05	7.4E-05	2.0E-04	2.1E-04
Benzo[g,h,i]perylene	191-24-2	4.5E-06	6.5E-05	4.1E-05	5.8E-05	1.3E-04	1.8E-04
Bis(2-Ethylhexyl)adipate	103-23-1	0.0E+00	2.2E-06	2.0E-06	1.6E-06	6.7E-06	8.2E-06
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	0.0E+00	1.8E-06	5.2E-06	0.0E+00	1.6E-05	1.9E-05
Boron		0.0E+00	9.1E-07	1.0E-06	4.1E-07	2.7E-06	3.6E-06
n-Caproic acid vinyl ester	3050-69-9	0.0E+00	1.9E-08	1.1E-07	0.0E+00	0.0E+00	6.8E-07
Chrysene	218-01-9	4.4E-05	1.7E-04	9.2E-05	1.7E-04	3.0E-04	4.8E-04
Coronene	191-07-1	0.0E+00	2.4E-05	6.9E-05	0.0E+00	1.0E-04	3.7E-04
Cyclopenta[cd]pyrene	27208-37-3	6.6E-06	3.7E-05	3.4E-05	3.2E-05	9.8E-05	1.7E-04
Dicyclohexylamine	101-83-7	0.0E+00	8.2E-07	6.8E-07	7.9E-07	1.9E-06	2.3E-06
Dimethyl phthalate	131-11-3	0.0E+00	3.7E-08	1.3E-07	0.0E+00	3.4E-07	5.9E-07
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	6.5E-06	1.1E-05	0.0E+00	2.8E-05	4.5E-05
Methyl stearate	112-61-8	3.6E-07	1.4E-06	1.3E-06	1.1E-06	3.4E-06	6.8E-06
Nickel		7.6E-06	3.5E-05	2.9E-05	2.5E-05	9.9E-05	1.4E-04
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	3.2E-07	2.6E-06	1.6E-06	2.3E-06	5.2E-06	7.0E-06
Phenol, 4-(1-phenylethyl)-	1988-89-2	0.0E+00	1.5E-06	1.9E-06	8.2E-07	5.0E-06	9.5E-06
4-tert-Octylphenol	140-66-9	5.3E-07	6.9E-06	9.5E-06	3.1E-06	2.7E-05	4.4E-05

^a 35 field-specific One-Day HQ_{ing-DART-field} are included in this table.

Table G-7. Field-Specific^a One-Day Ingestion Route Total Hazard Quotients for Individual Field-Related DARTs (One-Day HQ_{der-DART-sum-field}, unitless)— Combined Gender Athletes 50<70 years

Chemical	CASRN	OneDayHQ _{ing-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Arsenic		1.4E-03	1.2E-02	8.4E-03	1.1E-02	2.1E-02	4.6E-02
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	0.0E+00	2.8E-06	1.1E-05	0.0E+00	1.0E-05	6.3E-05



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Chemical	CASRN	OneDayHQ _{ing-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Benzo[a]pyrene	50-32-8	6.3E-06	3.2E-05	2.6E-05	2.3E-05	8.9E-05	9.4E-05
Benzo[e]pyrene	192-97-2	2.9E-05	9.6E-05	5.7E-05	7.5E-05	2.0E-04	2.1E-04
Benzo[g,h,i]perylene	191-24-2	4.5E-06	6.5E-05	4.1E-05	5.8E-05	1.3E-04	1.8E-04
Bis(2-Ethylhexyl)adipate	103-23-1	0.0E+00	2.2E-06	2.0E-06	1.6E-06	6.7E-06	8.2E-06
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	0.0E+00	1.8E-06	5.2E-06	0.0E+00	1.6E-05	1.9E-05
Boron		0.0E+00	9.1E-07	1.0E-06	4.1E-07	2.7E-06	3.6E-06
n-Caproic acid vinyl ester	3050-69-9	0.0E+00	1.9E-08	1.2E-07	0.0E+00	0.0E+00	6.8E-07
Chrysene	218-01-9	4.4E-05	1.7E-04	9.2E-05	1.7E-04	3.0E-04	4.8E-04
Coronene	191-07-1	0.0E+00	2.4E-05	6.9E-05	0.0E+00	1.0E-04	3.7E-04
Cyclopenta[cd]pyrene	27208-37-3	6.6E-06	3.7E-05	3.5E-05	3.2E-05	9.8E-05	1.8E-04
Dicyclohexylamine	101-83-7	0.0E+00	8.3E-07	6.8E-07	7.9E-07	1.9E-06	2.3E-06
Dimethyl phthalate	131-11-3	0.0E+00	3.8E-08	1.3E-07	0.0E+00	3.4E-07	6.0E-07
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	6.5E-06	1.1E-05	0.0E+00	2.8E-05	4.5E-05
Methyl stearate	112-61-8	3.6E-07	1.4E-06	1.3E-06	1.1E-06	3.4E-06	6.8E-06
Nickel		7.6E-06	3.6E-05	2.9E-05	2.5E-05	1.0E-04	1.4E-04
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	3.2E-07	2.6E-06	1.6E-06	2.3E-06	5.3E-06	7.0E-06
Phenol, 4-(1-phenylethyl)-	1988-89-2	0.0E+00	1.5E-06	1.9E-06	8.2E-07	5.0E-06	9.5E-06
4-tert-Octylphenol	140-66-9	5.3E-07	6.9E-06	9.5E-06	3.1E-06	2.7E-05	4.4E-05

^a 35 field-specific One-Day HQ_{ing-DART-field} are included in this table.

Table G-8. Field-Specific^a One-Day Ingestion Route Total Hazard Quotients for Individual **Field-Related DARTs** (One-Day HQ_{der-DART-sum-field}, unitless)— Combined Gender **Coaches 16<30 years**

Chemical	CASRN	OneDayHQ _{ing-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Arsenic		4.8E-04	4.1E-03	2.9E-03	3.7E-03	7.4E-03	1.6E-02
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	0.0E+00	9.6E-07	3.9E-06	0.0E+00	3.6E-06	2.2E-05



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Chemical	CASRN	OneDayHQ _{ing-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Benzo[a]pyrene	50-32-8	2.2E-06	1.1E-05	9.1E-06	7.9E-06	3.1E-05	3.3E-05
Benzo[e]pyrene	192-97-2	9.9E-06	3.3E-05	2.0E-05	2.6E-05	6.8E-05	7.4E-05
Benzo[g,h,i]perylene	191-24-2	1.5E-06	2.2E-05	1.4E-05	2.0E-05	4.5E-05	6.2E-05
Bis(2-Ethylhexyl)adipate	103-23-1	0.0E+00	7.7E-07	7.0E-07	5.4E-07	2.3E-06	2.8E-06
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	0.0E+00	6.1E-07	1.8E-06	0.0E+00	5.7E-06	6.5E-06
Boron		0.0E+00	3.1E-07	3.5E-07	1.4E-07	9.2E-07	1.2E-06
n-Caproic acid vinyl ester	3050-69-9	0.0E+00	6.7E-09	4.0E-08	0.0E+00	0.0E+00	2.4E-07
Chrysene	218-01-9	1.5E-05	6.0E-05	3.2E-05	6.0E-05	1.0E-04	1.6E-04
Coronene	191-07-1	0.0E+00	8.2E-06	2.4E-05	0.0E+00	3.5E-05	1.3E-04
Cyclopenta[cd]pyrene	27208-37-3	2.3E-06	1.3E-05	1.2E-05	1.1E-05	3.4E-05	6.1E-05
Dicyclohexylamine	101-83-7	0.0E+00	2.8E-07	2.3E-07	2.7E-07	6.5E-07	7.9E-07
Dimethyl phthalate	131-11-3	0.0E+00	1.3E-08	4.4E-08	0.0E+00	1.2E-07	2.1E-07
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	2.3E-06	3.9E-06	0.0E+00	9.6E-06	1.5E-05
Methyl stearate	112-61-8	1.2E-07	5.0E-07	4.4E-07	3.9E-07	1.2E-06	2.4E-06
Nickel		2.6E-06	1.2E-05	1.0E-05	8.5E-06	3.4E-05	4.7E-05
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	1.1E-07	8.9E-07	5.4E-07	8.0E-07	1.8E-06	2.4E-06
Phenol, 4-(1-phenylethyl)-	1988-89-2	0.0E+00	5.0E-07	6.6E-07	2.8E-07	1.7E-06	3.3E-06
4-tert-Octylphenol	140-66-9	1.8E-07	2.4E-06	3.3E-06	1.1E-06	9.4E-06	1.5E-05

^a 35 field-specific One-Day HQ_{ing-DART-field} are included in this table.

Table G-9. Field-Specific^a One-Day Ingestion Route Total Hazard Quotients for Individual **Field-Related DARTs** (One-Day HQ_{der-DART-sum-field}, unitless)— Combined Gender **Coaches 30<40 years**

Chemical	CASRN	OneDayHQ _{ing-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Arsenic		4.5E-04	3.8E-03	2.7E-03	3.5E-03	6.9E-03	1.5E-02
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	0.0E+00	9.0E-07	3.6E-06	0.0E+00	3.4E-06	2.0E-05



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Chemical	CASRN	OneDayHQ _{ing-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Benzo[a]pyrene	50-32-8	2.0E-06	1.0E-05	8.5E-06	7.4E-06	2.9E-05	3.1E-05
Benzo[e]pyrene	192-97-2	9.3E-06	3.1E-05	1.8E-05	2.4E-05	6.4E-05	7.0E-05
Benzo[g,h,i]perylene	191-24-2	1.4E-06	2.1E-05	1.3E-05	1.9E-05	4.2E-05	5.8E-05
Bis(2-Ethylhexyl)adipate	103-23-1	0.0E+00	7.3E-07	6.6E-07	5.1E-07	2.2E-06	2.7E-06
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	0.0E+00	5.8E-07	1.7E-06	0.0E+00	5.3E-06	6.1E-06
Boron		0.0E+00	3.0E-07	3.3E-07	1.3E-07	8.7E-07	1.2E-06
n-Caproic acid vinyl ester	3050-69-9	0.0E+00	6.3E-09	3.7E-08	0.0E+00	0.0E+00	2.2E-07
Chrysene	218-01-9	1.4E-05	5.6E-05	3.0E-05	5.6E-05	9.6E-05	1.5E-04
Coronene	191-07-1	0.0E+00	7.7E-06	2.2E-05	0.0E+00	3.3E-05	1.2E-04
Cyclopenta[cd]pyrene	27208-37-3	2.1E-06	1.2E-05	1.1E-05	1.0E-05	3.2E-05	5.7E-05
Dicyclohexylamine	101-83-7	0.0E+00	2.7E-07	2.2E-07	2.6E-07	6.2E-07	7.4E-07
Dimethyl phthalate	131-11-3	0.0E+00	1.2E-08	4.1E-08	0.0E+00	1.1E-07	1.9E-07
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	2.1E-06	3.7E-06	0.0E+00	8.9E-06	1.5E-05
Methyl stearate	112-61-8	1.2E-07	4.7E-07	4.1E-07	3.6E-07	1.1E-06	2.2E-06
Nickel		2.5E-06	1.1E-05	9.4E-06	8.0E-06	3.2E-05	4.4E-05
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	1.0E-07	8.4E-07	5.1E-07	7.5E-07	1.7E-06	2.3E-06
Phenol, 4-(1-phenylethyl)-	1988-89-2	0.0E+00	4.7E-07	6.2E-07	2.7E-07	1.6E-06	3.1E-06
4-tert-Octylphenol	140-66-9	1.7E-07	2.3E-06	3.1E-06	9.9E-07	8.8E-06	1.4E-05

^a 35 field-specific One-Day HQ_{ing-DART-field} are included in this table.

Table G-10. Field-Specific^a One-Day Ingestion Route Total Hazard Quotients for Individual **Field-Related DARTs** (One-Day HQ_{der-DART-sum-field}, unitless)— Combined Gender **Coaches 40<50 years**

Chemical	CASRN	OneDayHQ _{ing-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Arsenic		4.4E-04	3.8E-03	2.7E-03	3.4E-03	6.8E-03	1.4E-02
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	0.0E+00	8.9E-07	3.6E-06	0.0E+00	3.3E-06	2.0E-05



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Chemical	CASRN	OneDayHQ _{ing-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Benzo[a]pyrene	50-32-8	2.0E-06	1.0E-05	8.3E-06	7.2E-06	2.8E-05	3.0E-05
Benzo[e]pyrene	192-97-2	9.1E-06	3.0E-05	1.8E-05	2.4E-05	6.2E-05	6.8E-05
Benzo[g,h,i]perylene	191-24-2	1.4E-06	2.1E-05	1.3E-05	1.9E-05	4.1E-05	5.7E-05
Bis(2-Ethylhexyl)adipate	103-23-1	0.0E+00	7.1E-07	6.5E-07	5.0E-07	2.1E-06	2.6E-06
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	0.0E+00	5.6E-07	1.6E-06	0.0E+00	5.2E-06	6.0E-06
Boron		0.0E+00	2.9E-07	3.2E-07	1.3E-07	8.5E-07	1.1E-06
n-Caproic acid vinyl ester	3050-69-9	0.0E+00	6.2E-09	3.7E-08	0.0E+00	0.0E+00	2.2E-07
Chrysene	218-01-9	1.4E-05	5.5E-05	2.9E-05	5.5E-05	9.4E-05	1.5E-04
Coronene	191-07-1	0.0E+00	7.6E-06	2.2E-05	0.0E+00	3.2E-05	1.2E-04
Cyclopenta[cd]pyrene	27208-37-3	2.1E-06	1.2E-05	1.1E-05	1.0E-05	3.1E-05	5.6E-05
Dicyclohexylamine	101-83-7	0.0E+00	2.6E-07	2.2E-07	2.5E-07	6.0E-07	7.2E-07
Dimethyl phthalate	131-11-3	0.0E+00	1.2E-08	4.0E-08	0.0E+00	1.1E-07	1.9E-07
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	2.1E-06	3.6E-06	0.0E+00	8.8E-06	1.4E-05
Methyl stearate	112-61-8	1.1E-07	4.6E-07	4.0E-07	3.5E-07	1.1E-06	2.2E-06
Nickel		2.4E-06	1.1E-05	9.2E-06	7.8E-06	3.2E-05	4.3E-05
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	1.0E-07	8.2E-07	5.0E-07	7.3E-07	1.7E-06	2.2E-06
Phenol, 4-(1-phenylethyl)-	1988-89-2	0.0E+00	4.6E-07	6.0E-07	2.6E-07	1.6E-06	3.0E-06
4-tert-Octylphenol	140-66-9	1.7E-07	2.2E-06	3.0E-06	9.7E-07	8.6E-06	1.4E-05

^a 35 field-specific One-Day HQ_{ing-DART-field} are included in this table.

Table G-11. Field-Specific^a One-Day Ingestion Route Total Hazard Quotients for Individual **Field-Related DARTs** (One-Day HQ_{der-DART-sum-field}, unitless)— Combined Gender **Coaches 50<70 years**

Chemical	CASRN	OneDayHQ _{ing-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Arsenic		4.4E-04	3.8E-03	2.7E-03	3.4E-03	6.8E-03	1.4E-02
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	0.0E+00	8.9E-07	3.6E-06	0.0E+00	3.3E-06	2.0E-05



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Chemical	CASRN	OneDayHQ _{ing-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Benzo[a]pyrene	50-32-8	2.0E-06	1.0E-05	8.4E-06	7.3E-06	2.8E-05	3.0E-05
Benzo[e]pyrene	192-97-2	9.2E-06	3.0E-05	1.8E-05	2.4E-05	6.2E-05	6.8E-05
Benzo[g,h,i]perylene	191-24-2	1.4E-06	2.1E-05	1.3E-05	1.9E-05	4.1E-05	5.7E-05
Bis(2-Ethylhexyl)adipate	103-23-1	0.0E+00	7.1E-07	6.5E-07	5.0E-07	2.1E-06	2.6E-06
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	0.0E+00	5.6E-07	1.6E-06	0.0E+00	5.2E-06	6.0E-06
Boron		0.0E+00	2.9E-07	3.2E-07	1.3E-07	8.5E-07	1.1E-06
n-Caproic acid vinyl ester	3050-69-9	0.0E+00	6.2E-09	3.7E-08	0.0E+00	0.0E+00	2.2E-07
Chrysene	218-01-9	1.4E-05	5.5E-05	2.9E-05	5.5E-05	9.5E-05	1.5E-04
Coronene	191-07-1	0.0E+00	7.6E-06	2.2E-05	0.0E+00	3.2E-05	1.2E-04
Cyclopenta[cd]pyrene	27208-37-3	2.1E-06	1.2E-05	1.1E-05	1.0E-05	3.1E-05	5.6E-05
Dicyclohexylamine	101-83-7	0.0E+00	2.6E-07	2.2E-07	2.5E-07	6.0E-07	7.3E-07
Dimethyl phthalate	131-11-3	0.0E+00	1.2E-08	4.0E-08	0.0E+00	1.1E-07	1.9E-07
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	2.1E-06	3.6E-06	0.0E+00	8.8E-06	1.4E-05
Methyl stearate	112-61-8	1.1E-07	4.6E-07	4.0E-07	3.6E-07	1.1E-06	2.2E-06
Nickel		2.4E-06	1.1E-05	9.2E-06	7.8E-06	3.2E-05	4.3E-05
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	1.0E-07	8.2E-07	5.0E-07	7.4E-07	1.7E-06	2.2E-06
Phenol, 4-(1-phenylethyl)-	1988-89-2	0.0E+00	4.6E-07	6.1E-07	2.6E-07	1.6E-06	3.0E-06
4-tert-Octylphenol	140-66-9	1.7E-07	2.2E-06	3.0E-06	9.7E-07	8.7E-06	1.4E-05

^a 35 field-specific One-Day HQ_{ing-DART-field} are included in this table.

Table G-12. Field-Specific^a One-Day Ingestion Route Total Hazard Quotients for Individual **Field-Related DARTs** (One-Day HQ_{der-DART-sum-field}, unitless)— Combined Gender **Referees 16<30 years**

Chemical	CASRN	OneDayHQ _{ing-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Arsenic		4.8E-04	4.1E-03	2.9E-03	3.7E-03	7.4E-03	1.6E-02
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	0.0E+00	9.6E-07	3.9E-06	0.0E+00	3.6E-06	2.2E-05



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Chemical	CASRN	OneDayHQ _{ing-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Benzo[a]pyrene	50-32-8	2.2E-06	1.1E-05	9.1E-06	7.9E-06	3.1E-05	3.3E-05
Benzo[e]pyrene	192-97-2	9.9E-06	3.3E-05	2.0E-05	2.6E-05	6.8E-05	7.4E-05
Benzo[g,h,i]perylene	191-24-2	1.5E-06	2.2E-05	1.4E-05	2.0E-05	4.5E-05	6.2E-05
Bis(2-Ethylhexyl)adipate	103-23-1	0.0E+00	7.7E-07	7.0E-07	5.4E-07	2.3E-06	2.8E-06
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	0.0E+00	6.1E-07	1.8E-06	0.0E+00	5.7E-06	6.5E-06
Boron		0.0E+00	3.1E-07	3.5E-07	1.4E-07	9.2E-07	1.2E-06
n-Caproic acid vinyl ester	3050-69-9	0.0E+00	6.7E-09	4.0E-08	0.0E+00	0.0E+00	2.4E-07
Chrysene	218-01-9	1.5E-05	6.0E-05	3.2E-05	6.0E-05	1.0E-04	1.6E-04
Coronene	191-07-1	0.0E+00	8.2E-06	2.4E-05	0.0E+00	3.5E-05	1.3E-04
Cyclopenta[cd]pyrene	27208-37-3	2.3E-06	1.3E-05	1.2E-05	1.1E-05	3.4E-05	6.1E-05
Dicyclohexylamine	101-83-7	0.0E+00	2.8E-07	2.3E-07	2.7E-07	6.5E-07	7.9E-07
Dimethyl phthalate	131-11-3	0.0E+00	1.3E-08	4.4E-08	0.0E+00	1.2E-07	2.1E-07
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	2.3E-06	3.9E-06	0.0E+00	9.6E-06	1.5E-05
Methyl stearate	112-61-8	1.2E-07	5.0E-07	4.4E-07	3.9E-07	1.2E-06	2.4E-06
Nickel		2.6E-06	1.2E-05	1.0E-05	8.5E-06	3.4E-05	4.7E-05
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	1.1E-07	8.9E-07	5.4E-07	8.0E-07	1.8E-06	2.4E-06
Phenol, 4-(1-phenylethyl)-	1988-89-2	0.0E+00	5.0E-07	6.6E-07	2.8E-07	1.7E-06	3.3E-06
4-tert-Octylphenol	140-66-9	1.8E-07	2.4E-06	3.3E-06	1.1E-06	9.4E-06	1.5E-05

^a 35 field-specific One-Day HQ_{ing-DART-field} are included in this table.

Table G-13. Field-Specific^a One-Day Ingestion Route Total Hazard Quotients for Individual **Field-Related DARTs** (One-Day HQ_{der-DART-sum-field}, unitless)— Combined Gender **Referees 30<40 years**

Chemical	CASRN	OneDayHQ _{ing-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Arsenic		4.5E-04	3.8E-03	2.7E-03	3.5E-03	6.9E-03	1.5E-02
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	0.0E+00	9.0E-07	3.6E-06	0.0E+00	3.4E-06	2.0E-05



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Chemical	CASRN	OneDayHQ _{ing-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Benzo[a]pyrene	50-32-8	2.0E-06	1.0E-05	8.5E-06	7.4E-06	2.9E-05	3.1E-05
Benzo[e]pyrene	192-97-2	9.3E-06	3.1E-05	1.8E-05	2.4E-05	6.4E-05	7.0E-05
Benzo[g,h,i]perylene	191-24-2	1.4E-06	2.1E-05	1.3E-05	1.9E-05	4.2E-05	5.8E-05
Bis(2-Ethylhexyl)adipate	103-23-1	0.0E+00	7.3E-07	6.6E-07	5.1E-07	2.2E-06	2.7E-06
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	0.0E+00	5.8E-07	1.7E-06	0.0E+00	5.3E-06	6.1E-06
Boron		0.0E+00	3.0E-07	3.3E-07	1.3E-07	8.7E-07	1.2E-06
n-Caproic acid vinyl ester	3050-69-9	0.0E+00	6.3E-09	3.7E-08	0.0E+00	0.0E+00	2.2E-07
Chrysene	218-01-9	1.4E-05	5.6E-05	3.0E-05	5.6E-05	9.6E-05	1.5E-04
Coronene	191-07-1	0.0E+00	7.7E-06	2.2E-05	0.0E+00	3.3E-05	1.2E-04
Cyclopenta[cd]pyrene	27208-37-3	2.1E-06	1.2E-05	1.1E-05	1.0E-05	3.2E-05	5.7E-05
Dicyclohexylamine	101-83-7	0.0E+00	2.7E-07	2.2E-07	2.6E-07	6.2E-07	7.4E-07
Dimethyl phthalate	131-11-3	0.0E+00	1.2E-08	4.1E-08	0.0E+00	1.1E-07	1.9E-07
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	2.1E-06	3.7E-06	0.0E+00	8.9E-06	1.5E-05
Methyl stearate	112-61-8	1.2E-07	4.7E-07	4.1E-07	3.6E-07	1.1E-06	2.2E-06
Nickel		2.5E-06	1.1E-05	9.4E-06	8.0E-06	3.2E-05	4.4E-05
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	1.0E-07	8.4E-07	5.1E-07	7.5E-07	1.7E-06	2.3E-06
Phenol, 4-(1-phenylethyl)-	1988-89-2	0.0E+00	4.7E-07	6.2E-07	2.7E-07	1.6E-06	3.1E-06
4-tert-Octylphenol	140-66-9	1.7E-07	2.3E-06	3.1E-06	9.9E-07	8.8E-06	1.4E-05

^a 35 field-specific One-Day HQ_{ing-DART-field} are included in this table.

Table G-14. Field-Specific^a One-Day Ingestion Route Total Hazard Quotients for Individual **Field-Related DARTs** (One-Day HQ_{der-DART-sum-field}, unitless)— Combined Gender **Referees 40<50 years**

Chemical	CASRN	OneDayHQ _{ing-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Arsenic		4.4E-04	3.8E-03	2.7E-03	3.4E-03	6.8E-03	1.4E-02
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	0.0E+00	8.9E-07	3.6E-06	0.0E+00	3.3E-06	2.0E-05



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Chemical	CASRN	OneDayHQ _{ing-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Benzo[a]pyrene	50-32-8	2.0E-06	1.0E-05	8.3E-06	7.2E-06	2.8E-05	3.0E-05
Benzo[e]pyrene	192-97-2	9.1E-06	3.0E-05	1.8E-05	2.4E-05	6.2E-05	6.8E-05
Benzo[g,h,i]perylene	191-24-2	1.4E-06	2.1E-05	1.3E-05	1.9E-05	4.1E-05	5.7E-05
Bis(2-Ethylhexyl)adipate	103-23-1	0.0E+00	7.1E-07	6.5E-07	5.0E-07	2.1E-06	2.6E-06
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	0.0E+00	5.6E-07	1.6E-06	0.0E+00	5.2E-06	6.0E-06
Boron		0.0E+00	2.9E-07	3.2E-07	1.3E-07	8.5E-07	1.1E-06
n-Caproic acid vinyl ester	3050-69-9	0.0E+00	6.2E-09	3.7E-08	0.0E+00	0.0E+00	2.2E-07
Chrysene	218-01-9	1.4E-05	5.5E-05	2.9E-05	5.5E-05	9.4E-05	1.5E-04
Coronene	191-07-1	0.0E+00	7.6E-06	2.2E-05	0.0E+00	3.2E-05	1.2E-04
Cyclopenta[cd]pyrene	27208-37-3	2.1E-06	1.2E-05	1.1E-05	1.0E-05	3.1E-05	5.6E-05
Dicyclohexylamine	101-83-7	0.0E+00	2.6E-07	2.2E-07	2.5E-07	6.0E-07	7.2E-07
Dimethyl phthalate	131-11-3	0.0E+00	1.2E-08	4.0E-08	0.0E+00	1.1E-07	1.9E-07
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	2.1E-06	3.6E-06	0.0E+00	8.8E-06	1.4E-05
Methyl stearate	112-61-8	1.1E-07	4.6E-07	4.0E-07	3.5E-07	1.1E-06	2.2E-06
Nickel		2.4E-06	1.1E-05	9.2E-06	7.8E-06	3.2E-05	4.3E-05
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	1.0E-07	8.2E-07	5.0E-07	7.3E-07	1.7E-06	2.2E-06
Phenol, 4-(1-phenylethyl)-	1988-89-2	0.0E+00	4.6E-07	6.0E-07	2.6E-07	1.6E-06	3.0E-06
4-tert-Octylphenol	140-66-9	1.7E-07	2.2E-06	3.0E-06	9.7E-07	8.6E-06	1.4E-05

^a 35 field-specific One-Day HQ_{ing-DART-field} are included in this table.

Table G-15. Field-Specific^a One-Day Ingestion Route Total Hazard Quotients for Individual **Field-Related DARTs** (One-Day HQ_{der-DART-sum-field}, unitless)— Combined Gender **Referees 50<70 years**

Chemical	CASRN	OneDayHQ _{ing-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Arsenic		4.4E-04	3.8E-03	2.7E-03	3.4E-03	6.8E-03	1.4E-02
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	0.0E+00	8.9E-07	3.6E-06	0.0E+00	3.3E-06	2.0E-05



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Chemical	CASRN	OneDayHQ _{ing-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Benzo[a]pyrene	50-32-8	2.0E-06	1.0E-05	8.4E-06	7.3E-06	2.8E-05	3.0E-05
Benzo[e]pyrene	192-97-2	9.2E-06	3.0E-05	1.8E-05	2.4E-05	6.2E-05	6.8E-05
Benzo[g,h,i]perylene	191-24-2	1.4E-06	2.1E-05	1.3E-05	1.9E-05	4.1E-05	5.7E-05
Bis(2-Ethylhexyl)adipate	103-23-1	0.0E+00	7.1E-07	6.5E-07	5.0E-07	2.1E-06	2.6E-06
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	0.0E+00	5.6E-07	1.6E-06	0.0E+00	5.2E-06	6.0E-06
Boron		0.0E+00	2.9E-07	3.2E-07	1.3E-07	8.5E-07	1.1E-06
n-Caproic acid vinyl ester	3050-69-9	0.0E+00	6.2E-09	3.7E-08	0.0E+00	0.0E+00	2.2E-07
Chrysene	218-01-9	1.4E-05	5.5E-05	2.9E-05	5.5E-05	9.5E-05	1.5E-04
Coronene	191-07-1	0.0E+00	7.6E-06	2.2E-05	0.0E+00	3.2E-05	1.2E-04
Cyclopenta[cd]pyrene	27208-37-3	2.1E-06	1.2E-05	1.1E-05	1.0E-05	3.1E-05	5.6E-05
Dicyclohexylamine	101-83-7	0.0E+00	2.6E-07	2.2E-07	2.5E-07	6.0E-07	7.3E-07
Dimethyl phthalate	131-11-3	0.0E+00	1.2E-08	4.0E-08	0.0E+00	1.1E-07	1.9E-07
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	2.1E-06	3.6E-06	0.0E+00	8.8E-06	1.4E-05
Methyl stearate	112-61-8	1.1E-07	4.6E-07	4.0E-07	3.6E-07	1.1E-06	2.2E-06
Nickel		2.4E-06	1.1E-05	9.2E-06	7.8E-06	3.2E-05	4.3E-05
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	1.0E-07	8.2E-07	5.0E-07	7.4E-07	1.7E-06	2.2E-06
Phenol, 4-(1-phenylethyl)-	1988-89-2	0.0E+00	4.6E-07	6.1E-07	2.6E-07	1.6E-06	3.0E-06
4-tert-Octylphenol	140-66-9	1.7E-07	2.2E-06	3.0E-06	9.7E-07	8.7E-06	1.4E-05

^a 35 field-specific One-Day HQ_{ing-DART-field} are included in this table.

Table G-16. Field-Specific^a One-Day Ingestion Route Total Hazard Quotients for Individual **Field-Related DARTs** (One-Day HQ_{der-DART-sum-field}, unitless)— Combined Gender **Spectators Third Trimester Fetus**

Chemical	CASRN	OneDayHQ _{ing-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Arsenic		1.9E-04	1.6E-03	1.2E-03	1.5E-03	3.0E-03	6.3E-03
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	0.0E+00	3.9E-07	1.6E-06	0.0E+00	1.4E-06	8.8E-06



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Chemical	CASRN	OneDayHQ _{ing-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Benzo[a]pyrene	50-32-8	8.7E-07	4.4E-06	3.6E-06	3.2E-06	1.2E-05	1.3E-05
Benzo[e]pyrene	192-97-2	4.0E-06	1.3E-05	7.9E-06	1.0E-05	2.7E-05	3.0E-05
Benzo[g,h,i]perylene	191-24-2	6.2E-07	9.0E-06	5.7E-06	8.1E-06	1.8E-05	2.5E-05
Bis(2-Ethylhexyl)adipate	103-23-1	0.0E+00	3.1E-07	2.8E-07	2.2E-07	9.3E-07	1.1E-06
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	0.0E+00	2.5E-07	7.2E-07	0.0E+00	2.3E-06	2.6E-06
Boron		0.0E+00	1.3E-07	1.4E-07	5.7E-08	3.7E-07	5.0E-07
n-Caproic acid vinyl ester	3050-69-9	0.0E+00	2.7E-09	1.6E-08	0.0E+00	0.0E+00	9.5E-08
Chrysene	218-01-9	6.1E-06	2.4E-05	1.3E-05	2.4E-05	4.1E-05	6.6E-05
Coronene	191-07-1	0.0E+00	3.3E-06	9.6E-06	0.0E+00	1.4E-05	5.2E-05
Cyclopenta[cd]pyrene	27208-37-3	9.1E-07	5.2E-06	4.8E-06	4.5E-06	1.4E-05	2.4E-05
Dicyclohexylamine	101-83-7	0.0E+00	1.1E-07	9.4E-08	1.1E-07	2.6E-07	3.2E-07
Dimethyl phthalate	131-11-3	0.0E+00	5.2E-09	1.8E-08	0.0E+00	4.7E-08	8.3E-08
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	9.1E-07	1.6E-06	0.0E+00	3.8E-06	6.2E-06
Methyl stearate	112-61-8	5.0E-08	2.0E-07	1.8E-07	1.6E-07	4.7E-07	9.5E-07
Nickel		1.1E-06	4.9E-06	4.0E-06	3.4E-06	1.4E-05	1.9E-05
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	4.4E-08	3.6E-07	2.2E-07	3.2E-07	7.3E-07	9.8E-07
Phenol, 4-(1-phenylethyl)-	1988-89-2	0.0E+00	2.0E-07	2.6E-07	1.1E-07	6.9E-07	1.3E-06
4-tert-Octylphenol	140-66-9	7.4E-08	9.6E-07	1.3E-06	4.3E-07	3.8E-06	6.1E-06

^a 35 field-specific One-Day HQ_{ing-DART-field} are included in this table.

Table G-17. Field-Specific^a One-Day Ingestion Route Total Hazard Quotients for Individual **Field-Related DARTs** (One-Day HQ_{der-DART-sum-field}, unitless)— Combined Gender **Spectators 0<2 years**

Chemical	CASRN	OneDayHQ _{ing-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Arsenic		1.3E-02	1.1E-01	7.8E-02	1.0E-01	2.0E-01	4.3E-01
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	0.0E+00	2.6E-05	1.1E-04	0.0E+00	9.7E-05	5.9E-04



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Chemical	CASRN	OneDayHQ _{ing-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Benzo[a]pyrene	50-32-8	5.9E-05	3.0E-04	2.5E-04	2.1E-04	8.3E-04	8.8E-04
Benzo[e]pyrene	192-97-2	2.7E-04	8.9E-04	5.3E-04	7.0E-04	1.8E-03	2.0E-03
Benzo[g,h,i]perylene	191-24-2	4.2E-05	6.1E-04	3.8E-04	5.4E-04	1.2E-03	1.7E-03
Bis(2-Ethylhexyl)adipate	103-23-1	0.0E+00	2.1E-05	1.9E-05	1.5E-05	6.2E-05	7.6E-05
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	0.0E+00	1.7E-05	4.8E-05	0.0E+00	1.5E-04	1.8E-04
Boron		0.0E+00	8.5E-06	9.5E-06	3.8E-06	2.5E-05	3.3E-05
n-Caproic acid vinyl ester	3050-69-9	0.0E+00	1.8E-07	1.1E-06	0.0E+00	0.0E+00	6.4E-06
Chrysene	218-01-9	4.1E-04	1.6E-03	8.6E-04	1.6E-03	2.8E-03	4.5E-03
Coronene	191-07-1	0.0E+00	2.2E-04	6.4E-04	0.0E+00	9.4E-04	3.5E-03
Cyclopenta[cd]pyrene	27208-37-3	6.1E-05	3.5E-04	3.2E-04	3.0E-04	9.2E-04	1.6E-03
Dicyclohexylamine	101-83-7	0.0E+00	7.7E-06	6.3E-06	7.4E-06	1.8E-05	2.1E-05
Dimethyl phthalate	131-11-3	0.0E+00	3.5E-07	1.2E-06	0.0E+00	3.1E-06	5.6E-06
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	6.1E-05	1.1E-04	0.0E+00	2.6E-04	4.2E-04
Methyl stearate	112-61-8	3.4E-06	1.3E-05	1.2E-05	1.0E-05	3.2E-05	6.4E-05
Nickel		7.1E-05	3.3E-04	2.7E-04	2.3E-04	9.3E-04	1.3E-03
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	3.0E-06	2.4E-05	1.5E-05	2.2E-05	4.9E-05	6.6E-05
Phenol, 4-(1-phenylethyl)-	1988-89-2	0.0E+00	1.4E-05	1.8E-05	7.6E-06	4.7E-05	8.9E-05
4-tert-Octylphenol	140-66-9	5.0E-06	6.5E-05	8.9E-05	2.9E-05	2.5E-04	4.1E-04

^a 35 field-specific One-Day HQ_{ing-DART-field} are included in this table.

Table G-18. Field-Specific^a One-Day Ingestion Route Total Hazard Quotients for Individual **Field-Related DARTs** (One-Day HQ_{der-DART-sum-field}, unitless)— Combined Gender **Spectators 2<6 years**

Chemical	CASRN	OneDayHQ _{ing-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Arsenic		6.2E-03	5.2E-02	3.7E-02	4.7E-02	9.4E-02	2.0E-01
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	0.0E+00	1.2E-05	5.0E-05	0.0E+00	4.6E-05	2.8E-04



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Chemical	CASRN	OneDayHQ _{ing-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Benzo[a]pyrene	50-32-8	2.8E-05	1.4E-04	1.2E-04	1.0E-04	3.9E-04	4.2E-04
Benzo[e]pyrene	192-97-2	1.3E-04	4.2E-04	2.5E-04	3.3E-04	8.7E-04	9.5E-04
Benzo[g,h,i]perylene	191-24-2	2.0E-05	2.9E-04	1.8E-04	2.6E-04	5.8E-04	8.0E-04
Bis(2-Ethylhexyl)adipate	103-23-1	0.0E+00	9.9E-06	9.1E-06	6.9E-06	3.0E-05	3.6E-05
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	0.0E+00	7.9E-06	2.3E-05	0.0E+00	7.3E-05	8.4E-05
Boron		0.0E+00	4.0E-06	4.5E-06	1.8E-06	1.2E-05	1.6E-05
n-Caproic acid vinyl ester	3050-69-9	0.0E+00	8.6E-08	5.1E-07	0.0E+00	0.0E+00	3.0E-06
Chrysene	218-01-9	1.9E-04	7.7E-04	4.1E-04	7.7E-04	1.3E-03	2.1E-03
Coronene	191-07-1	0.0E+00	1.1E-04	3.1E-04	0.0E+00	4.5E-04	1.7E-03
Cyclopenta[cd]pyrene	27208-37-3	2.9E-05	1.7E-04	1.5E-04	1.4E-04	4.4E-04	7.8E-04
Dicyclohexylamine	101-83-7	0.0E+00	3.7E-06	3.0E-06	3.5E-06	8.4E-06	1.0E-05
Dimethyl phthalate	131-11-3	0.0E+00	1.7E-07	5.6E-07	0.0E+00	1.5E-06	2.6E-06
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	2.9E-05	5.0E-05	0.0E+00	1.2E-04	2.0E-04
Methyl stearate	112-61-8	1.6E-06	6.4E-06	5.6E-06	4.9E-06	1.5E-05	3.0E-05
Nickel		3.4E-05	1.6E-04	1.3E-04	1.1E-04	4.4E-04	6.0E-04
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	1.4E-06	1.1E-05	6.9E-06	1.0E-05	2.3E-05	3.1E-05
Phenol, 4-(1-phenylethyl)-	1988-89-2	0.0E+00	6.5E-06	8.5E-06	3.6E-06	2.2E-05	4.2E-05
4-tert-Octylphenol	140-66-9	2.4E-06	3.1E-05	4.2E-05	1.4E-05	1.2E-04	1.9E-04

^a 35 field-specific One-Day HQ_{ing-DART-field} are included in this table.

Table G-19. Field-Specific^a One-Day Ingestion Route Total Hazard Quotients for Individual **Field-Related DARTs** (One-Day HQ_{der-DART-sum-field}, unitless)— Combined Gender **Spectators 6<11 years**

Chemical	CASRN	OneDayHQ _{ing-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Arsenic		4.3E-03	3.7E-02	2.6E-02	3.3E-02	6.6E-02	1.4E-01
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	0.0E+00	8.7E-06	3.5E-05	0.0E+00	3.2E-05	2.0E-04



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Chemical	CASRN	OneDayHQ _{ing-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Benzo[a]pyrene	50-32-8	2.0E-05	1.0E-04	8.2E-05	7.1E-05	2.8E-04	2.9E-04
Benzo[e]pyrene	192-97-2	9.0E-05	3.0E-04	1.8E-04	2.3E-04	6.1E-04	6.7E-04
Benzo[g,h,i]perylene	191-24-2	1.4E-05	2.0E-04	1.3E-04	1.8E-04	4.1E-04	5.6E-04
Bis(2-Ethylhexyl)adipate	103-23-1	0.0E+00	7.0E-06	6.4E-06	4.9E-06	2.1E-05	2.6E-05
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	0.0E+00	5.5E-06	1.6E-05	0.0E+00	5.1E-05	5.9E-05
Boron		0.0E+00	2.8E-06	3.2E-06	1.3E-06	8.3E-06	1.1E-05
n-Caproic acid vinyl ester	3050-69-9	0.0E+00	6.1E-08	3.6E-07	0.0E+00	0.0E+00	2.1E-06
Chrysene	218-01-9	1.4E-04	5.4E-04	2.9E-04	5.4E-04	9.3E-04	1.5E-03
Coronene	191-07-1	0.0E+00	7.4E-05	2.1E-04	0.0E+00	3.1E-04	1.2E-03
Cyclopenta[cd]pyrene	27208-37-3	2.0E-05	1.2E-04	1.1E-04	1.0E-04	3.1E-04	5.5E-04
Dicyclohexylamine	101-83-7	0.0E+00	2.6E-06	2.1E-06	2.5E-06	5.9E-06	7.1E-06
Dimethyl phthalate	131-11-3	0.0E+00	1.2E-07	4.0E-07	0.0E+00	1.0E-06	1.9E-06
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	2.0E-05	3.5E-05	0.0E+00	8.6E-05	1.4E-04
Methyl stearate	112-61-8	1.1E-06	4.5E-06	3.9E-06	3.5E-06	1.1E-05	2.1E-05
Nickel		2.4E-05	1.1E-04	9.1E-05	7.7E-05	3.1E-04	4.2E-04
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	9.9E-07	8.1E-06	4.9E-06	7.2E-06	1.6E-05	2.2E-05
Phenol, 4-(1-phenylethyl)-	1988-89-2	0.0E+00	4.5E-06	5.9E-06	2.6E-06	1.6E-05	3.0E-05
4-tert-Octylphenol	140-66-9	1.7E-06	2.2E-05	3.0E-05	9.5E-06	8.5E-05	1.4E-04

^a 35 field-specific One-Day HQ_{ing-DART-field} are included in this table.

Table G-20. Field-Specific^a One-Day Ingestion Route Total Hazard Quotients for Individual **Field-Related DARTs** (One-Day HQ_{der-DART-sum-field}, unitless)— Combined Gender **Spectators 11<16 years**

Chemical	CASRN	OneDayHQ _{ing-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Arsenic		3.5E-04	3.0E-03	2.1E-03	2.7E-03	5.4E-03	1.1E-02
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	0.0E+00	7.0E-07	2.8E-06	0.0E+00	2.6E-06	1.6E-05



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Chemical	CASRN	OneDayHQ _{ing-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Benzo[a]pyrene	50-32-8	1.6E-06	8.0E-06	6.6E-06	5.7E-06	2.2E-05	2.4E-05
Benzo[e]pyrene	192-97-2	7.2E-06	2.4E-05	1.4E-05	1.9E-05	4.9E-05	5.4E-05
Benzo[g,h,i]perylene	191-24-2	1.1E-06	1.6E-05	1.0E-05	1.5E-05	3.3E-05	4.5E-05
Bis(2-Ethylhexyl)adipate	103-23-1	0.0E+00	5.6E-07	5.1E-07	3.9E-07	1.7E-06	2.1E-06
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	0.0E+00	4.5E-07	1.3E-06	0.0E+00	4.1E-06	4.8E-06
Boron		0.0E+00	2.3E-07	2.6E-07	1.0E-07	6.7E-07	9.0E-07
n-Caproic acid vinyl ester	3050-69-9	0.0E+00	4.9E-09	2.9E-08	0.0E+00	0.0E+00	1.7E-07
Chrysene	218-01-9	1.1E-05	4.4E-05	2.3E-05	4.4E-05	7.5E-05	1.2E-04
Coronene	191-07-1	0.0E+00	6.0E-06	1.7E-05	0.0E+00	2.5E-05	9.4E-05
Cyclopenta[cd]pyrene	27208-37-3	1.7E-06	9.4E-06	8.7E-06	8.1E-06	2.5E-05	4.4E-05
Dicyclohexylamine	101-83-7	0.0E+00	2.1E-07	1.7E-07	2.0E-07	4.8E-07	5.7E-07
Dimethyl phthalate	131-11-3	0.0E+00	9.4E-09	3.2E-08	0.0E+00	8.4E-08	1.5E-07
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	1.6E-06	2.9E-06	0.0E+00	6.9E-06	1.1E-05
Methyl stearate	112-61-8	9.0E-08	3.6E-07	3.2E-07	2.8E-07	8.6E-07	1.7E-06
Nickel		1.9E-06	8.9E-06	7.3E-06	6.2E-06	2.5E-05	3.4E-05
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	8.0E-08	6.5E-07	3.9E-07	5.8E-07	1.3E-06	1.8E-06
Phenol, 4-(1-phenylethyl)-	1988-89-2	0.0E+00	3.7E-07	4.8E-07	2.1E-07	1.3E-06	2.4E-06
4-tert-Octylphenol	140-66-9	1.3E-07	1.7E-06	2.4E-06	7.7E-07	6.8E-06	1.1E-05

^a 35 field-specific One-Day HQ_{ing-DART-field} are included in this table.

Table G-21. Field-Specific^a One-Day Ingestion Route Total Hazard Quotients for Individual **Field-Related DARTs** (One-Day HQ_{der-DART-sum-field}, unitless)— Combined Gender **Spectators 16<30 years**

Chemical	CASRN	OneDayHQ _{ing-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Arsenic		2.0E-04	1.7E-03	1.2E-03	1.5E-03	3.0E-03	6.5E-03
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	0.0E+00	4.0E-07	1.6E-06	0.0E+00	1.5E-06	9.0E-06



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Chemical	CASRN	OneDayHQ _{ing-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Benzo[a]pyrene	50-32-8	9.0E-07	4.6E-06	3.8E-06	3.3E-06	1.3E-05	1.3E-05
Benzo[e]pyrene	192-97-2	4.1E-06	1.4E-05	8.1E-06	1.1E-05	2.8E-05	3.1E-05
Benzo[g,h,i]perylene	191-24-2	6.4E-07	9.3E-06	5.8E-06	8.3E-06	1.9E-05	2.6E-05
Bis(2-Ethylhexyl)adipate	103-23-1	0.0E+00	3.2E-07	2.9E-07	2.2E-07	9.5E-07	1.2E-06
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	0.0E+00	2.5E-07	7.4E-07	0.0E+00	2.3E-06	2.7E-06
Boron		0.0E+00	1.3E-07	1.5E-07	5.9E-08	3.8E-07	5.1E-07
n-Caproic acid vinyl ester	3050-69-9	0.0E+00	2.8E-09	1.6E-08	0.0E+00	0.0E+00	9.7E-08
Chrysene	218-01-9	6.3E-06	2.5E-05	1.3E-05	2.5E-05	4.3E-05	6.8E-05
Coronene	191-07-1	0.0E+00	3.4E-06	9.8E-06	0.0E+00	1.4E-05	5.3E-05
Cyclopenta[cd]pyrene	27208-37-3	9.4E-07	5.3E-06	4.9E-06	4.6E-06	1.4E-05	2.5E-05
Dicyclohexylamine	101-83-7	0.0E+00	1.2E-07	9.7E-08	1.1E-07	2.7E-07	3.3E-07
Dimethyl phthalate	131-11-3	0.0E+00	5.4E-09	1.8E-08	0.0E+00	4.8E-08	8.5E-08
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	9.3E-07	1.6E-06	0.0E+00	3.9E-06	6.4E-06
Methyl stearate	112-61-8	5.1E-08	2.1E-07	1.8E-07	1.6E-07	4.9E-07	9.8E-07
Nickel		1.1E-06	5.1E-06	4.2E-06	3.5E-06	1.4E-05	2.0E-05
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	4.5E-08	3.7E-07	2.2E-07	3.3E-07	7.5E-07	1.0E-06
Phenol, 4-(1-phenylethyl)-	1988-89-2	0.0E+00	2.1E-07	2.7E-07	1.2E-07	7.1E-07	1.4E-06
4-tert-Octylphenol	140-66-9	7.6E-08	9.9E-07	1.4E-06	4.4E-07	3.9E-06	6.2E-06

^a 35 field-specific One-Day HQ_{ing-DART-field} are included in this table.

Table G-22. Field-Specific^a One-Day Ingestion Route Total Hazard Quotients for Individual **Field-Related DARTs** (One-Day HQ_{der-DART-sum-field}, unitless)— Combined Gender **Spectators 30<40 years**

Chemical	CASRN	OneDayHQ _{ing-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Arsenic		1.9E-04	1.6E-03	1.1E-03	1.4E-03	2.9E-03	6.1E-03
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	0.0E+00	3.8E-07	1.5E-06	0.0E+00	1.4E-06	8.5E-06



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Chemical	CASRN	OneDayHQ _{ing-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Benzo[a]pyrene	50-32-8	8.5E-07	4.3E-06	3.6E-06	3.1E-06	1.2E-05	1.3E-05
Benzo[e]pyrene	192-97-2	3.9E-06	1.3E-05	7.7E-06	1.0E-05	2.7E-05	2.9E-05
Benzo[g,h,i]perylene	191-24-2	6.0E-07	8.8E-06	5.5E-06	7.9E-06	1.8E-05	2.4E-05
Bis(2-Ethylhexyl)adipate	103-23-1	0.0E+00	3.0E-07	2.8E-07	2.1E-07	9.0E-07	1.1E-06
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	0.0E+00	2.4E-07	7.0E-07	0.0E+00	2.2E-06	2.6E-06
Boron		0.0E+00	1.2E-07	1.4E-07	5.5E-08	3.6E-07	4.8E-07
n-Caproic acid vinyl ester	3050-69-9	0.0E+00	2.6E-09	1.6E-08	0.0E+00	0.0E+00	9.2E-08
Chrysene	218-01-9	5.9E-06	2.3E-05	1.2E-05	2.3E-05	4.0E-05	6.4E-05
Coronene	191-07-1	0.0E+00	3.2E-06	9.3E-06	0.0E+00	1.4E-05	5.0E-05
Cyclopenta[cd]pyrene	27208-37-3	8.9E-07	5.0E-06	4.7E-06	4.4E-06	1.3E-05	2.4E-05
Dicyclohexylamine	101-83-7	0.0E+00	1.1E-07	9.2E-08	1.1E-07	2.6E-07	3.1E-07
Dimethyl phthalate	131-11-3	0.0E+00	5.1E-09	1.7E-08	0.0E+00	4.5E-08	8.0E-08
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	8.8E-07	1.5E-06	0.0E+00	3.7E-06	6.0E-06
Methyl stearate	112-61-8	4.9E-08	1.9E-07	1.7E-07	1.5E-07	4.6E-07	9.2E-07
Nickel		1.0E-06	4.8E-06	3.9E-06	3.3E-06	1.3E-05	1.8E-05
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	4.3E-08	3.5E-07	2.1E-07	3.1E-07	7.1E-07	9.5E-07
Phenol, 4-(1-phenylethyl)-	1988-89-2	0.0E+00	2.0E-07	2.6E-07	1.1E-07	6.8E-07	1.3E-06
4-tert-Octylphenol	140-66-9	7.2E-08	9.4E-07	1.3E-06	4.1E-07	3.7E-06	5.9E-06

^a 35 field-specific One-Day HQ_{ing-DART-field} are included in this table.

Table G-23. Field-Specific^a One-Day Ingestion Route Total Hazard Quotients for Individual **Field-Related DARTs** (One-Day HQ_{der-DART-sum-field}, unitless)— Combined Gender **Spectators 40<50 years**

Chemical	CASRN	OneDayHQ _{ing-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Arsenic		1.8E-04	1.5E-03	1.1E-03	1.4E-03	2.7E-03	5.8E-03
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	0.0E+00	3.6E-07	1.4E-06	0.0E+00	1.3E-06	8.1E-06



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Chemical	CASRN	OneDayHQ _{ing-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Benzo[a]pyrene	50-32-8	8.0E-07	4.1E-06	3.4E-06	2.9E-06	1.1E-05	1.2E-05
Benzo[e]pyrene	192-97-2	3.7E-06	1.2E-05	7.3E-06	9.5E-06	2.5E-05	2.7E-05
Benzo[g,h,i]perylene	191-24-2	5.7E-07	8.3E-06	5.2E-06	7.4E-06	1.7E-05	2.3E-05
Bis(2-Ethylhexyl)adipate	103-23-1	0.0E+00	2.9E-07	2.6E-07	2.0E-07	8.5E-07	1.0E-06
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	0.0E+00	2.3E-07	6.6E-07	0.0E+00	2.1E-06	2.4E-06
Boron		0.0E+00	1.2E-07	1.3E-07	5.2E-08	3.4E-07	4.6E-07
n-Caproic acid vinyl ester	3050-69-9	0.0E+00	2.5E-09	1.5E-08	0.0E+00	0.0E+00	8.7E-08
Chrysene	218-01-9	5.6E-06	2.2E-05	1.2E-05	2.2E-05	3.8E-05	6.1E-05
Coronene	191-07-1	0.0E+00	3.0E-06	8.8E-06	0.0E+00	1.3E-05	4.8E-05
Cyclopenta[cd]pyrene	27208-37-3	8.4E-07	4.8E-06	4.4E-06	4.1E-06	1.3E-05	2.2E-05
Dicyclohexylamine	101-83-7	0.0E+00	1.1E-07	8.7E-08	1.0E-07	2.4E-07	2.9E-07
Dimethyl phthalate	131-11-3	0.0E+00	4.8E-09	1.6E-08	0.0E+00	4.3E-08	7.6E-08
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	8.3E-07	1.5E-06	0.0E+00	3.5E-06	5.7E-06
Methyl stearate	112-61-8	4.6E-08	1.8E-07	1.6E-07	1.4E-07	4.4E-07	8.7E-07
Nickel		9.7E-07	4.5E-06	3.7E-06	3.2E-06	1.3E-05	1.7E-05
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	4.1E-08	3.3E-07	2.0E-07	3.0E-07	6.7E-07	9.0E-07
Phenol, 4-(1-phenylethyl)-	1988-89-2	0.0E+00	1.9E-07	2.4E-07	1.1E-07	6.4E-07	1.2E-06
4-tert-Octylphenol	140-66-9	6.8E-08	8.9E-07	1.2E-06	3.9E-07	3.5E-06	5.6E-06

^a 35 field-specific One-Day HQ_{ing-DART-field} are included in this table.

Table G-24. Field-Specific^a One-Day Ingestion Route Total Hazard Quotients for Individual **Field-Related DARTs** (One-Day HQ_{der-DART-sum-field}, unitless)— Combined Gender **Spectators 50<70 years**

Chemical	CASRN	OneDayHQ _{ing-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Arsenic		1.8E-04	1.5E-03	1.1E-03	1.4E-03	2.7E-03	5.8E-03
1,4-Benzenediamine, N,N'-diphenyl-	74-31-7	0.0E+00	3.6E-07	1.4E-06	0.0E+00	1.3E-06	8.1E-06



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Chemical	CASRN	OneDayHQ _{ing-DART-field}					
		Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Benzo[a]pyrene	50-32-8	8.1E-07	4.1E-06	3.4E-06	2.9E-06	1.1E-05	1.2E-05
Benzo[e]pyrene	192-97-2	3.7E-06	1.2E-05	7.3E-06	9.6E-06	2.5E-05	2.8E-05
Benzo[g,h,i]perylene	191-24-2	5.7E-07	8.4E-06	5.2E-06	7.5E-06	1.7E-05	2.3E-05
Bis(2-Ethylhexyl)adipate	103-23-1	0.0E+00	2.9E-07	2.6E-07	2.0E-07	8.6E-07	1.1E-06
Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate	52829-07-9	0.0E+00	2.3E-07	6.6E-07	0.0E+00	2.1E-06	2.4E-06
Boron		0.0E+00	1.2E-07	1.3E-07	5.3E-08	3.4E-07	4.6E-07
n-Caproic acid vinyl ester	3050-69-9	0.0E+00	2.5E-09	1.5E-08	0.0E+00	0.0E+00	8.7E-08
Chrysene	218-01-9	5.6E-06	2.2E-05	1.2E-05	2.2E-05	3.8E-05	6.1E-05
Coronene	191-07-1	0.0E+00	3.1E-06	8.8E-06	0.0E+00	1.3E-05	4.8E-05
Cyclopenta[cd]pyrene	27208-37-3	8.4E-07	4.8E-06	4.4E-06	4.1E-06	1.3E-05	2.3E-05
Dicyclohexylamine	101-83-7	0.0E+00	1.1E-07	8.7E-08	1.0E-07	2.4E-07	2.9E-07
Dimethyl phthalate	131-11-3	0.0E+00	4.8E-09	1.6E-08	0.0E+00	4.3E-08	7.6E-08
Indeno[1,2,3-cd]pyrene	193-39-5	0.0E+00	8.4E-07	1.5E-06	0.0E+00	3.5E-06	5.7E-06
Methyl stearate	112-61-8	4.6E-08	1.8E-07	1.6E-07	1.4E-07	4.4E-07	8.8E-07
Nickel		9.7E-07	4.5E-06	3.7E-06	3.2E-06	1.3E-05	1.8E-05
Phenol, 2,4-bis(1-methyl-1-phenylethyl)-	2772-45-4	4.1E-08	3.3E-07	2.0E-07	3.0E-07	6.7E-07	9.0E-07
Phenol, 4-(1-phenylethyl)-	1988-89-2	0.0E+00	1.9E-07	2.4E-07	1.1E-07	6.4E-07	1.2E-06
4-tert-Octylphenol	140-66-9	6.8E-08	8.9E-07	1.2E-06	3.9E-07	3.5E-06	5.6E-06

^a 35 field-specific One-Day HQ_{ing-DART-field} are included in this table.

INDIVIDUAL FIELD ASSESSMENT (Table G-123)

Table G-25. Field-Specific^a One-Day Ingestion Route Total Hazard Quotients for **Field-Related DARTs** (One-Day HQ_{ing-DART-sum-field}, unitless)—Combined Gender

Receptor Category and Age Group	One-Day HQ _{ing-DART-sum-field}					
	Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Athletes 2<6 years	6.1E-03	4.5E-02	3.1E-02	4.1E-02	8.1E-02	1.7E-01
Athletes 6<11 years	3.9E-03	2.9E-02	2.0E-02	2.6E-02	5.1E-02	1.1E-01



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Receptor Category and Age Group	One-Day HQ _{ing-DART-sum-field}					
	Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Athletes 11<16 years	2.5E-03	1.8E-02	1.2E-02	1.7E-02	3.3E-02	6.9E-02
Athletes 16<30 years	2.0E-03	1.5E-02	9.9E-03	1.3E-02	2.6E-02	5.5E-02
Athletes 30<40 years	1.7E-03	1.3E-02	8.5E-03	1.1E-02	2.2E-02	4.7E-02
Athletes 40<50 years	1.7E-03	1.2E-02	8.4E-03	1.1E-02	2.2E-02	4.6E-02
Athletes 50<70 years	1.7E-03	1.2E-02	8.4E-03	1.1E-02	2.2E-02	4.6E-02
Coaches 16<30 years	5.7E-04	4.3E-03	2.9E-03	3.8E-03	7.6E-03	1.6E-02
Coaches 30<40 years	5.4E-04	4.0E-03	2.7E-03	3.6E-03	7.1E-03	1.5E-02
Coaches 40<50 years	5.3E-04	3.9E-03	2.7E-03	3.5E-03	7.0E-03	1.5E-02
Coaches 50<70 years	5.3E-04	3.9E-03	2.7E-03	3.5E-03	7.0E-03	1.5E-02
Referees 16<30 years	5.7E-04	4.3E-03	2.9E-03	3.8E-03	7.6E-03	1.6E-02
Referees 30<40 years	5.4E-04	4.0E-03	2.7E-03	3.6E-03	7.1E-03	1.5E-02
Referees 40<50 years	5.3E-04	3.9E-03	2.7E-03	3.5E-03	7.0E-03	1.5E-02
Referees 50<70 years	5.3E-04	3.9E-03	2.7E-03	3.5E-03	7.0E-03	1.5E-02
Spectators Third trimester fetus	2.3E-04	1.7E-03	1.2E-03	1.5E-03	3.1E-03	6.4E-03
Spectators 0<2 years	1.5E-02	1.2E-01	7.8E-02	1.0E-01	2.1E-01	4.3E-01
Spectators 2<6 years	7.3E-03	5.5E-02	3.7E-02	4.9E-02	9.7E-02	2.0E-01
Spectators 6<11 years	5.2E-03	3.8E-02	2.6E-02	3.5E-02	6.8E-02	1.4E-01
Spectators 11<16 years	4.2E-04	3.1E-03	2.1E-03	2.8E-03	5.5E-03	1.2E-02
Spectators 16<30 years	2.4E-04	1.8E-03	1.2E-03	1.6E-03	3.1E-03	6.6E-03
Spectators 30<40 years	2.2E-04	1.7E-03	1.1E-03	1.5E-03	3.0E-03	6.2E-03
Spectators 40<50 years	2.1E-04	1.6E-03	1.1E-03	1.4E-03	2.8E-03	5.9E-03
Spectators 50<70 years	2.1E-04	1.6E-03	1.1E-03	1.4E-03	2.8E-03	5.9E-03

^a 35 field-specific One-Day HQ_{der-DART-sum-field} are included in this table.



G.2.8. Chronic Ingestion Hazard Quotient for General Chemicals (Chronic HQ_{ing})

Table G-1. Chronic Ingestion Hazard Quotient for Individual Chemical (Chronic HQ_{ing}, unitless), Chronic Ingestion Route Total Hazard Quotients (Chronic HQ_{ing-sum}, unitless) and Chronic Ingestion HI for **Field-Related General Chemicals—Combined Gender Athletes**

Chemical	CASRN ^a	Chronic HQ _{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	2.4E-08	1.6E-08	1.3E-08	1.4E-08	9.4E-09	8.0E-09	8.1E-09
Aluminum		5.7E-03	3.8E-03	3.0E-03	3.3E-03	2.2E-03	1.9E-03	1.9E-03
Aniline	62-53-3	1.2E-06	7.8E-07	6.1E-07	6.7E-07	4.5E-07	3.8E-07	3.9E-07
Anthracene	120-12-7	1.3E-08	8.6E-09	6.7E-09	7.4E-09	4.9E-09	4.2E-09	4.3E-09
Anthracene, 2-methyl-	613-12-7	5.1E-08	3.4E-08	2.7E-08	3.0E-08	2.0E-08	1.7E-08	1.7E-08
Anthracene, 9,10-dimethyl	781-43-1	4.1E-10	2.8E-10	2.1E-10	2.4E-10	1.6E-10	1.4E-10	1.4E-10
Anthracene, 9,10-diphenyl-	1499-10-1	3.2E-09	2.1E-09	1.7E-09	1.8E-09	1.2E-09	1.0E-09	1.1E-09
Anthracene, 9-phenyl	602-55-1	4.9E-09	3.2E-09	2.5E-09	2.8E-09	1.9E-09	1.6E-09	1.6E-09
Antimony		8.0E-04	5.3E-04	4.1E-04	4.6E-04	3.1E-04	2.6E-04	2.7E-04
Barium		1.0E-04	6.8E-05	5.2E-05	5.8E-05	3.9E-05	3.3E-05	3.4E-05
Benzene, n-butyl-	104-51-8	1.6E-08	1.1E-08	8.5E-09	9.5E-09	6.3E-09	5.3E-09	5.5E-09
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	7.5E-05	5.0E-05	3.9E-05	4.3E-05	2.9E-05	2.4E-05	2.5E-05
Benz[a]anthracene	56-55-3	4.5E-08	3.0E-08	2.3E-08	2.6E-08	1.7E-08	1.5E-08	1.5E-08
Benzo[b]fluoranthene	205-99-2	4.6E-07	3.1E-07	2.4E-07	2.7E-07	1.8E-07	1.5E-07	1.5E-07
7H-Benzo[c]fluorene	205-12-9	8.9E-08	6.0E-08	4.6E-08	5.1E-08	3.4E-08	2.9E-08	3.0E-08
Benzo[k]fluoranthene	207-08-9	1.5E-07	1.0E-07	7.8E-08	8.6E-08	5.8E-08	4.9E-08	5.0E-08
Benzothiazole	95-16-9	4.6E-03	3.0E-03	2.4E-03	2.6E-03	1.8E-03	1.5E-03	1.5E-03
Benzothiazole, 2-phenyl-	883-93-2	4.9E-04	3.3E-04	2.5E-04	2.8E-04	1.9E-04	1.6E-04	1.6E-04
Benzothiazolone	934-34-9	1.2E-02	7.8E-03	6.0E-03	6.7E-03	4.5E-03	3.8E-03	3.9E-03
Benzyl butyl phthalate	85-68-7	5.8E-07	3.9E-07	3.0E-07	3.4E-07	2.2E-07	1.9E-07	1.9E-07
Beryllium		1.5E-06	9.8E-07	7.6E-07	8.4E-07	5.6E-07	4.8E-07	4.9E-07
Butylated Hydroxytoluene	128-37-0	1.0E-08	6.9E-09	5.4E-09	6.0E-09	4.0E-09	3.4E-09	3.5E-09



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Chemical	CASRN ^a	Chronic HQ _{ing}						
		2<6 years	6<11 years	11<16 years	16<30 years	30<40 years	40<50 years	50<70 years
Cadmium		1.3E-03	8.8E-04	6.8E-04	7.6E-04	5.1E-04	4.3E-04	4.4E-04
Chromium		1.1E-03	7.4E-04	5.7E-04	6.4E-04	4.2E-04	3.6E-04	3.7E-04
Cobalt		1.7E-02	1.1E-02	8.7E-03	9.7E-03	6.4E-03	5.5E-03	5.6E-03
Copper		7.0E-05	4.7E-05	3.6E-05	4.0E-05	2.7E-05	2.3E-05	2.3E-05
Cyclohexyl isothiocyanate	1122-82-3	3.6E-03	2.4E-03	1.9E-03	2.1E-03	1.4E-03	1.2E-03	1.2E-03
Dibenz[a,h]anthracene	53-70-3	2.7E-09	1.8E-09	1.4E-09	1.5E-09	1.0E-09	8.7E-10	8.8E-10
Dibenzothiophene	132-65-0	3.1E-07	2.1E-07	1.6E-07	1.8E-07	1.2E-07	1.0E-07	1.0E-07
Dibutyl phthalate	84-74-2	2.2E-06	1.5E-06	1.1E-06	1.3E-06	8.5E-07	7.2E-07	7.4E-07
Diethyl Phthalate	84-66-2	2.3E-08	1.6E-08	1.2E-08	1.3E-08	9.0E-09	7.6E-09	7.7E-09
Diisobutyl Phthalate	84-69-5	2.2E-06	1.5E-06	1.1E-06	1.3E-06	8.5E-07	7.2E-07	7.4E-07
Diisoctylphthalate	27554-26-3	4.7E-05	3.1E-05	2.4E-05	2.7E-05	1.8E-05	1.5E-05	1.6E-05
Di-n-octyl phthalate	117-84-0	4.6E-06	3.1E-06	2.4E-06	2.7E-06	1.8E-06	1.5E-06	1.5E-06
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	1.9E-07	1.3E-07	9.9E-08	1.1E-07	7.4E-08	6.2E-08	6.4E-08
3,5-di-tert-Butyl-4-hydroxybenzaldehyde	1620-98-0	2.7E-07	1.8E-07	1.4E-07	1.6E-07	1.1E-07	8.9E-08	9.1E-08
Fluoranthene	206-44-0	2.6E-06	1.7E-06	1.3E-06	1.5E-06	1.0E-06	8.5E-07	8.7E-07
Fluorene	86-73-7	3.4E-08	2.3E-08	1.8E-08	2.0E-08	1.3E-08	1.1E-08	1.1E-08
Hexadecane	544-76-3	3.3E-05	2.2E-05	1.7E-05	1.9E-05	1.3E-05	1.1E-05	1.1E-05
1-Hydroxypyrene	5315-79-7	1.8E-07	1.2E-07	9.2E-08	1.0E-07	6.8E-08	5.8E-08	5.9E-08
Lead ^b		4.6E-02	3.1E-02	2.4E-02	2.7E-02	1.8E-02	1.5E-02	1.5E-02
Manganese		3.3E-05	2.2E-05	1.7E-05	1.9E-05	1.3E-05	1.1E-05	1.1E-05
2-(Methylthio)benzothiazole	615-22-5	1.7E-05	1.2E-05	9.0E-06	1.0E-05	6.7E-06	5.7E-06	5.8E-06
Molybdenum		1.7E-06	1.1E-06	8.8E-07	9.8E-07	6.5E-07	5.5E-07	5.6E-07
Naphthalene	91-20-3	1.2E-08	8.1E-09	6.3E-09	7.0E-09	4.7E-09	4.0E-09	4.1E-09
Naphthalene, 1-methyl-	90-12-0	9.0E-08	6.0E-08	4.7E-08	5.2E-08	3.5E-08	2.9E-08	3.0E-08
Naphthalene, 1,2-dimethyl-	573-98-8	7.4E-09	4.9E-09	3.8E-09	4.2E-09	2.8E-09	2.4E-09	2.4E-09



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Chemical	CASRN ^a	Chronic HQ _{ing}						
		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	4.8E-08	3.2E-08	2.5E-08	2.8E-08	1.9E-08	1.6E-08	1.6E-08
Naphthalene, 2-(bromomethyl)-	939-26-4	1.3E-06	8.5E-07	6.6E-07	7.4E-07	4.9E-07	4.2E-07	4.2E-07
Naphthalene, 2,3-dimethyl-	581-40-8	3.8E-07	2.5E-07	1.9E-07	2.2E-07	1.4E-07	1.2E-07	1.2E-07
Naphthalene, 2-methyl	91-57-6	1.4E-07	9.5E-08	7.4E-08	8.2E-08	5.5E-08	4.6E-08	4.7E-08
1-Octadecene	112-88-9	7.2E-05	4.8E-05	3.7E-05	4.2E-05	2.8E-05	2.4E-05	2.4E-05
17-Pentatriacontene	6971-40-0	9.2E-09	6.2E-09	4.8E-09	5.3E-09	3.5E-09	3.0E-09	3.1E-09
Phenanthrene	85-01-8	1.5E-07	1.0E-07	7.9E-08	8.8E-08	5.9E-08	5.0E-08	5.1E-08
Phenanthrene, 1-methyl	832-69-9	4.1E-08	2.7E-08	2.1E-08	2.3E-08	1.6E-08	1.3E-08	1.3E-08
Phenanthrene, 2-methyl-	2531-84-2	5.2E-08	3.5E-08	2.7E-08	3.0E-08	2.0E-08	1.7E-08	1.7E-08
Phenanthrene, 3-methyl	832-71-3	8.7E-08	5.8E-08	4.5E-08	5.0E-08	3.3E-08	2.8E-08	2.9E-08
N-Phenylbenzamide	93-98-1	1.5E-05	9.7E-06	7.5E-06	8.4E-06	5.6E-06	4.7E-06	4.8E-06
Phthalimide	85-41-6	1.8E-07	1.2E-07	9.5E-08	1.1E-07	7.1E-08	6.0E-08	6.1E-08
Pyrene	129-00-0	7.3E-06	4.9E-06	3.8E-06	4.2E-06	2.8E-06	2.4E-06	2.4E-06
Pyridine, 2-(4-methylphenyl)-	4467-06-5	4.7E-07	3.1E-07	2.4E-07	2.7E-07	1.8E-07	1.5E-07	1.6E-07
Selenium		5.6E-06	3.7E-06	2.9E-06	3.2E-06	2.1E-06	1.8E-06	1.8E-06
Strontium		6.6E-06	4.4E-06	3.4E-06	3.8E-06	2.5E-06	2.1E-06	2.2E-06
Thallium		1.1E-04	7.4E-05	5.7E-05	6.4E-05	4.2E-05	3.6E-05	3.7E-05
Tin		1.4E-06	9.6E-07	7.5E-07	8.3E-07	5.5E-07	4.7E-07	4.8E-07
Triethylene glycol monobutyl ether	143-22-6	5.4E-08	3.6E-08	2.8E-08	3.1E-08	2.1E-08	1.7E-08	1.8E-08
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	9.3E-07	6.2E-07	4.8E-07	5.4E-07	3.6E-07	3.0E-07	3.1E-07
Vanadium		3.2E-04	2.1E-04	1.7E-04	1.9E-04	1.2E-04	1.0E-04	1.1E-04
Zinc		3.2E-03	2.2E-03	1.7E-03	1.9E-03	1.2E-03	1.1E-03	1.1E-03
Field-Related Chronic HQ _{ing} -sum		9.7E-02	6.4E-02	5.0E-02	5.6E-02	3.7E-02	3.1E-02	3.2E-02

^a CASRN for metals and metalloids are not included as the Study did not speciate these chemicals.

^b Lead is included in Chronic HQ_{ing} calculation (see Section G.2.2 for details).



Table G-2. Chronic Ingestion Hazard Quotient for Individual Chemical (Chronic HQ_{ing}, unitless), Chronic Ingestion Route Total Hazard Quotients (Chronic HQ_{ing-sum}, unitless) for Field-Related General Chemicals—Combined Gender Coaches

Chemical	CASRN ^a	Chronic HQ _{ing}			
		16<30 years	30<40 years	40<50 years	50<70 years
Acenaphthylene	208-96-8	3.6E-09	3.3E-09	3.3E-09	3.3E-09
Aluminum		8.3E-04	7.8E-04	7.7E-04	7.7E-04
Aniline	62-53-3	1.7E-07	1.6E-07	1.6E-07	1.6E-07
Anthracene	120-12-7	1.9E-09	1.8E-09	1.7E-09	1.7E-09
Anthracene, 2-methyl-	613-12-7	7.4E-09	7.0E-09	6.8E-09	6.9E-09
Anthracene, 9,10-dimethyl	781-43-1	6.0E-11	5.7E-11	5.5E-11	5.6E-11
Anthracene, 9,10-diphenyl-	1499-10-1	4.7E-10	4.4E-10	4.3E-10	4.3E-10
Anthracene, 9-phenyl	602-55-1	7.1E-10	6.6E-10	6.5E-10	6.5E-10
Antimony		1.2E-04	1.1E-04	1.1E-04	1.1E-04
Barium		1.5E-05	1.4E-05	1.4E-05	1.4E-05
Benzene, n-butyl-	104-51-8	2.4E-09	2.2E-09	2.2E-09	2.2E-09
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	1.1E-05	1.0E-05	1.0E-05	1.0E-05
Benz[a]anthracene	56-55-3	6.5E-09	6.1E-09	6.0E-09	6.0E-09
Benzo[b]fluoranthene	205-99-2	6.7E-08	6.3E-08	6.2E-08	6.2E-08
7H-Benzo[c]fluorene	205-12-9	1.3E-08	1.2E-08	1.2E-08	1.2E-08
Benzo[k]fluoranthene	207-08-9	2.2E-08	2.0E-08	2.0E-08	2.0E-08
Benzothiazole	95-16-9	6.6E-04	6.2E-04	6.1E-04	6.1E-04
Benzothiazole, 2-phenyl-	883-93-2	7.1E-05	6.7E-05	6.5E-05	6.6E-05
Benzothiazolone	934-34-9	1.7E-03	1.6E-03	1.6E-03	1.6E-03
Benzyl butyl phthalate	85-68-7	8.5E-08	7.9E-08	7.8E-08	7.8E-08
Beryllium		2.1E-07	2.0E-07	2.0E-07	2.0E-07
Butylated Hydroxytoluene	128-37-0	1.5E-09	1.4E-09	1.4E-09	1.4E-09
Cadmium		1.9E-04	1.8E-04	1.8E-04	1.8E-04



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Chemical	CASRN ^a	Chronic HQ _{ing}			
		16<30 years	30<40 years	40<50 years	50<70 years
Chromium		1.6E-04	1.5E-04	1.5E-04	1.5E-04
Cobalt		2.4E-03	2.3E-03	2.2E-03	2.2E-03
Copper		1.0E-05	9.6E-06	9.4E-06	9.4E-06
Cyclohexyl isothiocyanate	1122-82-3	5.3E-04	5.0E-04	4.9E-04	4.9E-04
Dibenz[a,h]anthracene	53-70-3	3.9E-10	3.6E-10	3.6E-10	3.6E-10
Dibenzothiophene	132-65-0	4.5E-08	4.3E-08	4.2E-08	4.2E-08
Dibutyl phthalate	84-74-2	3.2E-07	3.0E-07	3.0E-07	3.0E-07
Diethyl Phthalate	84-66-2	3.4E-09	3.2E-09	3.1E-09	3.1E-09
Diisobutyl Phthalate	84-69-5	3.2E-07	3.0E-07	3.0E-07	3.0E-07
Diisoctylphthalate	27554-26-3	6.8E-06	6.4E-06	6.3E-06	6.3E-06
Di-n-octyl phthalate	117-84-0	6.7E-07	6.3E-07	6.2E-07	6.2E-07
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	2.8E-08	2.6E-08	2.6E-08	2.6E-08
3,5-di-tert-Butyl-4-hydroxybenzaldehyde	1620-98-0	4.0E-08	3.7E-08	3.7E-08	3.7E-08
Fluoranthene	206-44-0	3.8E-07	3.6E-07	3.5E-07	3.5E-07
Fluorene	86-73-7	4.9E-09	4.6E-09	4.5E-09	4.6E-09
Hexadecane	544-76-3	4.8E-06	4.5E-06	4.4E-06	4.4E-06
1-Hydroxypyrene	5315-79-7	2.6E-08	2.4E-08	2.4E-08	2.4E-08
Lead ^b		6.7E-03	6.3E-03	6.2E-03	6.2E-03
Manganese		4.8E-06	4.5E-06	4.4E-06	4.4E-06
2-(Methylthio)benzothiazole	615-22-5	2.5E-06	2.4E-06	2.3E-06	2.3E-06
Molybdenum		2.5E-07	2.3E-07	2.3E-07	2.3E-07
Naphthalene	91-20-3	1.8E-09	1.7E-09	1.6E-09	1.6E-09
Naphthalene, 1-methyl-	90-12-0	1.3E-08	1.2E-08	1.2E-08	1.2E-08
Naphthalene, 1,2-dimethyl-	573-98-8	1.1E-09	1.0E-09	9.8E-10	9.9E-10
Naphthalene, 1,6-dimethyl-	575-43-9	7.0E-09	6.6E-09	6.5E-09	6.5E-09
Naphthalene, 2-(bromomethyl)-	939-26-4	1.9E-07	1.7E-07	1.7E-07	1.7E-07



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Chemical	CASRN ^a	Chronic HQ _{ing}			
		16<30 years	30<40 years	40<50 years	50<70 years
Naphthalene, 2,3-dimethyl-	581-40-8	5.5E-08	5.1E-08	5.0E-08	5.0E-08
Naphthalene, 2-methyl	91-57-6	2.1E-08	1.9E-08	1.9E-08	1.9E-08
1-Octadecene	112-88-9	1.1E-05	9.9E-06	9.7E-06	9.7E-06
17-Pentatriacontene	6971-40-0	1.3E-09	1.3E-09	1.2E-09	1.2E-09
Phenanthrene	85-01-8	2.2E-08	2.1E-08	2.0E-08	2.0E-08
Phenanthrene, 1-methyl	832-69-9	5.9E-09	5.5E-09	5.4E-09	5.4E-09
Phenanthrene, 2-methyl-	2531-84-2	7.6E-09	7.2E-09	7.0E-09	7.0E-09
Phenanthrene, 3-methyl	832-71-3	1.3E-08	1.2E-08	1.2E-08	1.2E-08
N-Phenylbenzamide	93-98-1	2.1E-06	2.0E-06	1.9E-06	1.9E-06
Phthalimide	85-41-6	2.7E-08	2.5E-08	2.5E-08	2.5E-08
Pyrene	129-00-0	1.1E-06	1.0E-06	9.8E-07	9.8E-07
Pyridine, 2-(4-methylphenyl)-	4467-06-5	6.8E-08	6.4E-08	6.3E-08	6.3E-08
Selenium		8.1E-07	7.6E-07	7.4E-07	7.4E-07
Strontium		9.5E-07	9.0E-07	8.8E-07	8.8E-07
Thallium		1.6E-05	1.5E-05	1.5E-05	1.5E-05
Tin		2.1E-07	2.0E-07	1.9E-07	1.9E-07
Triethylene glycol monobutyl ether	143-22-6	7.8E-09	7.3E-09	7.2E-09	7.2E-09
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	1.4E-07	1.3E-07	1.2E-07	1.3E-07
Vanadium		4.7E-05	4.4E-05	4.3E-05	4.3E-05
Zinc		4.7E-04	4.4E-04	4.3E-04	4.3E-04
Field-Related Chronic HQ _{ing} -sum		1.4E-02	1.3E-02	1.3E-02	1.3E-02

^a CASRN for metals and metalloids are not included as the Study did not speciate these chemicals.

^b Lead is included in Chronic HQ_{ing} calculation (see Section G.2.2 for details).



Table G-3. Chronic Ingestion Hazard Quotient for Individual Chemical (Chronic HQ_{ing}, unitless), Chronic Ingestion Route Total Hazard Quotients (Chronic HQ_{ing-sum}, unitless) for **Field-Related General Chemicals**—Combined Gender **Referees**

Chemical	CASRN ^a	Chronic HQ _{ing}			
		16<30 years	30<40 years	40<50 years	50<70 years
Acenaphthylene	208-96-8	1.6E-09	1.5E-09	1.4E-09	1.4E-09
Aluminum		3.7E-04	3.4E-04	3.4E-04	3.4E-04
Aniline	62-53-3	7.5E-08	7.0E-08	6.9E-08	6.9E-08
Anthracene	120-12-7	8.2E-10	7.7E-10	7.5E-10	7.6E-10
Anthracene, 2-methyl-	613-12-7	3.3E-09	3.1E-09	3.0E-09	3.0E-09
Anthracene, 9,10-dimethyl	781-43-1	2.6E-11	2.5E-11	2.4E-11	2.4E-11
Anthracene, 9,10-diphenyl-	1499-10-1	2.0E-10	1.9E-10	1.9E-10	1.9E-10
Anthracene, 9-phenyl	602-55-1	3.1E-10	2.9E-10	2.8E-10	2.9E-10
Antimony		5.1E-05	4.8E-05	4.7E-05	4.7E-05
Barium		6.5E-06	6.1E-06	5.9E-06	6.0E-06
Benzene, n-butyl-	104-51-8	1.0E-09	9.8E-10	9.6E-10	9.7E-10
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	4.8E-06	4.5E-06	4.4E-06	4.4E-06
Benz[a]anthracene	56-55-3	2.9E-09	2.7E-09	2.6E-09	2.6E-09
Benzo[b]fluoranthene	205-99-2	3.0E-08	2.8E-08	2.7E-08	2.7E-08
7H-Benzo[c]fluorene	205-12-9	5.7E-09	5.4E-09	5.2E-09	5.3E-09
Benzo[k]fluoranthene	207-08-9	9.6E-09	9.0E-09	8.8E-09	8.8E-09
Benzothiazole	95-16-9	2.9E-04	2.7E-04	2.7E-04	2.7E-04
Benzothiazole, 2-phenyl-	883-93-2	3.1E-05	2.9E-05	2.9E-05	2.9E-05
Benzothiazolone	934-34-9	7.4E-04	7.0E-04	6.8E-04	6.8E-04
Benzyl butyl phthalate	85-68-7	3.7E-08	3.5E-08	3.4E-08	3.4E-08
Beryllium		9.4E-08	8.8E-08	8.6E-08	8.6E-08
Butylated Hydroxytoluene	128-37-0	6.6E-10	6.2E-10	6.1E-10	6.1E-10
Cadmium		8.4E-05	7.9E-05	7.8E-05	7.8E-05



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Chemical	CASRN ^a	Chronic HQ _{ing}			
		16<30 years	30<40 years	40<50 years	50<70 years
Chromium		7.1E-05	6.6E-05	6.5E-05	6.5E-05
Cobalt		1.1E-03	1.0E-03	9.8E-04	9.9E-04
Copper		4.5E-06	4.2E-06	4.1E-06	4.1E-06
Cyclohexyl isothiocyanate	1122-82-3	2.3E-04	2.2E-04	2.1E-04	2.1E-04
Dibenz[a,h]anthracene	53-70-3	1.7E-10	1.6E-10	1.6E-10	1.6E-10
Dibenzothiophene	132-65-0	2.0E-08	1.9E-08	1.8E-08	1.8E-08
Dibutyl phthalate	84-74-2	1.4E-07	1.3E-07	1.3E-07	1.3E-07
Diethyl Phthalate	84-66-2	1.5E-09	1.4E-09	1.4E-09	1.4E-09
Diisobutyl Phthalate	84-69-5	1.4E-07	1.3E-07	1.3E-07	1.3E-07
Diisoctylphthalate	27554-26-3	3.0E-06	2.8E-06	2.8E-06	2.8E-06
Di-n-octyl phthalate	117-84-0	3.0E-07	2.8E-07	2.7E-07	2.7E-07
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	1.2E-08	1.1E-08	1.1E-08	1.1E-08
3,5-di-tert-Butyl-4-hydroxybenzaldehyde	1620-98-0	1.7E-08	1.6E-08	1.6E-08	1.6E-08
Fluoranthene	206-44-0	1.7E-07	1.6E-07	1.5E-07	1.5E-07
Fluorene	86-73-7	2.2E-09	2.0E-09	2.0E-09	2.0E-09
Hexadecane	544-76-3	2.1E-06	2.0E-06	1.9E-06	1.9E-06
1-Hydroxypyrene	5315-79-7	1.1E-08	1.1E-08	1.0E-08	1.0E-08
Lead ^b		3.0E-03	2.8E-03	2.7E-03	2.7E-03
Manganese		2.1E-06	2.0E-06	1.9E-06	1.9E-06
2-(Methylthio)benzothiazole	615-22-5	1.1E-06	1.0E-06	1.0E-06	1.0E-06
Molybdenum		1.1E-07	1.0E-07	9.9E-08	1.0E-07
Naphthalene	91-20-3	7.8E-10	7.3E-10	7.2E-10	7.2E-10
Naphthalene, 1-methyl-	90-12-0	5.7E-09	5.4E-09	5.3E-09	5.3E-09
Naphthalene, 1,2-dimethyl-	573-98-8	4.7E-10	4.4E-10	4.3E-10	4.3E-10
Naphthalene, 1,6-dimethyl-	575-43-9	3.1E-09	2.9E-09	2.8E-09	2.9E-09
Naphthalene, 2-(bromomethyl)-	939-26-4	8.2E-08	7.7E-08	7.5E-08	7.5E-08



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Chemical	CASRN ^a	Chronic HQ _{ing}			
		16<30 years	30<40 years	40<50 years	50<70 years
Naphthalene, 2,3-dimethyl-	581-40-8	2.4E-08	2.3E-08	2.2E-08	2.2E-08
Naphthalene, 2-methyl	91-57-6	9.1E-09	8.6E-09	8.4E-09	8.4E-09
1-Octadecene	112-88-9	4.6E-06	4.3E-06	4.2E-06	4.3E-06
17-Pentatriacontene	6971-40-0	5.9E-10	5.5E-10	5.4E-10	5.4E-10
Phenanthrene	85-01-8	9.7E-09	9.2E-09	9.0E-09	9.0E-09
Phenanthrene, 1-methyl	832-69-9	2.6E-09	2.4E-09	2.4E-09	2.4E-09
Phenanthrene, 2-methyl-	2531-84-2	3.3E-09	3.1E-09	3.1E-09	3.1E-09
Phenanthrene, 3-methyl	832-71-3	5.5E-09	5.2E-09	5.1E-09	5.1E-09
N-Phenylbenzamide	93-98-1	9.3E-07	8.7E-07	8.5E-07	8.5E-07
Phthalimide	85-41-6	1.2E-08	1.1E-08	1.1E-08	1.1E-08
Pyrene	129-00-0	4.7E-07	4.4E-07	4.3E-07	4.3E-07
Pyridine, 2-(4-methylphenyl)-	4467-06-5	3.0E-08	2.8E-08	2.8E-08	2.8E-08
Selenium		3.5E-07	3.3E-07	3.3E-07	3.3E-07
Strontium		4.2E-07	3.9E-07	3.9E-07	3.9E-07
Thallium		7.0E-06	6.6E-06	6.5E-06	6.5E-06
Tin		9.2E-08	8.7E-08	8.5E-08	8.5E-08
Triethylene glycol monobutyl ether	143-22-6	3.4E-09	3.2E-09	3.1E-09	3.2E-09
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	6.0E-08	5.6E-08	5.5E-08	5.5E-08
Vanadium		2.1E-05	1.9E-05	1.9E-05	1.9E-05
Zinc		2.1E-04	1.9E-04	1.9E-04	1.9E-04
Field-Related Chronic HQ _{ing} -sum		6.2E-03	5.8E-03	5.7E-03	5.7E-03

^a CASRN for metals and metalloids are not included as the Study did not speciate these chemicals.

^b Lead is included in Chronic HQ_{ing} calculation (see Section G.2.2 for details).



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Table G-4. Chronic Ingestion Hazard Quotient for Individual Chemical (Chronic HQ_{ing}, unitless), Chronic Ingestion Route Total Hazard Quotients (Chronic HQ_{ing-sum}, unitless) for Field-Related General Chemicals—Combined Gender Spectators

Chemical	CASRN ^a	Chronic HQ _{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	1.2E-09	8.6E-08	4.1E-08	2.8E-08	2.2E-09	1.3E-09	1.2E-09	1.1E-09	1.1E-09
Aluminum		2.9E-04	2.0E-02	9.5E-03	6.7E-03	5.2E-04	3.0E-04	2.8E-04	2.7E-04	2.7E-04
Aniline	62-53-3	5.9E-08	4.1E-06	1.9E-06	1.4E-06	1.1E-07	6.1E-08	5.7E-08	5.4E-08	5.4E-08
Anthracene	120-12-7	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
Anthracene, 2-methyl-	613-12-7	2.6E-09	1.8E-07	8.5E-08	6.0E-08	4.7E-09	2.7E-09	2.5E-09	2.4E-09	2.4E-09
Anthracene, 9,10-dimethyl	781-43-1	2.1E-11	1.5E-09	6.9E-10	4.8E-10	3.8E-11	2.2E-11	2.0E-11	1.9E-11	1.9E-11
Anthracene, 9,10-diphenyl-	1499-10-1	1.6E-10	1.1E-08	5.3E-09	3.7E-09	2.9E-10	1.7E-10	1.6E-10	1.5E-10	1.5E-10
Anthracene, 9-phenyl	602-55-1	2.4E-10	1.7E-08	8.1E-09	5.6E-09	4.4E-10	2.5E-10	2.4E-10	2.3E-10	2.3E-10
Antimony		4.0E-05	2.8E-03	1.3E-03	9.3E-04	7.3E-05	4.1E-05	3.9E-05	3.7E-05	3.7E-05
Barium		5.1E-06	3.5E-04	1.7E-04	1.2E-04	9.2E-06	5.3E-06	5.0E-06	4.7E-06	4.7E-06
Benzene, n-butyl-	104-51-8	8.3E-10	5.7E-08	2.7E-08	1.9E-08	1.5E-09	8.5E-10	8.1E-10	7.6E-10	7.6E-10
1,4-Benzenediamine, N-(1,3-dimethylbutyl)-N'-phenyl-	793-24-8	3.8E-06	2.6E-04	1.2E-04	8.7E-05	6.8E-06	3.9E-06	3.7E-06	3.5E-06	3.5E-06
Benz[a]anthracene	56-55-3	2.3E-09	1.6E-07	7.4E-08	5.2E-08	4.1E-09	2.3E-09	2.2E-09	2.1E-09	2.1E-09
Benzo[b]fluoranthene	205-99-2	2.3E-08	1.6E-06	7.7E-07	5.4E-07	4.2E-08	2.4E-08	2.3E-08	2.1E-08	2.2E-08
7H-Benzo[c]fluorene	205-12-9	4.5E-09	3.1E-07	1.5E-07	1.0E-07	8.1E-09	4.6E-09	4.4E-09	4.1E-09	4.2E-09
Benzo[k]fluoranthene	207-08-9	7.6E-09	5.3E-07	2.5E-07	1.7E-07	1.4E-08	7.8E-09	7.4E-09	7.0E-09	7.0E-09
Benzothiazole	95-16-9	2.3E-04	1.6E-02	7.6E-03	5.3E-03	4.2E-04	2.4E-04	2.2E-04	2.1E-04	2.1E-04
Benzothiazole, 2-phenyl-	883-93-2	2.5E-05	1.7E-03	8.1E-04	5.7E-04	4.5E-05	2.5E-05	2.4E-05	2.3E-05	2.3E-05
Benzothiazolone	934-34-9	5.9E-04	4.1E-02	1.9E-02	1.4E-02	1.1E-03	6.0E-04	5.7E-04	5.4E-04	5.4E-04
Benzyl butyl phthalate	85-68-7	2.9E-08	2.0E-06	9.7E-07	6.8E-07	5.3E-08	3.0E-08	2.9E-08	2.7E-08	2.7E-08



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Chemical	CASRN ^a	Chronic HQ _{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
Beryllium		7.4E-08	5.1E-06	2.4E-06	1.7E-06	1.3E-07	7.6E-08	7.2E-08	6.8E-08	6.8E-08
Butylated Hydroxytoluene	128-37-0	5.2E-10	3.6E-08	1.7E-08	1.2E-08	9.5E-10	5.4E-10	5.1E-10	4.8E-10	4.8E-10
Cadmium		6.7E-05	4.6E-03	2.2E-03	1.5E-03	1.2E-04	6.9E-05	6.5E-05	6.1E-05	6.2E-05
Chromium		5.6E-05	3.9E-03	1.8E-03	1.3E-03	1.0E-04	5.7E-05	5.4E-05	5.1E-05	5.1E-05
Cobalt		8.4E-04	5.9E-02	2.8E-02	1.9E-02	1.5E-03	8.7E-04	8.2E-04	7.8E-04	7.8E-04
Copper		3.5E-06	2.5E-04	1.2E-04	8.2E-05	6.4E-06	3.6E-06	3.4E-06	3.3E-06	3.3E-06
Cyclohexyl isothiocyanate	1122-82-3	1.8E-04	1.3E-02	6.0E-03	4.2E-03	3.3E-04	1.9E-04	1.8E-04	1.7E-04	1.7E-04
Dibenz[a,h]anthracene	53-70-3	1.3E-10	9.3E-09	4.4E-09	3.1E-09	2.4E-10	1.4E-10	1.3E-10	1.2E-10	1.2E-10
Dibenzothiophene	132-65-0	1.6E-08	1.1E-06	5.2E-07	3.6E-07	2.8E-08	1.6E-08	1.5E-08	1.4E-08	1.5E-08
Dibutyl phthalate	84-74-2	1.1E-07	7.8E-06	3.7E-06	2.6E-06	2.0E-07	1.1E-07	1.1E-07	1.0E-07	1.0E-07
Diethyl Phthalate	84-66-2	1.2E-09	8.2E-08	3.9E-08	2.7E-08	2.1E-09	1.2E-09	1.1E-09	1.1E-09	1.1E-09
Diisobutyl Phthalate	84-69-5	1.1E-07	7.8E-06	3.7E-06	2.6E-06	2.0E-07	1.2E-07	1.1E-07	1.0E-07	1.0E-07
Diisooctylphthalate	27554-26-3	2.4E-06	1.6E-04	7.8E-05	5.5E-05	4.3E-06	2.4E-06	2.3E-06	2.2E-06	2.2E-06
Di-n-octyl phthalate	117-84-0	2.3E-07	1.6E-05	7.7E-06	5.4E-06	4.2E-07	2.4E-07	2.3E-07	2.1E-07	2.2E-07
2,5-di-tert-Butyl-1,4-benzoquinone	2460-77-7	9.7E-09	6.7E-07	3.2E-07	2.2E-07	1.7E-08	9.9E-09	9.4E-09	8.9E-09	8.9E-09
3,5-di-tert-Butyl-4-hydroxybenzaldehyde	1620-98-0	1.4E-08	9.6E-07	4.5E-07	3.2E-07	2.5E-08	1.4E-08	1.3E-08	1.3E-08	1.3E-08
Fluoranthene	206-44-0	1.3E-07	9.1E-06	4.3E-06	3.0E-06	2.4E-07	1.4E-07	1.3E-07	1.2E-07	1.2E-07
Fluorene	86-73-7	1.7E-09	1.2E-07	5.6E-08	4.0E-08	3.1E-09	1.8E-09	1.7E-09	1.6E-09	1.6E-09
Hexadecane	544-76-3	1.6E-06	1.1E-04	5.4E-05	3.8E-05	3.0E-06	1.7E-06	1.6E-06	1.5E-06	1.5E-06
1-Hydroxypyrene	5315-79-7	8.9E-09	6.2E-07	2.9E-07	2.1E-07	1.6E-08	9.2E-09	8.7E-09	8.2E-09	8.3E-09
Lead ^b		2.3E-03	1.6E-01	7.7E-02	5.4E-02	4.2E-03	2.4E-03	2.3E-03	2.2E-03	2.2E-03
Manganese		1.7E-06	1.1E-04	5.4E-05	3.8E-05	3.0E-06	1.7E-06	1.6E-06	1.5E-06	1.5E-06



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Chemical	CASRN ^a	Chronic HQ _{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
2-(Methylthio)benzothiazole	615-22-5	8.8E-07	6.1E-05	2.9E-05	2.0E-05	1.6E-06	9.1E-07	8.6E-07	8.1E-07	8.1E-07
Molybdenum		8.5E-08	5.9E-06	2.8E-06	2.0E-06	1.5E-07	8.8E-08	8.3E-08	7.9E-08	7.9E-08
Naphthalene	91-20-3	6.2E-10	4.3E-08	2.0E-08	1.4E-08	1.1E-09	6.3E-10	6.0E-10	5.7E-10	5.7E-10
Naphthalene, 1-methyl-	90-12-0	4.5E-09	3.2E-07	1.5E-07	1.0E-07	8.2E-09	4.7E-09	4.4E-09	4.2E-09	4.2E-09
Naphthalene, 1,2-dimethyl-	573-98-8	3.7E-10	2.6E-08	1.2E-08	8.6E-09	6.7E-10	3.8E-10	3.6E-10	3.4E-10	3.4E-10
Naphthalene, 1,6-dimethyl-	575-43-9	2.4E-09	1.7E-07	8.0E-08	5.6E-08	4.4E-09	2.5E-09	2.4E-09	2.3E-09	2.3E-09
Naphthalene, 2-(bromomethyl)-	939-26-4	6.4E-08	4.5E-06	2.1E-06	1.5E-06	1.2E-07	6.6E-08	6.3E-08	5.9E-08	5.9E-08
Naphthalene, 2,3-dimethyl-	581-40-8	1.9E-08	1.3E-06	6.2E-07	4.4E-07	3.4E-08	1.9E-08	1.8E-08	1.7E-08	1.7E-08
Naphthalene, 2-methyl	91-57-6	7.2E-09	5.0E-07	2.4E-07	1.7E-07	1.3E-08	7.4E-09	7.0E-09	6.6E-09	6.6E-09
1-Octadecene	112-88-9	3.6E-06	2.5E-04	1.2E-04	8.4E-05	6.6E-06	3.7E-06	3.5E-06	3.4E-06	3.4E-06
17-Pentatriacontene	6971-40-0	4.6E-10	3.2E-08	1.5E-08	1.1E-08	8.4E-10	4.8E-10	4.5E-10	4.3E-10	4.3E-10
Phenanthrene	85-01-8	7.7E-09	5.3E-07	2.5E-07	1.8E-07	1.4E-08	7.9E-09	7.5E-09	7.1E-09	7.1E-09
Phenanthrene, 1-methyl	832-69-9	2.0E-09	1.4E-07	6.7E-08	4.7E-08	3.7E-09	2.1E-09	2.0E-09	1.9E-09	1.9E-09
Phenanthrene, 2-methyl-	2531-84-2	2.6E-09	1.8E-07	8.7E-08	6.1E-08	4.8E-09	2.7E-09	2.6E-09	2.4E-09	2.4E-09
Phenanthrene, 3-methyl	832-71-3	4.4E-09	3.0E-07	1.4E-07	1.0E-07	7.9E-09	4.5E-09	4.2E-09	4.0E-09	4.0E-09
N-Phenylbenzamide	93-98-1	7.3E-07	5.1E-05	2.4E-05	1.7E-05	1.3E-06	7.5E-07	7.1E-07	6.7E-07	6.8E-07
Phthalimide	85-41-6	9.2E-09	6.4E-07	3.0E-07	2.1E-07	1.7E-08	9.5E-09	9.0E-09	8.5E-09	8.5E-09
Pyrene	129-00-0	3.7E-07	2.6E-05	1.2E-05	8.5E-06	6.7E-07	3.8E-07	3.6E-07	3.4E-07	3.4E-07
Pyridine, 2-(4-methylphenyl)-	4467-06-5	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
Selenium		2.8E-07	1.9E-05	9.2E-06	6.5E-06	5.1E-07	2.9E-07	2.7E-07	2.6E-07	2.6E-07
Strontium		3.3E-07	2.3E-05	1.1E-05	7.6E-06	6.0E-07	3.4E-07	3.2E-07	3.0E-07	3.1E-07
Thallium		5.6E-06	3.9E-04	1.8E-04	1.3E-04	1.0E-05	5.7E-06	5.4E-06	5.1E-06	5.1E-06



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Chemical	CASRN ^a	Chronic HQ _{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
Tin		7.3E-08	5.1E-06	2.4E-06	1.7E-06	1.3E-07	7.5E-08	7.1E-08	6.7E-08	6.7E-08
Triethylene glycol monobutyl ether	143-22-6	2.7E-09	1.9E-07	8.9E-08	6.2E-08	4.9E-09	2.8E-09	2.6E-09	2.5E-09	2.5E-09
5,9-Undecadien-2-one, 6,10-dimethyl-	689-67-8	4.7E-08	3.3E-06	1.5E-06	1.1E-06	8.5E-08	4.8E-08	4.6E-08	4.3E-08	4.3E-08
Vanadium		1.6E-05	1.1E-03	5.3E-04	3.7E-04	2.9E-05	1.7E-05	1.6E-05	1.5E-05	1.5E-05
Zinc		1.6E-04	1.1E-02	5.3E-03	3.8E-03	2.9E-04	1.7E-04	1.6E-04	1.5E-04	1.5E-04
Field-Related Chronic HQ _{ing} -sum		1.2E-09	8.6E-08	4.1E-08	2.8E-08	2.2E-09	1.3E-09	1.2E-09	1.1E-09	1.1E-09

^a CASRN for metals and metalloids are not included as the Study did not speciate these chemicals.

^b Lead is included in Chronic HQ_{ing} calculation (see Section G.2.2 for details).

INDIVIDUAL FIELD ASSESSMENT (Table G-128)

Table G-5. Field-Specific^a Chronic Ingestion Route Total Hazard Quotients for **Field-Related General Chemicals^b** (Chronic HQ_{ing}-sum-field, unitless)—Combined Gender

Receptor Category and Age Group	Chronic HQ _{ing} -sum-field					
	Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Athletes 2<6 years	3.9E-02	9.7E-02	5.2E-02	7.9E-02	1.9E-01	2.8E-01
Athletes 6<11 years	2.6E-02	6.4E-02	3.5E-02	5.3E-02	1.2E-01	1.9E-01
Athletes 11<16 years	2.0E-02	5.0E-02	2.7E-02	4.1E-02	9.7E-02	1.5E-01
Athletes 16<30 years	2.2E-02	5.6E-02	3.0E-02	4.5E-02	1.1E-01	1.6E-01
Athletes 30<40 years	1.5E-02	3.7E-02	2.0E-02	3.0E-02	7.2E-02	1.1E-01
Athletes 40<50 years	1.3E-02	3.1E-02	1.7E-02	2.6E-02	6.1E-02	9.3E-02
Athletes 50<70 years	1.3E-02	3.2E-02	1.7E-02	2.6E-02	6.2E-02	9.5E-02
Coaches 16<30 years	5.6E-03	1.4E-02	7.6E-03	1.1E-02	2.7E-02	4.1E-02
Coaches 30<40 years	5.3E-03	1.3E-02	7.1E-03	1.1E-02	2.6E-02	3.9E-02
Coaches 40<50 years	5.2E-03	1.3E-02	6.9E-03	1.1E-02	2.5E-02	3.8E-02
Coaches 50<70 years	5.2E-03	1.3E-02	7.0E-03	1.1E-02	2.5E-02	3.8E-02
Referees 16<30 years	2.5E-03	6.2E-03	3.3E-03	5.0E-03	1.2E-02	1.8E-02
Referees 30<40 years	2.3E-03	5.8E-03	3.1E-03	4.7E-03	1.1E-02	1.7E-02
Referees 40<50 years	2.3E-03	5.7E-03	3.0E-03	4.6E-03	1.1E-02	1.7E-02
Referees 50<70 years	2.3E-03	5.7E-03	3.1E-03	4.6E-03	1.1E-02	1.7E-02
Spectators Third trimester fetus	2.0E-03	4.9E-03	2.6E-03	4.0E-03	9.4E-03	1.4E-02
Spectators 0<2 years	1.4E-01	3.4E-01	1.8E-01	2.8E-01	6.6E-01	1.0E+00
Spectators 2<6 years	6.4E-02	1.6E-01	8.6E-02	1.3E-01	3.1E-01	4.7E-01
Spectators 6<11 years	4.5E-02	1.1E-01	6.0E-02	9.2E-02	2.2E-01	3.3E-01



Receptor Category and Age Group	Chronic HQ _{ing-sum-field}					
	Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Spectators 11<16 years	3.5E-03	8.8E-03	4.7E-03	7.2E-03	1.7E-02	2.6E-02
Spectators 16<30 years	2.0E-03	5.0E-03	2.7E-03	4.1E-03	9.7E-03	1.5E-02
Spectators 30<40 years	1.9E-03	4.7E-03	2.5E-03	3.9E-03	9.2E-03	1.4E-02
Spectators 40<50 years	1.8E-03	4.5E-03	2.4E-03	3.7E-03	8.7E-03	1.3E-02
Spectators 50<70 years	1.8E-03	4.5E-03	2.4E-03	3.7E-03	8.7E-03	1.3E-02

^a 35 field-specific Chronic HQ_{ing-sum-field} are included in the table.

^b Lead is included in Chronic HQ_{ing} calculation (see Section G.2.2 for details).

G.2.9. One-Day Multi-Route Non-Cancer Hazard Index (One-Day HI_{DART}) for DARTs

Off-field One-Day HI_{DART} for non-field-related DARTs are not assessed since all DARTs detected off-field were field-related.

INDIVIDUAL FIELD ASSESSMENT (Table G-129 to Table G-133)

Table G-1. On-Field Field-Specific^a One-Day Multi-Route Hazard Index (One-Day HI_{DART}, unitless) for All DARTs—Combined Gender

Receptor Category and Age Group	One-Day HI _{DART}					
	Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Athletes 2<6 years	1.6E-04	3.6E-03	3.5E-03	1.6E-03	9.9E-03	1.3E-02
Athletes 6<11 years	1.4E-04	2.7E-03	2.7E-03	1.2E-03	7.5E-03	9.6E-03
Athletes 11<16 years	1.2E-04	3.9E-01	4.0E-01	1.8E-01	1.1E+00	1.3E+00
Athletes 16<30 years	1.2E-04	5.8E-01	5.8E-01	2.7E-01	1.7E+00	1.8E+00
Athletes 30<40 years	1.0E-04	3.9E-01	3.9E-01	1.8E-01	1.1E+00	1.2E+00
Athletes 40<50 years	1.0E-04	3.9E-01	3.9E-01	1.8E-01	1.1E+00	1.2E+00
Athletes 50<70 years	1.1E-04	4.2E-01	4.2E-01	1.9E-01	1.2E+00	1.3E+00
Coaches 16<30 years	5.8E-05	2.5E-01	2.5E-01	1.1E-01	7.2E-01	7.8E-01
Coaches 30<40 years	5.3E-05	2.1E-01	2.1E-01	9.9E-02	6.3E-01	6.8E-01
Coaches 40<50 years	5.4E-05	2.2E-01	2.2E-01	1.0E-01	6.3E-01	6.9E-01
Coaches 50<70 years	5.4E-05	2.2E-01	2.2E-01	1.0E-01	6.4E-01	6.9E-01
Referees 16<30 years	5.6E-05	2.3E-01	2.3E-01	1.1E-01	6.7E-01	7.3E-01
Referees 30<40 years	5.1E-05	2.0E-01	2.0E-01	9.2E-02	5.8E-01	6.4E-01
Referees 40<50 years	5.2E-05	2.0E-01	2.0E-01	9.3E-02	5.9E-01	6.4E-01
Referees 50<70 years	5.2E-05	2.0E-01	2.0E-01	9.3E-02	5.9E-01	6.4E-01
Spectators Third trimester fetus	2.3E-05	2.6E-04	2.4E-04	1.4E-04	6.9E-04	8.6E-04
Spectators 0<2 years	1.5E-04	2.0E-03	1.9E-03	9.9E-04	5.5E-03	6.9E-03
Spectators 2<6 years	9.3E-05	1.1E-03	1.0E-03	5.7E-04	2.9E-03	3.6E-03
Spectators 6<11 years	8.6E-05	1.0E-03	9.6E-04	5.4E-04	2.8E-03	3.5E-03
Spectators 11<16 years	8.1E-05	7.4E-02	7.3E-02	3.4E-02	2.1E-01	2.3E-01
Spectators 16<30 years	3.7E-05	4.8E-02	4.8E-02	2.2E-02	1.4E-01	1.5E-01
Spectators 30<40 years	3.2E-05	4.2E-02	4.2E-02	2.0E-02	1.2E-01	1.4E-01



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Spectators 40<50 years	3.3E-05	4.3E-02	4.3E-02	2.0E-02	1.2E-01	1.4E-01
Spectators 50<70 years	3.1E-05	4.3E-02	4.3E-02	2.0E-02	1.3E-01	1.4E-01

^a 35 field-specific One-Day HI_{DART} are included in this table.

Table G-2. On-Field Field-Specific^a One-Day Multi-Route Hazard Index (One-Day HI_{DART}, unitless) for Field-Related DARTs—Combined Gender

Receptor Category and Age Group	Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Athletes 2<6 years	9.4E-05	3.5E-03	3.5E-03	1.5E-03	9.8E-03	1.2E-02
Athletes 6<11 years	8.6E-05	2.7E-03	2.6E-03	1.2E-03	7.5E-03	9.4E-03
Athletes 11<16 years	7.3E-05	3.9E-01	4.0E-01	1.8E-01	1.1E+00	1.3E+00
Athletes 16<30 years	6.4E-05	5.8E-01	5.8E-01	2.7E-01	1.7E+00	1.8E+00
Athletes 30<40 years	6.0E-05	3.9E-01	3.9E-01	1.8E-01	1.1E+00	1.2E+00
Athletes 40<50 years	6.0E-05	3.9E-01	3.9E-01	1.8E-01	1.1E+00	1.2E+00
Athletes 50<70 years	6.0E-05	4.2E-01	4.2E-01	1.9E-01	1.2E+00	1.3E+00
Coaches 16<30 years	3.2E-05	2.5E-01	2.5E-01	1.1E-01	7.2E-01	7.8E-01
Coaches 30<40 years	3.0E-05	2.1E-01	2.1E-01	9.9E-02	6.3E-01	6.8E-01
Coaches 40<50 years	3.0E-05	2.2E-01	2.2E-01	1.0E-01	6.3E-01	6.9E-01
Coaches 50<70 years	3.0E-05	2.2E-01	2.2E-01	1.0E-01	6.4E-01	6.9E-01
Referees 16<30 years	3.2E-05	2.3E-01	2.3E-01	1.1E-01	6.7E-01	7.3E-01
Referees 30<40 years	3.0E-05	2.0E-01	2.0E-01	9.2E-02	5.8E-01	6.4E-01
Referees 40<50 years	3.0E-05	2.0E-01	2.0E-01	9.3E-02	5.9E-01	6.4E-01
Referees 50<70 years	3.0E-05	2.0E-01	2.0E-01	9.3E-02	5.9E-01	6.4E-01
Spectators Third trimester fetus	2.0E-05	2.5E-04	2.4E-04	1.4E-04	6.9E-04	8.5E-04
Spectators 0<2 years	1.3E-04	2.0E-03	1.9E-03	9.7E-04	5.5E-03	6.8E-03
Spectators 2<6 years	8.0E-05	1.1E-03	1.0E-03	5.6E-04	2.9E-03	3.6E-03
Spectators 6<11 years	7.4E-05	1.0E-03	9.5E-04	5.3E-04	2.8E-03	3.4E-03
Spectators 11<16 years	7.3E-05	7.4E-02	7.3E-02	3.4E-02	2.1E-01	2.3E-01
Spectators 16<30 years	3.2E-05	4.8E-02	4.8E-02	2.2E-02	1.4E-01	1.5E-01
Spectators 30<40 years	2.8E-05	4.2E-02	4.2E-02	2.0E-02	1.2E-01	1.3E-01
Spectators 40<50 years	2.8E-05	4.3E-02	4.3E-02	2.0E-02	1.2E-01	1.4E-01
Spectators 50<70 years	2.6E-05	4.3E-02	4.3E-02	2.0E-02	1.3E-01	1.4E-01

^a 35 field-specific One-Day HI_{DART} are included in this table.

Table G-3. On-Field Field-Specific^a One-Day Multi-Route Hazard Index (One-Day HI_{DART}, unitless) for Non-Field-Related DARTs—Combined Gender

Receptor Category and Age Group	One-Day HI _{DART}					
	Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Athletes 2<6 years	0.0E+00	8.4E-05	6.0E-05	6.7E-05	1.8E-04	2.1E-04
Athletes 6<11 years	0.0E+00	6.4E-05	4.6E-05	5.0E-05	1.3E-04	1.6E-04



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Receptor Category and Age Group	One-Day HI _{DART}					
	Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Athletes 11<16 years	0.0E+00	5.3E-05	3.8E-05	4.2E-05	1.1E-04	1.3E-04
Athletes 16<30 years	0.0E+00	7.8E-05	5.6E-05	6.2E-05	1.6E-04	1.9E-04
Athletes 30<40 years	0.0E+00	5.2E-05	3.7E-05	4.1E-05	1.1E-04	1.3E-04
Athletes 40<50 years	0.0E+00	5.2E-05	3.7E-05	4.1E-05	1.1E-04	1.3E-04
Athletes 50<70 years	0.0E+00	5.6E-05	4.1E-05	4.5E-05	1.2E-04	1.4E-04
Coaches 16<30 years	0.0E+00	3.3E-05	2.4E-05	2.6E-05	7.0E-05	8.1E-05
Coaches 30<40 years	0.0E+00	2.9E-05	2.1E-05	2.3E-05	6.1E-05	7.1E-05
Coaches 40<50 years	0.0E+00	2.9E-05	2.1E-05	2.3E-05	6.2E-05	7.2E-05
Coaches 50<70 years	0.0E+00	2.9E-05	2.1E-05	2.3E-05	6.2E-05	7.2E-05
Referees 16<30 years	0.0E+00	3.1E-05	2.2E-05	2.4E-05	6.5E-05	7.5E-05
Referees 30<40 years	0.0E+00	2.7E-05	1.9E-05	2.1E-05	5.7E-05	6.6E-05
Referees 40<50 years	0.0E+00	2.7E-05	1.9E-05	2.2E-05	5.7E-05	6.7E-05
Referees 50<70 years	0.0E+00	2.7E-05	2.0E-05	2.2E-05	5.8E-05	6.7E-05
Spectators Third trimester fetus	0.0E+00	5.7E-06	4.1E-06	4.5E-06	1.2E-05	1.4E-05
Spectators 0<2 years	0.0E+00	4.6E-05	3.3E-05	3.6E-05	9.6E-05	1.1E-04
Spectators 2<6 years	0.0E+00	2.4E-05	1.7E-05	1.9E-05	5.1E-05	5.9E-05
Spectators 6<11 years	0.0E+00	2.3E-05	1.6E-05	1.8E-05	4.8E-05	5.6E-05
Spectators 11<16 years	0.0E+00	9.9E-06	7.1E-06	7.8E-06	2.1E-05	2.4E-05
Spectators 16<30 years	0.0E+00	6.5E-06	4.7E-06	5.2E-06	1.4E-05	1.6E-05
Spectators 30<40 years	0.0E+00	5.7E-06	4.1E-06	4.5E-06	1.2E-05	1.4E-05
Spectators 40<50 years	0.0E+00	5.7E-06	4.1E-06	4.6E-06	1.2E-05	1.4E-05
Spectators 50<70 years	0.0E+00	5.8E-06	4.1E-06	4.6E-06	1.2E-05	1.4E-05

^a 34 field-specific HI_{DART} are included in this table.

^b Non-Field-Related Chemicals exposed only via inhalation. All chemicals detected in crumb rubber (exposed via dermal or oral route) are designated as Field-Related Chemicals. For the inhalation routes sum of Non-Field-Related Chemicals, One-Day HQ_{inh-DART-sum}, equals to HI_{DART} for that group of chemicals.



Table G-4. Off-Field Field-Specific^a One-Day Multi-Route Hazard Index (One-Day HI_{DART}, unitless) for All DARTs—Combined Gender Spectators

Spectator Receptor Age Group	One-Day HI _{DART} ^b					
	Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Third trimester fetus	0	2.5E-04	3.1E-04	1.3E-04	8.1E-04	1.4E-03
0<2 years	0	2.0E-03	2.5E-03	1.1E-03	6.5E-03	1.2E-02
2<6 years	0	1.1E-03	1.3E-03	5.6E-04	3.4E-03	6.1E-03
6<11 years	0	1.0E-03	1.3E-03	5.3E-04	3.3E-03	5.8E-03
11<16 years	0	8.0E-02	1.0E-01	4.5E-02	2.7E-01	4.5E-01
16<30 years	0	5.3E-02	6.6E-02	3.0E-02	1.8E-01	3.0E-01
30<40 years	0	4.6E-02	5.8E-02	2.6E-02	1.6E-01	2.6E-01
40<50 years	0	4.7E-02	5.9E-02	2.6E-02	1.6E-01	2.6E-01
50<70 years	0	4.7E-02	5.9E-02	2.7E-02	1.6E-01	2.6E-01

^a 33 field-specific HI_{DART} are included in this table.

^b No crumb rubber samples were collected at off-field locations. Air samples were collected at off-field locations and chemicals detected were used for inhalation exposure assessment. Therefore Off-Field HI_{DART} for all DARTs equals to the inhalation route sum of the One-Day HQ_{inh-DART} (One-Day HQ_{inh-DART-sum}) for the same group. All DARTs detected off-field were field-related that Off-Field HI_{DART} for all DARTs equals to Off-Field HI_{DART} for field-related DARTs.

Table G-5. Off-Field Field-Specific^a One-Day Multi-Route Hazard Index (One-Day HI_{DART}, unitless) for Field-Related DARTs—Combined Gender Spectators

Spectator Receptor Age Group	One-Day HI _{DART} ^b					
	Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Third trimester fetus	0.0E+00	2.5E-04	3.1E-04	1.3E-04	8.1E-04	1.4E-03
0<2 years	0.0E+00	2.0E-03	2.5E-03	1.1E-03	6.5E-03	1.2E-02
2<6 years	0.0E+00	1.1E-03	1.3E-03	5.6E-04	3.4E-03	6.1E-03
6<11 years	0.0E+00	1.0E-03	1.3E-03	5.3E-04	3.3E-03	5.8E-03
11<16 years	0.0E+00	8.0E-02	1.0E-01	4.5E-02	2.7E-01	4.5E-01
16<30 years	0.0E+00	5.3E-02	6.6E-02	3.0E-02	1.8E-01	3.0E-01
30<40 years	0.0E+00	4.6E-02	5.8E-02	2.6E-02	1.6E-01	2.6E-01
40<50 years	0.0E+00	4.7E-02	5.9E-02	2.6E-02	1.6E-01	2.6E-01



Spectator Receptor Age Group	One-Day HI _{DART^b}					
	Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
50<70 years	0.0E+00	4.7E-02	5.9E-02	2.7E-02	1.6E-01	2.6E-01

^a 33 field-specific HI_{DART} are included in this table.

^b No crumb rubber samples were collected at off-field locations. Air samples were collected at off-field locations and chemicals detected were used for inhalation exposure assessment. Therefore Off-Field HI_{DART} for Field-Related DARTs equals to the inhalation route sum of the One-Day HQ_{inh-DART} (One-Day HQ_{inh-DART-sum}) for this group of DARTs.

G.2.10. Chronic Multi-Route Non-Cancer Hazard Index for General Chemicals (Chronic HI)

Table G-1. On-Field Chronic Multi-Route Hazard Index for General Chemicals (Chronic HI)—Combined Gender

Receptor Category and Age Group	On-Field Chronic HI		
	All General Chemicals	Field-Related General Chemicals	Non-Field-Related Chemicals ^a
Athletes 2<6 years	2.5E-01	2.0E-01	5.5E-02
Athletes 6<11 years	2.6E-01	1.9E-01	7.1E-02
Athletes 11<16 years	2.4E-01	1.8E-01	7.0E-02
Athletes 16<30 years	4.2E-01	2.9E-01	1.3E-01
Athletes 30<40 years	2.8E-01	1.9E-01	8.6E-02
Athletes 40<50 years	2.7E-01	1.8E-01	8.5E-02
Athletes 50<70 years	2.6E-01	1.8E-01	8.3E-02
Athletes Lifetime Average ^b	2.9E-01	2.0E-01	8.8E-02
Coaches 16<30 years	1.7E-01	1.1E-01	5.4E-02
Coaches 30<40 years	1.5E-01	9.8E-02	4.7E-02
Coaches 40<50 years	1.5E-01	9.9E-02	4.8E-02
Coaches 50<70 years	1.5E-01	9.9E-02	4.8E-02
Coaches Lifetime Average ^b	1.2E-01	7.9E-02	3.8E-02
Referees 16<30 years	6.2E-02	4.2E-02	2.0E-02
Referees 30<40 years	5.5E-02	3.7E-02	1.8E-02
Referees 40<50 years	5.5E-02	3.8E-02	1.8E-02
Referees 50<70 years	5.6E-02	3.8E-02	1.8E-02
Referees Lifetime Average ^b	4.4E-02	3.0E-02	1.4E-02
Spectators Third trimester fetus	2.6E-02	1.8E-02	7.3E-03
Spectators 0<2 years	5.0E-01	4.5E-01	5.9E-02
Spectators 2<6 years	2.5E-01	2.2E-01	3.1E-02
Spectators 6<11 years	2.0E-01	1.7E-01	3.0E-02



Receptor Category and Age Group	On-Field Chronic HI		
	All General Chemicals	Field-Related General Chemicals	Non-Field-Related Chemicals ^a
Spectators 11<16 years	4.6E-02	3.3E-02	1.3E-02
Spectators 16<30 years	2.9E-02	2.1E-02	8.4E-03
Spectators 30<40 years	2.6E-02	1.8E-02	7.3E-03
Spectators 40<50 years	2.6E-02	1.8E-02	7.4E-03
Spectators 50<70 years	2.6E-02	1.8E-02	7.4E-03
Spectators Lifetime Average ^b	6.7E-02	5.4E-02	1.2E-02

^a Exposure to Non-Field-Related chemicals via inhalation was the only route assessed. All chemicals present in crumb rubber were assessed as Field-Related Chemicals.

^b Lifetime Average Chronic HI is the 70-year weighted lifetime average of all age groups within a receptor category.

Table G-2. Off-Field^a Chronic Multi-Route Hazard Index for General Chemicals (Chronic HI) for Combined Gender Spectators

Spectator Receptor Age Group	Off-Field Chronic HI		
	All Chemicals	Field-Related Chemicals	Non-Field Related Chemical
Third trimester fetus	3.3E-02	1.3E-02	3.3E-02
0<2 years	1.4E-02	5.4E-03	1.4E-02
2<6 years	1.1E-01	4.3E-02	1.1E-01
6<11 years	5.7E-02	2.3E-02	5.7E-02
11<16 years	5.5E-02	2.2E-02	5.5E-02
16<30 years	2.4E-02	9.4E-03	2.4E-02
30<40 years	1.6E-02	6.2E-03	1.6E-02
40<50 years	1.4E-02	5.4E-03	1.4E-02
50<70 years	1.4E-02	5.5E-03	1.4E-02
Lifetime Average ^b	2.8E-02	1.1E-02	2.8E-02

^a Only inhalation route is assessed for off-field.

^b Lifetime Average Chronic HI is the 70-year weighted lifetime average of all age groups within a receptor category.

INDIVIDUAL FIELD ASSESSMENT (Table G-136 to Table G-141)

Table G-3. On-Field Field-Specific^a Chronic Hazard Index (Chronic HI_{field}, unitless) for All General Chemicals^b—Combined Gender

Receptor Category and Age Group	Chronic HI _{field}					
	Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Athletes 2<6 years	8.9E-02	2.5E-01	1.3E-01	2.2E-01	4.8E-01	5.9E-01
Athletes 6<11 years	7.3E-02	2.6E-01	1.5E-01	2.1E-01	5.3E-01	6.2E-01
Athletes 11<16 years	6.2E-02	2.4E-01	1.4E-01	1.9E-01	5.0E-01	5.8E-01



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Receptor Category and Age Group	Chronic HI _{field}					
	Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Athletes 16<30 years	9.0E-02	4.2E-01	2.6E-01	3.4E-01	8.8E-01	1.0E+00
Athletes 30<40 years	5.9E-02	2.8E-01	1.7E-01	2.3E-01	5.7E-01	6.6E-01
Athletes 40<50 years	5.5E-02	2.7E-01	1.6E-01	2.2E-01	5.6E-01	6.4E-01
Athletes 50<70 years	5.5E-02	2.6E-01	1.6E-01	2.2E-01	5.5E-01	6.3E-01
Athletes Lifetime Average ^c	6.5E-02	2.9E-01	1.7E-01	2.3E-01	5.9E-01	6.9E-01
Coaches 16<30 years	3.1E-02	1.6E-01	1.0E-01	1.4E-01	3.5E-01	4.0E-01
Coaches 30<40 years	2.8E-02	1.4E-01	9.1E-02	1.2E-01	3.1E-01	3.5E-01
Coaches 40<50 years	2.8E-02	1.5E-01	9.2E-02	1.2E-01	3.1E-01	3.5E-01
Coaches 50<70 years	2.8E-02	1.5E-01	9.2E-02	1.2E-01	3.1E-01	3.5E-01
Coaches Lifetime Average ^c	2.2E-02	1.2E-01	7.3E-02	9.6E-02	2.5E-01	2.8E-01
Referees 16<30 years	1.2E-02	6.2E-02	3.9E-02	5.1E-02	1.3E-01	1.5E-01
Referees 30<40 years	1.1E-02	5.5E-02	3.4E-02	4.5E-02	1.2E-01	1.3E-01
Referees 40<50 years	1.1E-02	5.5E-02	3.4E-02	4.6E-02	1.2E-01	1.3E-01
Referees 50<70 years	1.1E-02	5.5E-02	3.4E-02	4.6E-02	1.2E-01	1.3E-01
Referees Lifetime Average ^c	8.8E-03	4.4E-02	2.7E-02	3.6E-02	9.3E-02	1.1E-01
Spectators Third trimester fetus	6.9E-03	2.6E-02	1.5E-02	2.1E-02	5.2E-02	6.1E-02
Spectators 0<2 years	2.2E-01	5.0E-01	2.5E-01	4.3E-01	1.0E+00	1.2E+00
Spectators 2<6 years	1.1E-01	2.5E-01	1.2E-01	2.1E-01	5.0E-01	5.8E-01
Spectators 6<11 years	8.3E-02	2.0E-01	9.7E-02	1.7E-01	3.9E-01	4.5E-01
Spectators 11<16 years	1.3E-02	4.6E-02	2.6E-02	3.7E-02	9.2E-02	1.1E-01
Spectators 16<30 years	7.6E-03	2.9E-02	1.7E-02	2.4E-02	5.9E-02	6.8E-02
Spectators 30<40 years	6.9E-03	2.6E-02	1.5E-02	2.1E-02	5.2E-02	6.1E-02
Spectators 40<50 years	6.8E-03	2.6E-02	1.5E-02	2.1E-02	5.2E-02	6.1E-02
Spectators 50<70 years	6.7E-03	2.6E-02	1.5E-02	2.1E-02	5.2E-02	6.1E-02
Spectators Lifetime Average ^c	2.6E-02	6.7E-02	3.4E-02	5.9E-02	1.3E-01	1.5E-01

^a 35 field-specific Chronic HI_{field} are included in this table.

^b Lead is included in Chronic HI_{field} calculation (see Section G.2.2 for details).

^c Lifetime Average Chronic HI is the 70-year weighted lifetime average of all age groups within a receptor category.

Table G-4. On-Field Field-Specific^a Chronic Hazard Index (Chronic HI_{field}, unitless) for Field-Related General Chemicals^b—Combined Gender

Receptor Category and Age Group	Chronic HI _{field}					
	Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Athletes 2<6 years	6.6E-02	2.0E-01	9.4E-02	1.8E-01	3.8E-01	4.1E-01
Athletes 6<11 years	4.7E-02	1.9E-01	9.8E-02	1.8E-01	3.6E-01	4.2E-01
Athletes 11<16 years	3.8E-02	1.7E-01	9.1E-02	1.5E-01	3.2E-01	3.9E-01
Athletes 16<30 years	4.6E-02	2.9E-01	1.6E-01	2.5E-01	5.5E-01	6.6E-01
Athletes 30<40 years	3.1E-02	1.9E-01	1.0E-01	1.6E-01	3.6E-01	4.3E-01
Athletes 40<50 years	2.7E-02	1.8E-01	1.0E-01	1.6E-01	3.5E-01	4.2E-01
Athletes 50<70 years	2.7E-02	1.8E-01	1.0E-01	1.6E-01	3.4E-01	4.1E-01
Athletes Lifetime Average ^c	3.5E-02	2.0E-01	1.1E-01	1.7E-01	3.7E-01	4.5E-01



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Receptor Category and Age Group	Chronic HI _{field}					
	Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Coaches 16<30 years	1.4E-02	1.1E-01	6.4E-02	9.9E-02	2.1E-01	2.6E-01
Coaches 30<40 years	1.3E-02	9.7E-02	5.6E-02	8.7E-02	1.9E-01	2.3E-01
Coaches 40<50 years	1.2E-02	9.8E-02	5.6E-02	8.8E-02	1.9E-01	2.3E-01
Coaches 50<70 years	1.3E-02	9.8E-02	5.7E-02	8.8E-02	1.9E-01	2.3E-01
Coaches Lifetime Average ^c	9.9E-03	7.8E-02	4.5E-02	7.0E-02	1.5E-01	1.8E-01
Referees 16<30 years	5.7E-03	4.2E-02	2.4E-02	3.7E-02	8.1E-02	9.8E-02
Referees 30<40 years	5.3E-03	3.7E-02	2.1E-02	3.3E-02	7.1E-02	8.6E-02
Referees 40<50 years	5.2E-03	3.7E-02	2.1E-02	3.3E-02	7.2E-02	8.7E-02
Referees 50<70 years	5.2E-03	3.7E-02	2.1E-02	3.3E-02	7.2E-02	8.7E-02
Referees Lifetime Average ^c	4.1E-03	3.0E-02	1.7E-02	2.6E-02	5.7E-02	6.9E-02
Spectators Third trimester fetus	3.9E-03	1.8E-02	9.5E-03	1.6E-02	3.4E-02	4.1E-02
Spectators 0<2 years	2.0E-01	4.4E-01	2.2E-01	4.1E-01	8.8E-01	1.1E+00
Spectators 2<6 years	9.8E-02	2.2E-01	1.0E-01	2.0E-01	4.3E-01	5.4E-01
Spectators 6<11 years	7.3E-02	1.7E-01	7.9E-02	1.5E-01	3.3E-01	3.9E-01
Spectators 11<16 years	7.5E-03	3.3E-02	1.7E-02	2.9E-02	6.0E-02	7.3E-02
Spectators 16<30 years	4.2E-03	2.1E-02	1.1E-02	1.8E-02	3.8E-02	4.6E-02
Spectators 30<40 years	3.9E-03	1.8E-02	9.5E-03	1.6E-02	3.4E-02	4.1E-02
Spectators 40<50 years	3.8E-03	1.8E-02	9.5E-03	1.6E-02	3.3E-02	4.1E-02
Spectators 50<70 years	3.8E-03	1.8E-02	9.5E-03	1.6E-02	3.3E-02	4.1E-02
Spectators Lifetime Average ^c	2.1E-02	5.4E-02	2.6E-02	5.2E-02	1.1E-01	1.2E-01

^a 35 field-specific Chronic HI_{field} are included in this table.

^b Lead is included in Chronic HI_{field} calculation (see Section G.2.2 for details).

^c Lifetime Average Chronic HI is the 70-year weighted lifetime average of all age groups within a receptor category.

Table G-5. On-Field Field-Specific^a Chronic Hazard Index (Chronic HI_{field}, unitless) for Non-Field-Related General Chemicals^b—Combined Gender

Receptor Category and Age Group	Chronic HI _{field}					
	Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Athletes 2<6 years	6.0E-03	5.5E-02	4.9E-02	3.7E-02	1.4E-01	2.1E-01
Athletes 6<11 years	7.8E-03	7.1E-02	6.3E-02	4.9E-02	1.8E-01	2.8E-01
Athletes 11<16 years	7.6E-03	7.0E-02	6.2E-02	4.7E-02	1.8E-01	2.7E-01
Athletes 16<30 years	1.4E-02	1.3E-01	1.2E-01	8.9E-02	3.4E-01	5.1E-01
Athletes 30<40 years	9.4E-03	8.6E-02	7.6E-02	5.8E-02	2.2E-01	3.3E-01
Athletes 40<50 years	9.3E-03	8.5E-02	7.5E-02	5.8E-02	2.2E-01	3.3E-01
Athletes 50<70 years	9.1E-03	8.3E-02	7.4E-02	5.7E-02	2.2E-01	3.2E-01
Athletes Lifetime Average ^c	9.6E-03	8.8E-02	7.8E-02	5.9E-02	2.3E-01	3.4E-01
Coaches 16<30 years	6.0E-03	5.4E-02	4.8E-02	3.7E-02	1.4E-01	2.1E-01
Coaches 30<40 years	5.2E-03	4.7E-02	4.2E-02	3.2E-02	1.2E-01	1.8E-01
Coaches 40<50 years	5.3E-03	4.8E-02	4.3E-02	3.3E-02	1.2E-01	1.9E-01
Coaches 50<70 years	5.3E-03	4.8E-02	4.3E-02	3.3E-02	1.2E-01	1.9E-01
Coaches Lifetime Average ^c	4.2E-03	3.8E-02	3.4E-02	2.6E-02	9.9E-02	1.5E-01



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Receptor Category and Age Group	Chronic HI _{field}					
	Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Referees 16<30 years	2.2E-03	2.0E-02	1.8E-02	1.4E-02	5.2E-02	7.8E-02
Referees 30<40 years	1.9E-03	1.8E-02	1.6E-02	1.2E-02	4.6E-02	6.8E-02
Referees 40<50 years	2.0E-03	1.8E-02	1.6E-02	1.2E-02	4.6E-02	6.9E-02
Referees 50<70 years	2.0E-03	1.8E-02	1.6E-02	1.2E-02	4.6E-02	6.9E-02
Referees Lifetime Average ^c	1.6E-03	1.4E-02	1.3E-02	9.6E-03	3.7E-02	5.5E-02
Spectators Third trimester fetus	8.0E-04	7.3E-03	6.5E-03	5.0E-03	1.9E-02	2.8E-02
Spectators 0<2 years	6.4E-03	5.9E-02	5.2E-02	4.0E-02	1.5E-01	2.3E-01
Spectators 2<6 years	3.4E-03	3.1E-02	2.7E-02	2.1E-02	8.0E-02	1.2E-01
Spectators 6<11 years	3.2E-03	3.0E-02	2.6E-02	2.0E-02	7.6E-02	1.1E-01
Spectators 11<16 years	1.4E-03	1.3E-02	1.1E-02	8.7E-03	3.3E-02	4.9E-02
Spectators 16<30 years	9.2E-04	8.4E-03	7.5E-03	5.7E-03	2.2E-02	3.2E-02
Spectators 30<40 years	8.0E-04	7.3E-03	6.5E-03	5.0E-03	1.9E-02	2.8E-02
Spectators 40<50 years	8.1E-04	7.4E-03	6.6E-03	5.0E-03	1.9E-02	2.9E-02
Spectators 50<70 years	8.2E-04	7.4E-03	6.6E-03	5.1E-03	1.9E-02	2.9E-02
Spectators Lifetime Average ^c	1.4E-03	1.2E-02	1.1E-02	8.4E-03	3.2E-02	4.8E-02

^a 35 field-specific Chronic HI_{field} are included in this table.

^b Inhalation is the only exposure route assessed for non-field-related chemicals that field-specific on-field Chronic HI_{field} equals to field-specific on-field Chronic HQ_{inh-sum-field} of the corresponding field.

^c Lifetime Average Chronic HI is the 70-year weighted lifetime average of all age groups within a receptor category.

Table G-6. Off-Field Field-Specific^a Chronic Hazard Index (Chronic HI_{field}) for All General Chemicals^b for Combined Gender Spectators

Spectator Receptor Age Group	Chronic HI _{field}					
	Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Third trimester fetus	9.5E-04	1.3E-02	1.3E-02	6.9E-03	3.4E-02	5.5E-02
0<2 years	7.6E-03	1.1E-01	1.0E-01	5.6E-02	2.7E-01	4.5E-01
2<6 years	4.0E-03	5.6E-02	5.5E-02	2.9E-02	1.4E-01	2.3E-01
6<11 years	3.8E-03	5.3E-02	5.3E-02	2.8E-02	1.4E-01	2.2E-01
11<16 years	1.7E-03	2.3E-02	2.3E-02	1.2E-02	5.9E-02	9.6E-02
16<30 years	1.1E-03	1.5E-02	1.5E-02	7.9E-03	3.9E-02	6.4E-02
30<40 years	9.5E-04	1.3E-02	1.3E-02	6.9E-03	3.4E-02	5.6E-02
40<50 years	9.6E-04	1.3E-02	1.3E-02	7.0E-03	3.4E-02	5.6E-02
50<70 years	9.7E-04	1.3E-02	1.3E-02	7.0E-03	3.4E-02	5.6E-02
Lifetime Average ^c	1.6E-03	2.2E-02	2.2E-02	1.2E-02	5.7E-02	9.4E-02

^a 35 field-specific Chronic HI_{field} are included in this table.

^b Inhalation exposure is the only route assessed for off-field chemicals that field-specific off-field Chronic HI_{field} for all chemicals equals to field-specific off-field Chronic HQ_{inh-sum-field} for all chemicals of the corresponding field.

^c Lifetime Average Chronic HI is the 70-year weighted lifetime average of all age groups within a receptor category.



Table G-7. Off-Field Field-Specific^a Chronic Hazard Index (Chronic HI_{field}) for Field-Related General Chemicals^b for Combined Gender Spectators

Spectator Receptor Age Group	Chronic HI _{field}					
	Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Third trimester fetus	8.9E-06	5.2E-03	6.4E-03	2.4E-03	1.7E-02	2.5E-02
0<2 years	7.1E-05	4.2E-02	5.2E-02	1.9E-02	1.4E-01	2.0E-01
2<6 years	3.7E-05	2.2E-02	2.7E-02	1.0E-02	7.2E-02	1.0E-01
6<11 years	3.6E-05	2.1E-02	2.6E-02	9.6E-03	6.9E-02	9.9E-02
11<16 years	1.5E-05	9.1E-03	1.1E-02	4.1E-03	3.0E-02	4.3E-02
16<30 years	1.0E-05	6.0E-03	7.4E-03	2.7E-03	2.0E-02	2.8E-02
30<40 years	8.9E-06	5.2E-03	6.5E-03	2.4E-03	1.7E-02	2.5E-02
40<50 years	9.0E-06	5.3E-03	6.5E-03	2.4E-03	1.7E-02	2.5E-02
50<70 years	9.0E-06	5.3E-03	6.5E-03	2.4E-03	1.7E-02	2.5E-02
Lifetime Average ^c	1.5E-05	8.9E-03	1.1E-02	4.0E-03	2.9E-02	4.2E-02

^a 35 field-specific Chronic HI_{field} are included in this table.

^b Inhalation exposure is the only route assessed for off-field chemicals that field-specific off-field Chronic HI_{field} for field-related chemicals equals to field-specific off-field Chronic HQ_{inh-sum-field} for field-related chemicals of the corresponding field.

^c Lifetime Average Chronic HI is the 70-year weighted lifetime average of all age groups within a receptor category.

Table G-8. Off-Field Field-Specific^a Chronic Hazard Index (Chronic HI_{field}) for Non-Field-Related General Chemicals^b for Combined Gender Spectators

Spectator Receptor Age Group	Chronic HI _{field}					
	Minimum	Mean	Standard Deviation	Median	95 th Percentile	Maximum
Third trimester fetus	1.3E-03	8.2E-03	7.9E-03	5.0E-03	2.2E-02	3.6E-02
0<2 years	1.0E-02	6.6E-02	6.3E-02	4.0E-02	1.8E-01	2.9E-01
2<6 years	5.3E-03	3.5E-02	3.3E-02	2.1E-02	9.3E-02	1.5E-01
6<11 years	5.1E-03	3.3E-02	3.2E-02	2.0E-02	8.9E-02	1.5E-01
11<16 years	2.2E-03	1.4E-02	1.4E-02	8.6E-03	3.8E-02	6.3E-02
16<30 years	1.5E-03	9.4E-03	9.1E-03	5.7E-03	2.5E-02	4.2E-02
30<40 years	1.3E-03	8.2E-03	7.9E-03	5.0E-03	2.2E-02	3.7E-02
40<50 years	1.3E-03	8.3E-03	8.0E-03	5.0E-03	2.2E-02	3.7E-02
50<70 years	1.3E-03	8.3E-03	8.0E-03	5.0E-03	2.2E-02	3.7E-02
Lifetime Average ^c	2.1E-03	1.4E-02	1.3E-02	8.4E-03	3.7E-02	6.2E-02

^a 34 field-specific Chronic HI_{field} are included in this table.

^b Inhalation exposure is the only route assessed for off-field chemicals that field-specific off-field Chronic HI_{field} for non-field-related chemicals equals to field-specific off-field Chronic HQ_{inh-sum-field} for non-field-related chemicals of the corresponding field.

^c Lifetime Average Chronic HI is the 70-year weighted lifetime average of all age groups within a receptor category.



G.3. Lifetime Cancer Risk

This appendix presents the risk of all detected chemicals on synthetic turf fields for the inhalation (Risk_{inh}), ingestion (Risk_{ing}), and dermal (Risk_{der}) routes when toxicity criteria (TC) are available. Details of each exposure route and how to calculate the risk are presented in Chapters 5 and 6 of the Main Report. An example calculation for each route is presented in Section G.1.1.

G.3.1. Inhalation Lifetime Risk

Table G-1. **On-Field** Inhalation Lifetime Cancer Risk (Risk_{inh} , unitless) by Chemical and Inhalation Route Total Lifetime Risk ($\text{Risk}_{\text{inh-sum}}$, unitless) for **Athletes**

Chemical	CASRN	Risk _{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									
Acetaldehyde	75-07-0	1.9E-07	3.1E-07	3.0E-07	5.3E-07	2.5E-07	2.5E-07	4.8E-07	2.3E-06
Aniline	62-53-3	2.8E-10	4.5E-10	4.4E-10	7.8E-10	3.6E-10	3.6E-10	7.1E-10	3.4E-09
Benz[a]anthracene	56-55-3	1.5E-11	2.4E-11	2.3E-11	4.1E-11	1.9E-11	1.9E-11	3.7E-11	1.8E-10
Benzo[a]pyrene	50-32-8	3.4E-08	5.5E-08	5.4E-08	9.4E-08	4.4E-08	4.3E-08	8.5E-08	4.1E-07
Benzo[b]fluoranthene	205-99-2	7.3E-11	1.2E-10	1.2E-10	2.0E-10	9.5E-11	9.4E-11	1.8E-10	8.8E-10
Benzo[k]fluoranthene	207-08-9	9.1E-11	1.5E-10	1.4E-10	2.5E-10	1.2E-10	1.2E-10	2.3E-10	1.1E-09
Chrysene	218-01-9	6.1E-11	9.8E-11	9.6E-11	1.7E-10	7.9E-11	7.8E-11	1.5E-10	7.3E-10
Cyclopenta[cd]pyrene	27208-37-3	2.2E-09	3.5E-09	3.4E-09	6.0E-09	2.8E-09	2.8E-09	5.4E-09	2.6E-08
Dibenz[a,h]anthracene	53-70-3	4.5E-09	7.2E-09	7.1E-09	1.2E-08	5.8E-09	5.7E-09	1.1E-08	5.4E-08
Indeno[1,2,3-cd]pyrene	193-39-5	3.2E-10	5.2E-10	5.1E-10	8.9E-10	4.1E-10	4.1E-10	8.0E-10	3.9E-09
Methyl Isobutyl Ketone	108-10-1	4.6E-10	7.5E-10	7.3E-10	1.3E-09	6.0E-10	5.9E-10	1.2E-09	5.6E-09
Naphthalene	91-20-3	2.4E-08	3.9E-08	3.8E-08	6.8E-08	3.2E-08	3.1E-08	6.1E-08	2.9E-07
Styrene	100-42-5	1.2E-08	1.9E-08	1.8E-08	3.2E-08	1.5E-08	1.5E-08	2.9E-08	1.4E-07
Field-Related Risk _{inh-sum}		7.8E-08	1.3E-07	1.2E-07	2.2E-07	1.0E-07	9.9E-08	2.0E-07	9.4E-07
Non-Field-Related Chemicals									
Benzene	71-43-2	4.6E-07	7.5E-07	7.3E-07	1.3E-06	6.0E-07	5.9E-07	1.2E-06	5.6E-06
Benzene, 1,4-dichloro	106-46-7	5.8E-09	9.5E-09	9.2E-09	1.6E-08	7.6E-09	7.5E-09	1.5E-08	7.1E-08
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	1.3E-07	2.1E-07	2.1E-07	3.7E-07	1.7E-07	1.7E-07	3.3E-07	1.6E-06
Ethylbenzene	100-41-4	1.1E-08	1.8E-08	1.8E-08	3.2E-08	1.5E-08	1.5E-08	2.9E-08	1.4E-07
Formaldehyde	50-00-0	6.1E-07	9.9E-07	9.7E-07	1.7E-06	7.9E-07	7.8E-07	1.5E-06	7.4E-06
Tetrachloroethylene	127-18-4	7.3E-09	1.2E-08	1.2E-08	2.0E-08	9.4E-09	9.3E-09	1.8E-08	8.8E-08
Non-Field-Related Risk _{inh-sum}		1.4E-06	2.3E-06	2.2E-06	4.0E-06	1.8E-06	1.8E-06	3.6E-06	1.7E-05



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Chemical	CASRN	Risk _{inh}						
		2<6 years	6<11 years	11<16 years	16<30 years	30<40 years	40<50 years	50<70 years
All Chemical Risk _{inh-sum}		1.5E-06	2.4E-06	2.4E-06	4.2E-06	1.9E-06	1.9E-06	3.8E-06
								1.8E-05

Table G-2. **On-Field** Inhalation Lifetime Cancer Risk (Risk_{inh}, unitless) by Chemical and Inhalation Route Total Lifetime Cacner Risk (Risk_{inh-sum}, unitless) for Coaches

Chemical	CASRN	Risk _{inh}				
		16<30 years	30<40 years	40<50 years	50<70 years	Lifetime
Field-Related Chemicals						
Acetaldehyde	75-07-0	2.2E-07	1.4E-07	1.4E-07	2.8E-07	7.8E-07
Aniline	62-53-3	3.2E-10	2.0E-10	2.0E-10	4.1E-10	1.1E-09
Benz[a]anthracene	56-55-3	1.7E-11	1.0E-11	1.1E-11	2.1E-11	5.9E-11
Benzo[a]pyrene	50-32-8	3.9E-08	2.4E-08	2.5E-08	4.9E-08	1.4E-07
Benzo[b]fluoranthene	205-99-2	8.4E-11	5.2E-11	5.3E-11	1.1E-10	3.0E-10
Benzo[k]fluoranthene	207-08-9	1.0E-10	6.5E-11	6.6E-11	1.3E-10	3.7E-10
Chrysene	218-01-9	7.0E-11	4.4E-11	4.4E-11	8.8E-11	2.5E-10
Cyclopenta[cd]pyrene	27208-37-3	2.5E-09	1.5E-09	1.6E-09	3.1E-09	8.7E-09
Dibenz[a,h]anthracene	53-70-3	5.1E-09	3.2E-09	3.2E-09	6.5E-09	1.8E-08
Indeno[1,2,3-cd]pyrene	193-39-5	3.7E-10	2.3E-10	2.3E-10	4.6E-10	1.3E-09
Methyl Isobutyl Ketone	108-10-1	5.3E-10	3.3E-10	3.4E-10	6.8E-10	1.9E-09
Naphthalene	91-20-3	2.8E-08	1.7E-08	1.8E-08	3.5E-08	9.8E-08
Styrene	100-42-5	1.3E-08	8.4E-09	8.4E-09	1.7E-08	4.7E-08
Field-Related Risk _{inh-sum}		8.9E-08	5.6E-08	5.6E-08	1.1E-07	3.1E-07
Non-Field-Related Chemicals						
Benzene	71-43-2	5.3E-07	3.3E-07	3.3E-07	6.7E-07	1.9E-06
Benzene, 1,4-dichloro	106-46-7	6.7E-09	4.2E-09	4.2E-09	8.5E-09	2.4E-08
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	1.5E-07	9.4E-08	9.5E-08	1.9E-07	5.3E-07
Ethylbenzene	100-41-4	1.3E-08	8.2E-09	8.2E-09	1.7E-08	4.6E-08
Formaldehyde	50-00-0	7.0E-07	4.4E-07	4.4E-07	8.9E-07	2.5E-06
Tetrachloroethylene	127-18-4	8.4E-09	5.2E-09	5.3E-09	1.1E-08	2.9E-08
Non-Field-Related Risk _{inh-sum}		1.6E-06	1.0E-06	1.0E-06	2.1E-06	5.7E-06
All Chemical Risk _{inh-sum}		1.7E-06	1.1E-06	1.1E-06	2.2E-06	6.1E-06

Table G-3. **On-Field** Inhalation Lifetime Cancer Risk (Risk_{inh}, unitless) by Chemical and Inhalation Route Total Lifetime Cancer Risk (Risk_{inh-sum}, unitless) for Referees

Chemical	CASRN	Risk _{inh}				
		16<30 years	30<40 years	40<50 years	50<70 years	Lifetime
Field-Related Chemicals						
Acetaldehyde	75-07-0	8.2E-08	5.1E-08	5.2E-08	1.0E-07	2.9E-07



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Chemical	CASRN	Risk _{inh}				
		16<30 years	30<40 years	40<50 years	50<70 years	Lifetime
Aniline	62-53-3	1.2E-10	7.5E-11	7.6E-11	1.5E-10	4.2E-10
Benz[a]anthracene	56-55-3	6.2E-12	3.9E-12	3.9E-12	7.9E-12	2.2E-11
Benzo[a]pyrene	50-32-8	1.4E-08	9.0E-09	9.1E-09	1.8E-08	5.1E-08
Benzo[b]fluoranthene	205-99-2	3.1E-11	1.9E-11	2.0E-11	3.9E-11	1.1E-10
Benzo[k]fluoranthene	207-08-9	3.9E-11	2.4E-11	2.4E-11	4.9E-11	1.4E-10
Chrysene	218-01-9	2.6E-11	1.6E-11	1.6E-11	3.3E-11	9.1E-11
Cyclopenta[cd]pyrene	27208-37-3	9.2E-10	5.7E-10	5.8E-10	1.2E-09	3.2E-09
Dibenz[a,h]anthracene	53-70-3	1.9E-09	1.2E-09	1.2E-09	2.4E-09	6.7E-09
Indeno[1,2,3-cd]pyrene	193-39-5	1.4E-10	8.5E-11	8.6E-11	1.7E-10	4.8E-10
Methyl Isobutyl Ketone	108-10-1	2.0E-10	1.2E-10	1.3E-10	2.5E-10	7.0E-10
Naphthalene	91-20-3	1.0E-08	6.5E-09	6.5E-09	1.3E-08	3.6E-08
Styrene	100-42-5	5.0E-09	3.1E-09	3.1E-09	6.3E-09	1.7E-08
Field-Related Risk _{inh-sum}		3.3E-08	2.1E-08	2.1E-08	4.2E-08	1.2E-07
Non-Field-Related Chemicals						
Benzene	71-43-2	2.0E-07	1.2E-07	1.2E-07	2.5E-07	6.9E-07
Benzene, 1,4-dichloro	106-46-7	2.5E-09	1.6E-09	1.6E-09	3.2E-09	8.8E-09
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	5.6E-08	3.5E-08	3.5E-08	7.1E-08	2.0E-07
Ethylbenzene	100-41-4	4.9E-09	3.0E-09	3.1E-09	6.1E-09	1.7E-08
Formaldehyde	50-00-0	2.6E-07	1.6E-07	1.6E-07	3.3E-07	9.2E-07
Tetrachloroethylene	127-18-4	3.1E-09	1.9E-09	2.0E-09	3.9E-09	1.1E-08
Non-Field-Related Risk _{inh-sum}		6.1E-07	3.8E-07	3.8E-07	7.7E-07	2.1E-06
All Chemical Risk _{inh-sum}		6.4E-07	4.0E-07	4.0E-07	8.1E-07	2.2E-06

Table G-4. **On-Field** Inhalation Lifetime Cancer Risk (Risk_{inh}, unitless) by Chemical and Inhalation Route Total Lifetime Cancer Risk (Risk_{inh-sum}, unitless) for Spectators

Chemical	CASRN	Risk _{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	Life time
Field-Related Chemicals											
Acetaldehyde	75-07-0	5.3E-09	3.4E-07	1.1E-07	1.3E-07	5.5E-08	3.4E-08	2.1E-08	2.2E-08	4.3E-08	7.6E-07
Aniline	62-53-3	7.8E-12	5.0E-10	1.6E-10	1.9E-10	8.1E-11	5.0E-11	3.1E-11	3.2E-11	6.3E-11	1.1E-09



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Chemical	CASRN	Risk _{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	Life time
Benz[a]anthracene	56-55-3	4.0E-13	2.6E-11	8.2E-12	9.8E-12	4.2E-12	2.6E-12	1.6E-12	1.6E-12	3.3E-12	5.8E-11
Benzo[a]pyrene	50-32-8	9.4E-10	6.0E-08	1.9E-08	2.3E-08	9.8E-09	6.0E-09	3.8E-09	3.8E-09	7.6E-09	1.3E-07
Benzo[b]fluoranthene	205-99-2	2.0E-12	1.3E-10	4.1E-11	4.9E-11	2.1E-11	1.3E-11	8.1E-12	8.2E-12	1.6E-11	2.9E-10
Benzo[k]fluoranthene	207-08-9	2.5E-12	1.6E-10	5.1E-11	6.1E-11	2.6E-11	1.6E-11	1.0E-11	1.0E-11	2.0E-11	3.6E-10
Chrysene	218-01-9	1.7E-12	1.1E-10	3.4E-11	4.1E-11	1.8E-11	1.1E-11	6.7E-12	6.8E-12	1.4E-11	2.4E-10
Cyclopenta[cd]pyrene	27208-37-3	6.0E-11	3.8E-09	1.2E-09	1.4E-09	6.2E-10	3.8E-10	2.4E-10	2.4E-10	4.8E-10	8.5E-09
Dibenz[a,h]anthracene	53-70-3	1.2E-10	8.0E-09	2.5E-09	3.0E-09	1.3E-09	8.0E-10	5.0E-10	5.0E-10	1.0E-09	1.8E-08
Indeno[1,2,3-cd]pyrene	193-39-5	8.8E-12	5.7E-10	1.8E-10	2.1E-10	9.2E-11	5.7E-11	3.5E-11	3.6E-11	7.2E-11	1.3E-09
Methyl Isobutyl Ketone	108-10-1	1.3E-11	8.3E-10	2.6E-10	3.1E-10	1.3E-10	8.3E-11	5.2E-11	5.2E-11	1.0E-10	1.8E-09
Naphthalene	91-20-3	6.7E-10	4.3E-08	1.4E-08	1.6E-08	7.0E-09	4.3E-09	2.7E-09	2.7E-09	5.5E-09	9.6E-08
Styrene	100-42-5	3.2E-10	2.1E-08	6.5E-09	7.8E-09	3.4E-09	2.1E-09	1.3E-09	1.3E-09	2.6E-09	4.6E-08
Field-Related Risk _{inh-sum}		2.1E-09	1.4E-07	4.4E-08	5.2E-08	2.2E-08	1.4E-08	8.6E-09	8.7E-09	1.7E-08	3.1E-07
Non-Field-Related Chemicals											
Benzene	71-43-2	1.3E-08	8.2E-07	2.6E-07	3.1E-07	1.3E-07	8.2E-08	5.1E-08	5.2E-08	1.0E-07	1.8E-06
Benzene, 1,4-dichloro	106-46-7	1.6E-10	1.0E-08	3.3E-09	3.9E-09	1.7E-09	1.0E-09	6.5E-10	6.6E-10	1.3E-09	2.3E-08
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	3.6E-09	2.3E-07	7.4E-08	8.8E-08	3.8E-08	2.3E-08	1.5E-08	1.5E-08	3.0E-08	5.2E-07
Ethylbenzene	100-41-4	3.1E-10	2.0E-08	6.4E-09	7.6E-09	3.3E-09	2.0E-09	1.3E-09	1.3E-09	2.6E-09	4.5E-08
Formaldehyde	50-00-0	1.7E-08	1.1E-06	3.4E-07	4.1E-07	1.8E-07	1.1E-07	6.8E-08	6.9E-08	1.4E-07	2.4E-06
Tetrachloroethylene	127-18-4	2.0E-10	1.3E-08	4.1E-09	4.9E-09	2.1E-09	1.3E-09	8.1E-10	8.2E-10	1.6E-09	2.9E-08
Non-Field-Related Risk _{inh-sum}		3.9E-08	2.5E-06	8.0E-07	9.5E-07	4.1E-07	2.5E-07	1.6E-07	1.6E-07	3.2E-07	5.6E-06
All Chemical Risk _{inh-sum}		4.1E-08	2.7E-06	8.4E-07	1.0E-06	4.3E-07	2.7E-07	1.7E-07	1.7E-07	3.4E-07	5.9E-06



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Table G-5. Off-Field Inhalation Lifetime Cancer Risk ($Risk_{inh}$, unitless) by Chemical and Inhalation Route Total Lifetime Cancer ($Risk_{inh-sum}$, unitless) for Spectators

Chemical	CASRN	Risk _{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	Life time
Field-Related Chemicals											
Acetaldehyde	75-07-0	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Aniline	62-53-3	8.6E-12	5.5E-10	1.7E-10	2.1E-10	9.0E-11	5.5E-11	3.4E-11	3.5E-11	7.0E-11	1.2E-09
Benz[a]anthracene	56-55-3	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Benzo[a]pyrene	50-32-8	1.1E-09	7.4E-08	2.3E-08	2.8E-08	1.2E-08	7.4E-09	4.6E-09	4.7E-09	9.4E-09	1.6E-07
Benzo[b]fluoranthene	205-99-2	3.1E-12	2.0E-10	6.3E-11	7.6E-11	3.3E-11	2.0E-11	1.3E-11	1.3E-11	2.5E-11	4.5E-10
Benzo[k]fluoranthene	207-08-9	2.6E-12	1.7E-10	5.3E-11	6.3E-11	2.7E-11	1.7E-11	1.0E-11	1.1E-11	2.1E-11	3.7E-10
Chrysene	218-01-9	8.6E-13	5.5E-11	1.7E-11	2.1E-11	9.0E-12	5.5E-12	3.5E-12	3.5E-12	7.0E-12	1.2E-10
Cyclopenta[cd]pyrene	27208-37-3	5.2E-11	3.4E-09	1.1E-09	1.3E-09	5.5E-10	3.4E-10	2.1E-10	2.1E-10	4.2E-10	7.5E-09
Dibenz[a,h]anthracene	53-70-3	7.8E-11	5.0E-09	1.6E-09	1.9E-09	8.1E-10	5.0E-10	3.1E-10	3.1E-10	6.3E-10	1.1E-08
Indeno[1,2,3-cd]pyrene	193-39-5	6.1E-12	3.9E-10	1.2E-10	1.5E-10	6.3E-11	3.9E-11	2.4E-11	2.5E-11	4.9E-11	8.7E-10
Methyl Isobutyl Ketone	108-10-1	2.9E-12	1.9E-10	6.0E-11	7.1E-11	3.1E-11	1.9E-11	1.2E-11	1.2E-11	2.4E-11	4.2E-10
Naphthalene	91-20-3	7.4E-10	4.7E-08	1.5E-08	1.8E-08	7.7E-09	4.7E-09	3.0E-09	3.0E-09	6.0E-09	1.1E-07
Styrene	100-42-5	3.3E-10	2.1E-08	6.7E-09	7.9E-09	3.4E-09	2.1E-09	1.3E-09	1.3E-09	2.7E-09	4.7E-08
Field-Related Risk _{inh-sum}		2.4E-09	1.5E-07	4.8E-08	5.7E-08	2.5E-08	1.5E-08	9.5E-09	9.6E-09	1.9E-08	3.4E-07
Non-Field-Related Chemicals											
Benzene	71-43-2	1.3E-08	8.6E-07	2.7E-07	3.2E-07	1.4E-07	8.6E-08	5.4E-08	5.4E-08	1.1E-07	1.9E-06
Benzene, 1,4-dichloro	106-46-7	1.5E-10	9.4E-09	3.0E-09	3.5E-09	1.5E-09	9.4E-10	5.9E-10	6.0E-10	1.2E-09	2.1E-08
Benzene, 1-chloro-4-(trifluoromethyl)-	98-56-6	3.6E-09	2.3E-07	7.4E-08	8.8E-08	3.8E-08	2.3E-08	1.5E-08	1.5E-08	3.0E-08	5.2E-07
Ethylbenzene	100-41-4	3.3E-10	2.1E-08	6.8E-09	8.1E-09	3.5E-09	2.1E-09	1.3E-09	1.4E-09	2.7E-09	4.8E-08
Formaldehyde	50-00-0	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Tetrachloroethylene	127-18-4	2.1E-10	1.3E-08	4.2E-09	5.0E-09	2.2E-09	1.3E-09	8.3E-10	8.4E-10	1.7E-09	3.0E-08
Non-Field-Related Risk _{inh-sum}		1.8E-08	1.1E-06	3.6E-07	4.3E-07	1.9E-07	1.1E-07	7.1E-08	7.2E-08	1.4E-07	2.5E-06



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Chemical	CASRN	Risk _{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	Life time
All Chemical Risk _{inh-sum}		2.0E-08	1.3E-06	4.1E-07	4.9E-07	2.1E-07	1.3E-07	8.1E-08	8.2E-08	1.6E-07	2.9E-06

INDIVIDUAL FIELD ASSESSMENT (Table G-147 to Table G-150)

Table G-6. On-Field Field-Specific^a Inhalation Risk Route Total Lifetime Cancer Risk (Risk_{inh-sum-field}, unitless) for All Carcinogens—Combined Gender

Receptor Category	Age Group	Risk _{inh-sum-field}					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Athletes	2<6 years	3.2E-07	1.5E-06	1.0E-06	1.0E-06	3.6E-06	4.0E-06
	6<11 years	5.2E-07	2.4E-06	1.6E-06	1.7E-06	5.8E-06	6.4E-06
	11<16 years	5.1E-07	2.3E-06	1.6E-06	1.7E-06	5.7E-06	6.3E-06
	16<30 years	8.9E-07	4.1E-06	2.8E-06	2.9E-06	9.9E-06	1.1E-05
	30<40 years	4.1E-07	1.9E-06	1.3E-06	1.4E-06	4.6E-06	5.1E-06
	40<50 years	4.1E-07	1.9E-06	1.3E-06	1.3E-06	4.6E-06	5.1E-06
	50<70 years	8.0E-07	3.7E-06	2.6E-06	2.6E-06	9.0E-06	1.0E-05
	Lifetime	3.9E-06	1.8E-05	1.2E-05	1.3E-05	4.3E-05	4.8E-05
Coaches	16<30 years	3.7E-07	1.7E-06	1.2E-06	1.2E-06	4.1E-06	4.6E-06
	30<40 years	2.3E-07	1.1E-06	7.3E-07	7.5E-07	2.6E-06	2.8E-06
	40<50 years	2.3E-07	1.1E-06	7.4E-07	7.6E-07	2.6E-06	2.9E-06
	50<70 years	4.6E-07	2.1E-06	1.5E-06	1.5E-06	5.2E-06	5.8E-06
	Lifetime	1.3E-06	6.0E-06	4.1E-06	4.2E-06	1.4E-05	1.6E-05
Referees	16<30 years	1.4E-07	6.3E-07	4.3E-07	4.5E-07	1.5E-06	1.7E-06
	30<40 years	8.5E-08	3.9E-07	2.7E-07	2.8E-07	9.5E-07	1.1E-06
	40<50 years	8.6E-08	4.0E-07	2.7E-07	2.8E-07	9.6E-07	1.1E-06
	50<70 years	1.7E-07	8.0E-07	5.5E-07	5.6E-07	1.9E-06	2.1E-06
	Lifetime	4.8E-07	2.2E-06	1.5E-06	1.6E-06	5.4E-06	6.0E-06
Spectators	Third trimester fetus	8.8E-09	4.1E-08	2.8E-08	2.9E-08	9.9E-08	1.1E-07
	0<2 years	5.7E-07	2.6E-06	1.8E-06	1.9E-06	6.4E-06	7.0E-06
	2<6 years	1.8E-07	8.3E-07	5.7E-07	5.9E-07	2.0E-06	2.2E-06
	6<11 years	2.1E-07	9.9E-07	6.8E-07	7.0E-07	2.4E-06	2.6E-06
	11<16 years	9.2E-08	4.3E-07	2.9E-07	3.0E-07	1.0E-06	1.1E-06
	16<30 years	5.7E-08	2.6E-07	1.8E-07	1.9E-07	6.4E-07	7.0E-07
	30<40 years	3.5E-08	1.6E-07	1.1E-07	1.2E-07	4.0E-07	4.4E-07
	40<50 years	3.6E-08	1.7E-07	1.1E-07	1.2E-07	4.0E-07	4.4E-07
	50<70 years	7.2E-08	3.3E-07	2.3E-07	2.4E-07	8.0E-07	8.9E-07
	Lifetime	1.3E-06	5.8E-06	4.0E-06	4.1E-06	1.4E-05	1.6E-05

^a 35 field-specific Risk_{inh-sum-field} are included in the table.



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Table G-7. On-Field Field-Specific^a Inhalation Risk Route Total Lifetime Cancer Risk (Risk_{inh-sum-field}, unitless) for Field-Related Carcinogens—Combined Gender

Receptor Category	Age Group	Risk _{inh-sum-field}					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Athletes	2<6 years	4.0E-10	7.6E-08	8.3E-08	4.1E-08	2.1E-07	3.5E-07
	6<11 years	6.5E-10	1.2E-07	1.3E-07	6.7E-08	3.4E-07	5.7E-07
	11<16 years	6.4E-10	1.2E-07	1.3E-07	6.6E-08	3.3E-07	5.6E-07
	16<30 years	1.1E-09	2.1E-07	2.3E-07	1.2E-07	5.9E-07	9.8E-07
	30<40 years	5.2E-10	9.9E-08	1.1E-07	5.4E-08	2.7E-07	4.6E-07
	40<50 years	5.1E-10	9.8E-08	1.1E-07	5.3E-08	2.7E-07	4.5E-07
	50<70 years	1.0E-09	1.9E-07	2.1E-07	1.0E-07	5.3E-07	8.9E-07
	Lifetime	4.9E-09	9.2E-07	1.0E-06	5.0E-07	2.5E-06	4.3E-06
Coaches	16<30 years	4.6E-10	8.8E-08	9.6E-08	4.8E-08	2.4E-07	4.1E-07
	30<40 years	2.9E-10	5.5E-08	6.0E-08	3.0E-08	1.5E-07	2.5E-07
	40<50 years	2.9E-10	5.6E-08	6.0E-08	3.0E-08	1.5E-07	2.6E-07
	50<70 years	5.9E-10	1.1E-07	1.2E-07	6.0E-08	3.1E-07	5.1E-07
	Lifetime	1.6E-09	3.1E-07	3.4E-07	1.7E-07	8.5E-07	1.4E-06
Referees	16<30 years	1.7E-10	3.3E-08	3.6E-08	1.8E-08	9.0E-08	1.5E-07
	30<40 years	1.1E-10	2.0E-08	2.2E-08	1.1E-08	5.6E-08	9.4E-08
	40<50 years	1.1E-10	2.1E-08	2.2E-08	1.1E-08	5.7E-08	9.5E-08
	50<70 years	2.2E-10	4.1E-08	4.5E-08	2.2E-08	1.1E-07	1.9E-07
	Lifetime	6.0E-10	1.1E-07	1.2E-07	6.2E-08	3.2E-07	5.3E-07
Spectators	Third trimester fetus	1.1E-11	2.1E-09	2.3E-09	1.1E-09	5.8E-09	9.8E-09
	0<2 years	7.2E-10	1.4E-07	1.5E-07	7.4E-08	3.8E-07	6.3E-07
	2<6 years	2.3E-10	4.3E-08	4.7E-08	2.3E-08	1.2E-07	2.0E-07
	6<11 years	2.7E-10	5.1E-08	5.6E-08	2.8E-08	1.4E-07	2.4E-07
	11<16 years	1.2E-10	2.2E-08	2.4E-08	1.2E-08	6.1E-08	1.0E-07
	16<30 years	7.2E-11	1.4E-08	1.5E-08	7.4E-09	3.8E-08	6.3E-08
	30<40 years	4.5E-11	8.5E-09	9.2E-09	4.6E-09	2.3E-08	3.9E-08
	40<50 years	4.5E-11	8.6E-09	9.3E-09	4.6E-09	2.4E-08	4.0E-08
	50<70 years	9.0E-11	1.7E-08	1.9E-08	9.3E-09	4.7E-08	8.0E-08
	Lifetime	1.6E-09	3.0E-07	3.3E-07	1.6E-07	8.3E-07	1.4E-06

^a 35 field-specific Risk_{inh-sum-field} are included in the table.

Table G-8. On-Field Field-Specific^a Inhalation Risk Route Total Lifetime Cancer Risk (Risk_{inh-sum-field}, unitless) for Non-Field-Related Carcinogens—Combined Gender

Receptor Category	Age Group	Risk _{inh-sum-field}					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Athletes	2<6 years	3.1E-07	1.4E-06	9.7E-07	1.0E-06	3.3E-06	3.9E-06
	6<11 years	4.9E-07	2.3E-06	1.6E-06	1.7E-06	5.3E-06	6.4E-06



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Receptor Category	Age Group	Risk _{inh-sum-field}					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
	11<16 years	4.8E-07	2.2E-06	1.5E-06	1.7E-06	5.2E-06	6.2E-06
	16<30 years	8.5E-07	3.9E-06	2.7E-06	2.9E-06	9.2E-06	1.1E-05
	30<40 years	4.0E-07	1.8E-06	1.3E-06	1.4E-06	4.3E-06	5.1E-06
	40<50 years	3.9E-07	1.8E-06	1.2E-06	1.3E-06	4.2E-06	5.0E-06
	50<70 years	7.7E-07	3.5E-06	2.4E-06	2.6E-06	8.3E-06	9.9E-06
	Lifetime	3.7E-06	1.7E-05	1.2E-05	1.3E-05	4.0E-05	4.8E-05
Coaches	16<30 years	3.5E-07	1.6E-06	1.1E-06	1.2E-06	3.8E-06	4.5E-06
	30<40 years	2.2E-07	1.0E-06	7.0E-07	7.5E-07	2.4E-06	2.8E-06
	40<50 years	2.2E-07	1.0E-06	7.0E-07	7.6E-07	2.4E-06	2.9E-06
	50<70 years	4.4E-07	2.0E-06	1.4E-06	1.5E-06	4.8E-06	5.7E-06
	Lifetime	1.2E-06	5.7E-06	3.9E-06	4.2E-06	1.3E-05	1.6E-05
Referees	16<30 years	1.3E-07	6.0E-07	4.1E-07	4.5E-07	1.4E-06	1.7E-06
	30<40 years	8.1E-08	3.7E-07	2.6E-07	2.8E-07	8.8E-07	1.0E-06
	40<50 years	8.2E-08	3.8E-07	2.6E-07	2.8E-07	8.9E-07	1.1E-06
	50<70 years	1.7E-07	7.5E-07	5.2E-07	5.6E-07	1.8E-06	2.1E-06
	Lifetime	4.6E-07	2.1E-06	1.5E-06	1.6E-06	4.9E-06	5.9E-06
Spectators	Third trimester fetus	8.4E-09	3.9E-08	2.7E-08	2.9E-08	9.1E-08	1.1E-07
	0<2 years	5.4E-07	2.5E-06	1.7E-06	1.9E-06	5.8E-06	7.0E-06
	2<6 years	1.7E-07	7.8E-07	5.4E-07	5.8E-07	1.8E-06	2.2E-06
	6<11 years	2.0E-07	9.3E-07	6.5E-07	7.0E-07	2.2E-06	2.6E-06
	11<16 years	8.8E-08	4.0E-07	2.8E-07	3.0E-07	9.5E-07	1.1E-06
	16<30 years	5.4E-08	2.5E-07	1.7E-07	1.9E-07	5.8E-07	7.0E-07
	30<40 years	3.4E-08	1.6E-07	1.1E-07	1.2E-07	3.7E-07	4.4E-07
	40<50 years	3.4E-08	1.6E-07	1.1E-07	1.2E-07	3.7E-07	4.4E-07
	50<70 years	6.9E-08	3.1E-07	2.2E-07	2.3E-07	7.4E-07	8.9E-07
	Lifetime	1.2E-06	5.5E-06	3.8E-06	4.1E-06	1.3E-05	1.6E-05

^a 35 field-specific Risk_{inh-sum-field} are included in the table.

Table G-9. Off-Field Field-Specific^a Inhalation Risk Route Total Lifetime Cancer Risk (Risk_{inh-sum-field}, unitless) for Spectators—Combined Gender

Age Group	Risk _{inh-sum-field}					
	Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related^a Chemicals						
Third trimester fetus	0.0E+00	2.3E-09	2.8E-09	9.8E-10	7.5E-09	1.1E-08
0<2 years	0.0E+00	1.5E-07	1.8E-07	6.3E-08	4.8E-07	7.0E-07
2<6 years	0.0E+00	4.6E-08	5.7E-08	2.0E-08	1.5E-07	2.2E-07
6<11 years	0.0E+00	5.5E-08	6.8E-08	2.4E-08	1.8E-07	2.6E-07
11<16 years	0.0E+00	2.4E-08	2.9E-08	1.0E-08	7.9E-08	1.1E-07



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Age Group	Risk _{inh-sum-field}					
	Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
16<30 years	0.0E+00	1.5E-08	1.8E-08	6.3E-09	4.8E-08	7.0E-08
30<40 years	0.0E+00	9.1E-09	1.1E-08	3.9E-09	3.0E-08	4.4E-08
40<50 years	0.0E+00	9.2E-09	1.1E-08	4.0E-09	3.1E-08	4.4E-08
50<70 years	0.0E+00	1.8E-08	2.3E-08	7.9E-09	6.1E-08	8.8E-08
Lifetime	0.0E+00	3.2E-07	4.0E-07	1.4E-07	1.1E-06	1.5E-06
Non-Field-Related ^b Chemicals						
Third trimester fetus	4.0E-09	1.8E-08	1.6E-08	1.0E-08	4.8E-08	7.3E-08
0<2 years	2.6E-07	1.1E-06	1.0E-06	6.4E-07	3.1E-06	4.7E-06
2<6 years	8.1E-08	3.6E-07	3.2E-07	2.0E-07	9.7E-07	1.5E-06
6<11 years	9.7E-08	4.3E-07	3.8E-07	2.4E-07	1.2E-06	1.8E-06
11<16 years	4.2E-08	1.9E-07	1.6E-07	1.0E-07	5.0E-07	7.6E-07
16<30 years	2.6E-08	1.1E-07	1.0E-07	6.4E-08	3.1E-07	4.7E-07
30<40 years	1.6E-08	7.1E-08	6.3E-08	4.0E-08	1.9E-07	2.9E-07
40<50 years	1.6E-08	7.2E-08	6.4E-08	4.1E-08	1.9E-07	2.9E-07
50<70 years	3.3E-08	1.4E-07	1.3E-07	8.1E-08	3.9E-07	5.9E-07
Lifetime	5.7E-07	2.5E-06	2.3E-06	1.4E-06	6.8E-06	1.0E-05
All Carcinogens						
Third trimester fetus	2.3E-09	1.9E-08	1.7E-08	1.1E-08	5.4E-08	7.7E-08
0<2 years	1.5E-07	1.3E-06	1.1E-06	7.0E-07	3.4E-06	5.0E-06
2<6 years	4.8E-08	4.0E-07	3.5E-07	2.2E-07	1.1E-06	1.6E-06
6<11 years	5.7E-08	4.7E-07	4.2E-07	2.6E-07	1.3E-06	1.9E-06
11<16 years	2.5E-08	2.0E-07	1.8E-07	1.1E-07	5.6E-07	8.1E-07
16<30 years	1.5E-08	1.3E-07	1.1E-07	7.0E-08	3.4E-07	5.0E-07
30<40 years	9.4E-09	7.8E-08	7.0E-08	4.4E-08	2.2E-07	3.1E-07
40<50 years	9.5E-09	7.9E-08	7.0E-08	4.4E-08	2.2E-07	3.1E-07
50<70 years	1.9E-08	1.6E-07	1.4E-07	8.9E-08	4.4E-07	6.3E-07
Lifetime	3.4E-07	2.5E-06	2.0E-06	1.5E-06	6.75973E-06	8.1E-06

^a 35 field-specific Risk_{inh-sum-field} are included in the table.

^b 34 field-specific Risk_{inh-sum-field} are included in the table.

G.3.2. Dermal Lifetime Risk

Table G-1. Dermal Risk (Risk_{der}, unitless) by **Field-Related Chemical** and Dermal Route Total (Risk_{der-sum}, unitless) for Athletes

Chemical	CASRN	Risk _{der}							
		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	2.5E-13	2.5E-13	2.6E-13	3.1E-13	1.6E-13	1.3E-13	2.7E-13	1.6E-12
Benz[a]anthracene	56-55-3	7.2E-11	7.1E-11	7.5E-11	8.9E-11	4.5E-11	3.8E-11	7.7E-11	4.7E-10

Appendix G. Calculation Examples, Results of Non-Cancer Hazard and Lifetime Incremental Cancer Risk

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OEHHA Synthetic Turf Study

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Chemical	CASRN	Risk _{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	8.3E-10	8.2E-10	8.7E-10	1.0E-09	5.2E-10	4.4E-10	8.9E-10
Benzo[a]pyrene	50-32-8	5.4E-10	5.4E-10	5.7E-10	6.7E-10	3.4E-10	2.9E-10	5.8E-10
Benzo[b]fluoranthene	205-99-2	1.0E-10	1.0E-10	1.1E-10	1.3E-10	6.4E-11	5.4E-11	1.1E-10
1,3-Benzothiazole-2-thiol	149-30-4	3.2E-12	3.2E-12	3.4E-12	4.0E-12	2.0E-12	1.7E-12	3.4E-12
Dibenz[a,h]anthracene	53-70-3	9.1E-11	9.0E-11	9.5E-11	1.1E-10	5.7E-11	4.8E-11	9.7E-11
Indeno[1,2,3-cd]pyrene	193-39-5	5.3E-11	5.3E-11	5.6E-11	6.6E-11	3.3E-11	2.8E-11	5.7E-11
Benzo[k]fluoranthene	207-08-9	4.5E-11	4.4E-11	4.7E-11	5.5E-11	2.8E-11	2.4E-11	4.8E-11
Naphthalene	91-20-3	3.4E-13	3.4E-13	3.6E-13	4.2E-13	2.1E-13	1.8E-13	3.7E-13
Chrysene	218-01-9	4.7E-11	4.6E-11	4.9E-11	5.7E-11	2.9E-11	2.5E-11	5.0E-11
Field-Related Risk _{der-sum}		1.8E-09	1.8E-09	1.9E-09	2.2E-09	1.1E-09	9.5E-10	1.9E-09
								1.2E-08

Table G-2. Dermal Risk (Risk_{der}, unitless) by **Field-Related Chemical** and Dermal Route Total (Risk_{der-sum}, unitless) for Coaches

Chemical	CASRN	Risk _{der}					Lifetime
		16<30 years	30<40 years	40<50 years	50<70 years		
Aniline	62-53-3	1.5E-13	1.0E-13	1.0E-13	2.1E-13		5.6E-13
Benz[a]anthracene	56-55-3	4.4E-11	2.9E-11	3.0E-11	5.9E-11		1.6E-10
Cyclopenta[cd]pyrene	27208-37-3	5.1E-10	3.4E-10	3.4E-10	6.9E-10		1.9E-09
Benzo[a]pyrene	50-32-8	3.3E-10	2.2E-10	2.2E-10	4.5E-10		1.2E-09
Benzo[b]fluoranthene	205-99-2	6.2E-11	4.2E-11	4.2E-11	8.4E-11		2.3E-10
1,3-Benzothiazole-2-thiol	149-30-4	2.0E-12	1.3E-12	1.3E-12	2.7E-12		7.3E-12
Dibenz[a,h]anthracene	53-70-3	5.5E-11	3.7E-11	3.7E-11	7.5E-11		2.0E-10
Indeno[1,2,3-cd]pyrene	193-39-5	3.2E-11	2.2E-11	2.2E-11	4.4E-11		1.2E-10
Benzo[k]fluoranthene	207-08-9	2.7E-11	1.8E-11	1.8E-11	3.7E-11		1.0E-10
Naphthalene	91-20-3	2.1E-13	1.4E-13	1.4E-13	2.8E-13		7.7E-13
Chrysene	218-01-9	2.8E-11	1.9E-11	1.9E-11	3.8E-11		1.0E-10
Field-Related Risk _{der-sum}		1.1E-09	7.3E-10	7.4E-10	1.5E-09		4.0E-09

Table G-3. Dermal Risk (Risk_{der}, unitless) by **Field-Related Chemical** and Dermal Route Total (Risk_{der-sum}, unitless) for Referees

Chemical	CASRN	Risk _{der}					Lifetime
		16<30 years	30<40 years	40<50 years	50<70 years		
Aniline	62-53-3	6.1E-14	4.1E-14	4.1E-14	8.3E-14		2.3E-13
Benz[a]anthracene	56-55-3	1.8E-11	1.2E-11	1.2E-11	2.4E-11		6.5E-11
Cyclopenta[cd]pyrene	27208-37-3	2.0E-10	1.4E-10	1.4E-10	2.8E-10		7.5E-10
Benzo[a]pyrene	50-32-8	1.3E-10	8.9E-11	9.0E-11	1.8E-10		4.9E-10



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Chemical	CASRN	Risk _{der}					
		16<30 years	30<40 years	40<50 years	50<70 years	Lifetime	
Benzo[b]fluoranthene	205-99-2	2.5E-11	1.7E-11	1.7E-11	3.4E-11	9.3E-11	
1,3-Benzothiazole-2-thiol	149-30-4	7.9E-13	5.3E-13	5.3E-13	1.1E-12	2.9E-12	
Dibenz[a,h]anthracene	53-70-3	2.2E-11	1.5E-11	1.5E-11	3.0E-11	8.2E-11	
Indeno[1,2,3-cd]pyrene	193-39-5	1.3E-11	8.7E-12	8.8E-12	1.8E-11	4.8E-11	
Benzo[k]fluoranthene	207-08-9	1.1E-11	7.3E-12	7.4E-12	1.5E-11	4.0E-11	
Naphthalene	91-20-3	8.4E-14	5.6E-14	5.7E-14	1.1E-13	3.1E-13	
Chrysene	218-01-9	1.1E-11	7.6E-12	7.7E-12	1.5E-11	4.2E-11	
Field-Related Risk _{der-sum}		4.4E-10	2.9E-10	3.0E-10	5.9E-10	1.6E-09	

Table G-4. Dermal Risk (Risk_{der}, unitless) by **Field-Related Chemical** and Dermal Route Total (Risk_{der-sum}, unitless) for Spectators

Chemical	CASRN	Risk _{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	1.5E-14	6.6E-13	2.9E-13	3.3E-13	2.8E-13	1.2E-13	7.1E-14	7.2E-14	1.4E-13	2.0E-12
Benz[a]anthracene	56-55-3	4.4E-12	1.9E-10	8.4E-11	9.5E-11	8.2E-11	3.3E-11	2.1E-11	2.1E-11	3.9E-11	5.7E-10
Cyclopenta[cd]pyrene	27208-37-3	5.1E-11	2.2E-09	9.7E-10	1.1E-09	9.4E-10	3.8E-10	2.4E-10	2.4E-10	4.5E-10	6.6E-09
Benzo[a]pyrene	50-32-8	3.3E-11	1.4E-09	6.3E-10	7.2E-10	6.1E-10	2.5E-10	1.5E-10	1.6E-10	2.9E-10	4.3E-09
Benzo[b]fluoranthene	205-99-2	6.3E-12	2.7E-10	1.2E-10	1.4E-10	1.2E-10	4.7E-11	2.9E-11	2.9E-11	5.6E-11	8.1E-10
1,3-Benzothiazole-2-thiol	149-30-4	2.0E-13	8.5E-12	3.8E-12	4.3E-12	3.6E-12	1.5E-12	9.2E-13	9.3E-13	1.8E-12	2.5E-11
Dibenz[a,h]anthracene	53-70-3	5.6E-12	2.4E-10	1.1E-10	1.2E-10	1.0E-10	4.2E-11	2.6E-11	2.6E-11	4.9E-11	7.2E-10
Indeno[1,2,3-cd]pyrene	193-39-5	3.3E-12	1.4E-10	6.2E-11	7.1E-11	6.0E-11	2.5E-11	1.5E-11	1.5E-11	2.9E-11	4.2E-10
Benzo[k]fluoranthene	207-08-9	2.8E-12	1.2E-10	5.2E-11	5.9E-11	5.1E-11	2.1E-11	1.3E-11	1.3E-11	2.4E-11	3.5E-10
Naphthalene	91-20-3	2.1E-14	9.1E-13	4.0E-13	4.5E-13	3.9E-13	1.6E-13	9.8E-14	9.9E-14	1.9E-13	2.7E-12
Chrysene	218-01-9	2.9E-12	1.2E-10	5.4E-11	6.1E-11	5.3E-11	2.1E-11	1.3E-11	1.3E-11	2.5E-11	3.7E-10
Field-Related Risk _{der-sum}		1.1E-10	4.7E-09	2.1E-09	2.4E-09	2.0E-09	8.3E-10	5.1E-10	5.2E-10	9.7E-10	1.4E-08

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Table G-5. Field-Specific^a Dermal Risk Route Total Lifetime Cancer Risk ($\text{Risk}_{\text{der-sum-field}}$, unitless) for **Field-Related Carcinogens**—Combined Gender

Receptor Category	Age Group	Risk _{der-sum-field}					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Athletes	2<6 years	9.2E-11	1.8E-09	1.2E-09	1.7E-09	3.6E-09	4.8E-09
	6<11 years	9.1E-11	1.8E-09	1.2E-09	1.7E-09	3.5E-09	4.8E-09
	11<16 years	9.6E-11	1.9E-09	1.2E-09	1.8E-09	3.7E-09	5.0E-09
	16<30 years	1.1E-10	2.2E-09	1.5E-09	2.1E-09	4.4E-09	5.9E-09
	30<40 years	5.8E-11	1.1E-09	7.4E-10	1.1E-09	2.2E-09	3.0E-09
	40<50 years	4.9E-11	9.5E-10	6.3E-10	9.0E-10	1.9E-09	2.5E-09
	50<70 years	9.8E-11	1.9E-09	1.3E-09	1.8E-09	3.8E-09	5.1E-09
	Lifetime	6.0E-10	1.2E-08	7.7E-09	1.7E-09	2.3E-08	3.1E-08
Coaches	16<30 years	5.6E-11	1.1E-09	7.2E-10	1.0E-09	2.2E-09	2.9E-09
	30<40 years	3.8E-11	7.3E-10	4.8E-10	6.9E-10	1.5E-09	2.0E-09
	40<50 years	3.8E-11	7.4E-10	4.9E-10	7.0E-10	1.5E-09	2.0E-09
	50<70 years	7.6E-11	1.5E-09	9.8E-10	1.4E-09	3.0E-09	4.0E-09
	Lifetime	8.1E-10	1.6E-08	1.0E-08	1.5E-08	3.1E-08	4.2E-08
Referees	16<30 years	2.3E-11	4.4E-10	2.9E-10	4.2E-10	8.8E-10	1.2E-09
	30<40 years	1.5E-11	2.9E-10	1.9E-10	2.8E-10	5.9E-10	7.9E-10
	40<50 years	1.5E-11	3.0E-10	2.0E-10	2.8E-10	5.9E-10	8.0E-10
	50<70 years	3.1E-11	5.9E-10	3.9E-10	5.7E-10	1.2E-09	1.6E-09
	Lifetime	8.4E-11	1.6E-09	1.1E-09	1.5E-09	3.2E-09	4.4E-09
Spectators	Third trimester fetus	5.7E-12	1.1E-10	7.3E-11	1.1E-10	2.2E-10	3.0E-10
	0<2 years	2.4E-10	4.7E-09	3.1E-09	4.5E-09	9.5E-09	1.3E-08
	2<6 years	1.1E-10	2.1E-09	1.4E-09	2.0E-09	4.2E-09	5.6E-09
	6<11 years	1.2E-10	2.4E-09	1.6E-09	2.3E-09	4.7E-09	6.4E-09
	11<16 years	1.0E-10	2.0E-09	1.3E-09	1.9E-09	4.1E-09	5.4E-09
	16<30 years	4.3E-11	8.3E-10	5.5E-10	7.9E-10	1.7E-09	2.2E-09



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Receptor Category	Age Group	Risk _{der-sum-field}					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
	30<40 years	2.6E-11	5.1E-10	3.4E-10	4.9E-10	1.0E-09	1.4E-09
	40<50 years	2.7E-11	5.2E-10	3.4E-10	4.9E-10	1.0E-09	1.4E-09
	50<70 years	5.0E-11	9.7E-10	6.4E-10	9.3E-10	1.9E-09	2.6E-09
	Lifetime	7.3E-10	1.4E-08	9.4E-09	1.3E-08	2.8E-08	3.8E-08

^a 35 field-specific Risk_{der-sum-field} are included in the table.

G.3.3. Ingestion Lifetime Risk

Table G-1. Ingestion Risk (Risk_{ing}, unitless) by **Field-Related Chemical** and Ingestion Route Total (Risk_{ing-sum}, unitless) for Athletes

Chemical	CASRN ^a	Risk _{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	8.0E-12	6.7E-12	5.2E-12	5.4E-12	2.6E-12	2.2E-12	4.4E-12
Arsenic		7.4E-08	6.1E-08	4.8E-08	4.9E-08	2.4E-08	2.0E-08	4.1E-08
Benz[a]anthracene	56-55-3	2.8E-09	2.3E-09	1.8E-09	1.9E-09	8.9E-10	7.5E-10	1.5E-09
Benzo[a]pyrene	50-32-8	2.3E-08	1.9E-08	1.5E-08	1.5E-08	7.3E-09	6.2E-09	1.3E-08
Benzo[b]fluoranthene	205-99-2	3.8E-09	3.2E-09	2.5E-09	2.6E-09	1.2E-09	1.0E-09	2.1E-09
Benzo[k]fluoranthene	207-08-9	1.2E-09	1.0E-09	8.0E-10	8.3E-10	4.0E-10	3.4E-10	6.8E-10
Chromium		1.9E-08	1.6E-08	1.2E-08	1.3E-08	6.1E-09	5.1E-09	1.0E-08
Chrysene	218-01-9	1.2E-09	1.0E-09	8.0E-10	8.3E-10	4.0E-10	3.4E-10	6.8E-10
Cyclopenta[cd]pyrene	27208-37-3	2.6E-08	2.2E-08	1.7E-08	1.8E-08	8.5E-09	7.2E-09	1.5E-08
Dibenz[a,h]anthracene	53-70-3	5.6E-10	4.7E-10	3.6E-10	3.8E-10	1.8E-10	1.5E-10	3.1E-10
Indeno[1,2,3-cd]pyrene	193-39-5	4.6E-10	3.9E-10	3.0E-10	3.1E-10	1.5E-10	1.3E-10	2.6E-10
Lead		4.5E-09	3.8E-09	2.9E-09	3.0E-09	1.5E-09	1.2E-09	2.5E-09
Naphthalene	91-20-3	5.0E-12	4.2E-12	3.2E-12	3.4E-12	1.6E-12	1.4E-12	2.8E-12
Field-Related Risk _{ing-sum}		1.6E-07	1.3E-07	1.0E-07	1.1E-07	5.0E-08	4.2E-08	8.7E-08
								6.7E-07

^a CASRN for metals and metalloids are not included as the Study did not speciate these chemicals.

Table G-2. Ingestion Risk (Risk_{ing}, unitless) by **Field-Related Chemical** and Ingestion Route Total (Risk_{ing-sum}, unitless) for Coaches

Chemical	CASRN ^a	Risk _{ing}				
		16<30 years	30<40 years	40<50 years	50<70 years	Lifetime
Aniline	62-53-3	1.4E-12	9.1E-13	8.9E-13	1.8E-12	4.9E-12
Arsenic		1.2E-08	8.4E-09	8.2E-09	1.6E-08	4.5E-08
Benz[a]anthracene	56-55-3	4.7E-10	3.2E-10	3.1E-10	6.2E-10	1.7E-09
Benzo[a]pyrene	50-32-8	3.9E-09	2.6E-09	2.5E-09	5.1E-09	1.4E-08
Benzo[b]fluoranthene	205-99-2	6.5E-10	4.3E-10	4.2E-10	8.5E-10	2.4E-09



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Chemical	CASRN ^a	Risk _{ing}				
		16<30 years	30<40 years	40<50 years	50<70 years	Lifetime
Benzo[k]fluoranthene	207-08-9	2.1E-10	1.4E-10	1.4E-10	2.8E-10	7.6E-10
Chromium		3.2E-09	2.2E-09	2.1E-09	4.2E-09	1.2E-08
Chrysene	218-01-9	2.1E-10	1.4E-10	1.4E-10	2.8E-10	7.6E-10
Cyclopenta[cd]pyrene	27208-37-3	4.5E-09	3.0E-09	3.0E-09	5.9E-09	1.6E-08
Dibenz[a,h]anthracene	53-70-3	9.5E-11	6.4E-11	6.2E-11	1.3E-10	3.5E-10
Indeno[1,2,3-cd]pyrene	193-39-5	7.9E-11	5.3E-11	5.2E-11	1.0E-10	2.9E-10
Lead		7.7E-10	5.1E-10	5.0E-10	1.0E-09	2.8E-09
Naphthalene	91-20-3	8.5E-13	5.7E-13	5.6E-13	1.1E-12	3.1E-12
Field-Related Risk _{ing-sum}		2.7E-08	1.8E-08	1.7E-08	3.5E-08	9.7E-08

^a CASRN for metals and metalloids are not included as the Study did not speciate these chemicals.

Table G-3. Ingestion Risk (Risk_{ing}, unitless) by Field-Related Chemical and Ingestion Route Total (Risk_{ing-sum}, unitless) for Referees

Chemical	CASRN ^a	Risk _{ing}				
		16<30 years	30<40 years	40<50 years	50<70 years	Lifetime
Aniline	62-53-3	6.0E-13	4.0E-13	3.9E-13	7.8E-13	2.2E-12
Arsenic		5.5E-09	3.7E-09	3.6E-09	7.2E-09	2.0E-08
Benz[a]anthracene	56-55-3	2.1E-10	1.4E-10	1.4E-10	2.7E-10	7.5E-10
Benzo[a]pyrene	50-32-8	1.7E-09	1.1E-09	1.1E-09	2.2E-09	6.2E-09
Benzo[b]fluoranthene	205-99-2	2.8E-10	1.9E-10	1.9E-10	3.7E-10	1.0E-09
Benzo[k]fluoranthene	207-08-9	9.2E-11	6.2E-11	6.0E-11	1.2E-10	3.3E-10
Chromium		1.4E-09	9.5E-10	9.3E-10	1.9E-09	5.1E-09
Chrysene	218-01-9	9.2E-11	6.2E-11	6.0E-11	1.2E-10	3.4E-10
Cyclopenta[cd]pyrene	27208-37-3	2.0E-09	1.3E-09	1.3E-09	2.6E-09	7.2E-09
Dibenz[a,h]anthracene	53-70-3	4.2E-11	2.8E-11	2.7E-11	5.5E-11	1.5E-10
Indeno[1,2,3-cd]pyrene	193-39-5	3.5E-11	2.3E-11	2.3E-11	4.5E-11	1.3E-10
Lead		3.4E-10	2.3E-10	2.2E-10	4.4E-10	1.2E-09
Naphthalene	91-20-3	3.7E-13	2.5E-13	2.5E-13	4.9E-13	1.4E-12
Field-Related Risk _{ing-sum}		1.2E-08	7.8E-09	7.6E-09	1.5E-08	4.2E-08

^a CASRN for metals and metalloids are not included as the Study did not speciate these chemicals.

Table G-4. Ingestion Risk (Risk_{ing}, unitless) by Field-Related Chemical and Ingestion Route Total (Risk_{ing-sum}, unitless) for Spectators

Chemical	CASRN ^a	Risk _{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	8.4E-14	4.7E-11	1.3E-11	1.2E-11	9.1E-13	4.8E-13	3.3E-13	3.1E-13	6.2E-13	7.4E-11



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Chemical	CASRN ^a	Risk _{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
Arsenic		7.7E-10	4.3E-07	1.2E-07	1.1E-07	8.4E-09	4.4E-09	3.0E-09	2.8E-09	5.7E-09	6.8E-07
Benz[a]anthracene	56-55-3	2.9E-11	1.6E-08	4.6E-09	4.0E-09	3.2E-10	1.7E-10	1.1E-10	1.1E-10	2.2E-10	2.6E-08
Benzo[a]pyrene	50-32-8	2.4E-10	1.3E-07	3.8E-08	3.3E-08	2.6E-09	1.4E-09	9.3E-10	8.8E-10	1.8E-09	2.1E-07
Benzo[b]fluoranthene	205-99-2	4.0E-11	2.2E-08	6.3E-09	5.5E-09	4.3E-10	2.3E-10	1.6E-10	1.5E-10	3.0E-10	3.5E-08
Benzo[k]fluoranthene	207-08-9	1.3E-11	7.2E-09	2.0E-09	1.8E-09	1.4E-10	7.5E-11	5.0E-11	4.8E-11	9.6E-11	1.1E-08
Chromium		2.0E-10	1.1E-07	3.1E-08	2.8E-08	2.2E-09	1.1E-09	7.7E-10	7.3E-10	1.5E-09	1.8E-07
Chrysene	218-01-9	1.3E-11	7.2E-09	2.0E-09	1.8E-09	1.4E-10	7.5E-11	5.0E-11	4.8E-11	9.6E-11	1.1E-08
Cyclopenta[cd]pyrene	27208-37-3	2.8E-10	1.5E-07	4.4E-08	3.9E-08	3.0E-09	1.6E-09	1.1E-09	1.0E-09	2.1E-09	2.5E-07
Dibenz[a,h]anthracene	53-70-3	5.9E-12	3.3E-09	9.3E-10	8.1E-10	6.4E-11	3.4E-11	2.3E-11	2.2E-11	4.3E-11	5.2E-09
Indeno[1,2,3-cd]pyrene	193-39-5	4.9E-12	2.7E-09	7.7E-10	6.7E-10	5.3E-11	2.8E-11	1.9E-11	1.8E-11	3.6E-11	4.3E-09
Lead		4.8E-11	2.6E-08	7.5E-09	6.6E-09	5.2E-10	2.7E-10	1.9E-10	1.8E-10	3.5E-10	4.2E-08
Naphthalene	91-20-3	5.3E-14	2.9E-11	8.3E-12	7.3E-12	5.7E-13	3.0E-13	2.1E-13	1.9E-13	3.9E-13	4.7E-11
Field-Related Risk _{ing-sum}		1.6E-09	9.1E-07	2.6E-07	2.3E-07	1.8E-08	9.5E-09	6.4E-09	6.0E-09	1.2E-08	1.5E-06

^a CASRN for metals and metalloids are not included as the Study did not speciate these chemicals.

INDIVIDUAL FIELD ASSESSMENT (Table G-160)

Table G-5. Field-Specific^a Ingestion Risk Route Total Lifetime Cancer Risk (Risk_{ing-sum-field}, unitless) for **Field-Related Carcinogens**—Combined Gender

Receptor Category	Age Group	Risk _{ing-sum-field}					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Athletes	2<6 years	3.9E-08	1.6E-07	7.3E-08	1.4E-07	2.7E-07	3.6E-07
	6<11 years	3.3E-08	1.3E-07	6.1E-08	1.2E-07	2.3E-07	3.0E-07
	11<16 years	2.5E-08	1.0E-07	4.7E-08	9.0E-08	1.8E-07	2.3E-07
	16<30 years	2.6E-08	1.1E-07	4.9E-08	9.3E-08	1.8E-07	2.4E-07
	30<40 years	1.3E-08	5.0E-08	2.3E-08	4.4E-08	8.7E-08	1.2E-07
	40<50 years	1.1E-08	4.2E-08	2.0E-08	3.8E-08	7.4E-08	9.8E-08



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Receptor Category	Age Group	Risk ^{ing-sum-field}					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Coaches	50<70 years	2.2E-08	8.7E-08	4.1E-08	7.7E-08	1.5E-07	2.0E-07
	Lifetime	1.7E-07	6.7E-07	3.1E-07	6.0E-07	1.2E-06	1.5E-06
Referees	16<30 years	6.7E-09	2.7E-08	1.2E-08	2.4E-08	4.6E-08	6.1E-08
	30<40 years	4.5E-09	1.8E-08	8.3E-09	1.6E-08	3.1E-08	4.1E-08
	40<50 years	4.4E-09	1.7E-08	8.1E-09	1.5E-08	3.0E-08	4.0E-08
	50<70 years	8.8E-09	3.5E-08	1.6E-08	3.1E-08	6.1E-08	8.0E-08
	Lifetime	2.4E-08	9.7E-08	4.5E-08	8.6E-08	1.7E-07	2.2E-07
Spectators	16<30 years	2.9E-09	1.2E-08	5.4E-09	1.0E-08	2.0E-08	2.7E-08
	30<40 years	2.0E-09	7.8E-09	3.7E-09	6.9E-09	1.4E-08	1.8E-08
	40<50 years	1.9E-09	7.6E-09	3.6E-09	6.8E-09	1.3E-08	1.8E-08
	50<70 years	3.9E-09	1.5E-08	7.2E-09	1.4E-08	2.7E-08	3.5E-08
	Lifetime	1.1E-08	4.2E-08	2.0E-08	3.8E-08	7.4E-08	9.8E-08
	Third trimester fetus	4.1E-10	1.6E-09	7.7E-10	1.5E-09	2.9E-09	3.8E-09
	0<2 years	2.3E-07	9.1E-07	4.3E-07	8.1E-07	1.6E-06	2.1E-06
	2<6 years	6.5E-08	2.6E-07	1.2E-07	2.3E-07	4.5E-07	6.0E-07
	6<11 years	5.7E-08	2.3E-07	1.1E-07	2.0E-07	4.0E-07	5.2E-07
	11<16 years	4.5E-09	1.8E-08	8.3E-09	1.6E-08	3.1E-08	4.1E-08
	16<30 years	2.4E-09	9.5E-09	4.4E-09	8.4E-09	1.6E-08	2.2E-08
	30<40 years	1.6E-09	6.4E-09	3.0E-09	5.7E-09	1.1E-08	1.5E-08
	40<50 years	1.5E-09	6.0E-09	2.8E-09	5.4E-09	1.1E-08	1.4E-08
	50<70 years	3.0E-09	1.2E-08	5.7E-09	1.1E-08	2.1E-08	2.8E-08
	Lifetime	3.6E-07	1.5E-06	6.8E-07	1.3E-06	2.5E-06	3.3E-06

^a35 field-specific Risk^{ing-sum-field} are included in the table.



G.3.4. Multiple Routes Lifetime Incremental Cancer Risk

Table G-1. **On-Field** Lifetime Incremental Cancer Risks for Inhalation, Dermal, and Ingestion Routes ($\text{Risk}_{\text{inh-sum}}$, $\text{Risk}_{\text{der-sum}}$, and $\text{Risk}_{\text{ing-sum}}$, unitless) and Multiple Routes Exposures to **All** Carcinogens (RISK, unitless)

Cancer Risk	Athletes	Coaches	Referees	Spectators
$\text{Risk}_{\text{inh-sum}}$	1.8E-05	6.1E-06	2.2E-06	5.9E-06
$\text{Risk}_{\text{der-sum}}$	1.2E-08	4.0E-09	1.6E-09	1.4E-08
$\text{Risk}_{\text{ing-sum}}$	6.7E-07	9.7E-08	4.2E-08	1.5E-06
All Chemicals RISK	1.9E-05	6.2E-06	2.3E-06	7.4E-06

Table G-2. **On-Field** Lifetime Incremental Cancer Risks for Inhalation, Dermal, and Ingestion Routes ($\text{Risk}_{\text{inh-sum}}$, $\text{Risk}_{\text{der-sum}}$, and $\text{Risk}_{\text{ing-sum}}$, unitless) and Multiple Routes Exposures to **Field-Related** Carcinogens (RISK, unitless)

Cancer Risk	Athletes	Coaches	Referees	Spectators
Field-Related $\text{Risk}_{\text{inh-sum}}$	9.4E-07	3.1E-07	1.2E-07	3.1E-07
$\text{Risk}_{\text{der-sum}}$	1.2E-08	4.0E-09	1.6E-09	1.4E-08
$\text{Risk}_{\text{ing-sum}}$	6.7E-07	9.7E-08	4.2E-08	1.5E-06
Field-Related RISK	1.6E-06	4.2E-07	1.6E-07	1.8E-06

Table G-3. **On-Field** Lifetime Incremental Cancer Risks for Inhalation, Dermal, and Ingestion Routes ($\text{Risk}_{\text{inh-sum}}$, $\text{Risk}_{\text{der-sum}}$, and $\text{Risk}_{\text{ing-sum}}$, unitless) and Multiple Routes Exposures to **Non-Field-Related** Carcinogens (RISK, unitless)

Cancer Risk	Athletes	Coaches	Referees	Spectators
Non-Field-Related $\text{Risk}_{\text{inh-sum}}$	1.7E-05	5.7E-06	2.1E-06	5.6E-06
Non-Field-Related $\text{Risk}_{\text{der-sum}}$	0	0	0	0
Non-Field-Related $\text{Risk}_{\text{ing-sum}}$	0	0	0	0
Non-Field-Related RISK	1.7E-05	5.7E-06	2.1E-06	5.6E-06

Table G-4. **Off-Field** Lifetime Incremental Cancer Risks for Inhalation ($\text{Risk}_{\text{inh-sum}}$, unitless) and Multiple Routes^a Exposures to Carcinogens (RISK, unitless) for Spectators

Cancer Risk	Spectators
Field-Related $\text{Risk}_{\text{inh-sum}}$ or Field-Related RISK	3.4E-07
Non-Field-Related $\text{Risk}_{\text{inh-sum}}$ or Non-Field-Related RISK	2.5E-06
All Chemicals $\text{Risk}_{\text{inh-sum}}$ or All Chemicals RISK	2.9E-06

^a Only inhalation route was assessed for exposure to chemicals off-field. Therefore, the inhalation route risk sum of each chemical group equals to the overall RISK for the corresponding chemical groups.

INDIVIDUAL FIELD ASSESSMENT (Table G-165 to Table G-168)



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Table G-5. **On-Field** Field-Specific^a Lifetime Incremental Cancer Risks Multiple Routes Exposures to **All** Carcinogens ($RISK_{field}$, unitless)—Combined Gender

Receptor Category	Age Group	$RISK_{field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Athletes	2<6 years	4.3E-07	1.6E-06	1.0E-06	1.2E-06	3.8E-06	4.1E-06
	6<11 years	6.1E-07	2.5E-06	1.7E-06	1.8E-06	6.0E-06	6.5E-06
	11<16 years	5.8E-07	2.4E-06	1.6E-06	1.8E-06	5.8E-06	6.4E-06
	16<30 years	9.6E-07	4.2E-06	2.8E-06	3.0E-06	1.0E-05	1.1E-05
	30<40 years	4.5E-07	2.0E-06	1.3E-06	1.4E-06	4.7E-06	5.2E-06
	40<50 years	4.4E-07	1.9E-06	1.3E-06	1.4E-06	4.6E-06	5.1E-06
	50<70 years	8.6E-07	3.8E-06	2.6E-06	2.7E-06	9.1E-06	1.0E-05
	Lifetime	4.3E-06	1.8E-05	1.2E-05	1.3E-05	4.4E-05	4.8E-05
Coaches	16<30 years	3.9E-07	1.7E-06	1.2E-06	1.2E-06	4.2E-06	4.6E-06
	30<40 years	2.4E-07	1.1E-06	7.3E-07	7.7E-07	2.6E-06	2.9E-06
	40<50 years	2.4E-07	1.1E-06	7.4E-07	7.8E-07	2.6E-06	2.9E-06
	50<70 years	4.9E-07	2.2E-06	1.5E-06	1.6E-06	5.3E-06	5.8E-06
	Lifetime	1.4E-06	6.1E-06	4.1E-06	4.3E-06	1.5E-05	1.6E-05
Referees	16<30 years	1.4E-07	6.4E-07	4.4E-07	4.6E-07	1.5E-06	1.7E-06
	30<40 years	9.1E-08	4.0E-07	2.7E-07	2.9E-07	9.7E-07	1.1E-06
	40<50 years	9.1E-08	4.0E-07	2.7E-07	2.9E-07	9.8E-07	1.1E-06
	50<70 years	1.8E-07	8.1E-07	5.5E-07	5.8E-07	2.0E-06	2.2E-06
	Lifetime	5.1E-07	2.3E-06	1.5E-06	1.6E-06	5.4E-06	6.0E-06
Spectators	Third trimester fetus	1.0E-08	4.2E-08	2.8E-08	3.1E-08	1.0E-07	1.1E-07
	0<2 years	1.2E-06	3.5E-06	2.0E-06	2.9E-06	7.2E-06	8.4E-06
	2<6 years	3.6E-07	1.1E-06	6.1E-07	8.8E-07	2.3E-06	2.6E-06
	6<11 years	3.7E-07	1.2E-06	7.2E-07	9.6E-07	2.6E-06	2.9E-06
	11<16 years	1.1E-07	4.5E-07	3.0E-07	3.2E-07	1.1E-06	1.2E-06
	16<30 years	6.4E-08	2.7E-07	1.8E-07	2.0E-07	6.5E-07	7.1E-07
	30<40 years	4.0E-08	1.7E-07	1.1E-07	1.2E-07	4.1E-07	4.5E-07
	40<50 years	4.0E-08	1.7E-07	1.1E-07	1.2E-07	4.1E-07	4.5E-07
	50<70 years	8.1E-08	3.4E-07	2.3E-07	2.5E-07	8.2E-07	9.0E-07
	Lifetime	2.3E-06	7.3E-06	4.2E-06	5.8E-06	1.6E-05	1.7E-05

^a35 field-specific $RISK_{field}$ are included in the table.

Table G-6. **On-Field** Field-Specific^a Lifetime Incremental Cancer Risks Multiple Routes Exposures to **Field-Related** Carcinogens ($RISK_{field}$, unitless)—Combined Gender

Receptor Category	Age Group	$RISK_{field}$					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Athletes	2<6 years	5.7E-08	2.3E-07	1.3E-07	2.1E-07	4.4E-07	7.2E-07
	6<11 years	6.1E-08	2.6E-07	1.7E-07	2.2E-07	5.5E-07	8.8E-07



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Receptor Category	Age Group	RISK _{field}					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
	11<16 years	5.3E-08	2.2E-07	1.6E-07	1.8E-07	5.0E-07	8.0E-07
	16<30 years	6.4E-08	3.2E-07	2.6E-07	2.4E-07	7.6E-07	1.2E-06
	30<40 years	3.0E-08	1.5E-07	1.2E-07	1.1E-07	3.6E-07	5.8E-07
	40<50 years	2.6E-08	1.4E-07	1.2E-07	1.0E-07	3.4E-07	5.5E-07
	50<70 years	5.3E-08	2.8E-07	2.3E-07	2.1E-07	6.7E-07	1.1E-06
	Lifetime	3.8E-07	1.6E-06	1.2E-06	1.3E-06	3.6E-06	5.8E-06
Coaches	16<30 years	1.7E-08	1.2E-07	1.0E-07	7.9E-08	2.9E-07	4.7E-07
	30<40 years	1.1E-08	7.3E-08	6.4E-08	5.1E-08	1.8E-07	3.0E-07
	40<50 years	1.1E-08	7.4E-08	6.5E-08	5.1E-08	1.8E-07	3.0E-07
	50<70 years	2.2E-08	1.5E-07	1.3E-07	1.0E-07	3.6E-07	6.0E-07
	Lifetime	6.1E-08	4.1E-07	3.6E-07	2.8E-07	1.0E-06	1.7E-06
Referees	16<30 years	7.3E-09	4.5E-08	3.8E-08	3.2E-08	1.1E-07	1.8E-07
	30<40 years	4.9E-09	2.8E-08	2.4E-08	2.0E-08	6.9E-08	1.1E-07
	40<50 years	4.8E-09	2.9E-08	2.4E-08	2.0E-08	6.9E-08	1.1E-07
	50<70 years	9.6E-09	5.7E-08	4.9E-08	4.1E-08	1.4E-07	2.3E-07
	Lifetime	2.7E-08	1.6E-07	1.4E-07	1.1E-07	3.9E-07	6.3E-07
Spectators	Third trimester fetus	9.2E-10	3.9E-09	2.8E-09	3.1E-09	8.5E-09	1.4E-08
	0<2 years	2.6E-07	1.1E-06	5.2E-07	1.0E-06	1.8E-06	2.7E-06
	2<6 years	7.5E-08	3.0E-07	1.5E-07	2.9E-07	5.1E-07	8.0E-07
	6<11 years	6.9E-08	2.8E-07	1.4E-07	2.6E-07	4.8E-07	7.6E-07
	11<16 years	1.0E-08	4.2E-08	2.9E-08	3.4E-08	9.1E-08	1.5E-07
	16<30 years	5.7E-09	2.4E-08	1.7E-08	1.9E-08	5.3E-08	8.6E-08
	30<40 years	3.6E-09	1.5E-08	1.1E-08	1.2E-08	3.4E-08	5.5E-08
	40<50 years	3.6E-09	1.5E-08	1.1E-08	1.2E-08	3.4E-08	5.4E-08
	50<70 years	7.2E-09	3.0E-08	2.2E-08	2.4E-08	6.8E-08	1.1E-07
	Lifetime	4.4E-07	1.8E-06	8.9E-07	1.6E-06	3.0E-06	4.8E-06

^a 35 field-specific RISK_{field} are included in the table.

Table G-7. On-Field Field-Specific^a Lifetime Incremental Cancer Risks Multiple Routes Exposures to Non-Field-Related Carcinogens (RISK_{field}, unitless)^b—Combined Gender

Receptor Category	Age Group	RISK _{field}					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Athletes	2<6 years	4.1E-07	1.6E-06	9.9E-07	1.2E-06	3.6E-06	4.1E-06
	6<11 years	5.9E-07	2.4E-06	1.6E-06	1.8E-06	5.6E-06	6.5E-06
	11<16 years	5.5E-07	2.3E-06	1.5E-06	1.8E-06	5.4E-06	6.3E-06
	16<30 years	9.2E-07	4.0E-06	2.7E-06	3.0E-06	9.3E-06	1.1E-05
	30<40 years	4.3E-07	1.9E-06	1.3E-06	1.4E-06	4.4E-06	5.2E-06
	40<50 years	4.2E-07	1.8E-06	1.2E-06	1.4E-06	4.3E-06	5.1E-06
	50<70 years	8.3E-07	3.6E-06	2.4E-06	2.7E-06	8.4E-06	1.0E-05



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Receptor Category	Age Group	RISK _{field}					
		Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
	Lifetime	3.7E-06	1.7E-05	1.2E-05	1.3E-05	4.0E-05	4.8E-05
Coaches	16<30 years	3.7E-07	1.6E-06	1.1E-06	1.2E-06	3.8E-06	4.6E-06
	30<40 years	2.3E-07	1.0E-06	7.0E-07	7.7E-07	2.4E-06	2.8E-06
	40<50 years	2.3E-07	1.0E-06	7.0E-07	7.8E-07	2.4E-06	2.9E-06
	50<70 years	4.7E-07	2.1E-06	1.4E-06	1.6E-06	4.8E-06	5.8E-06
	Lifetime	1.2E-06	5.7E-06	3.9E-06	4.2E-06	1.3E-05	1.6E-05
Referees	16<30 years	1.4E-07	6.1E-07	4.1E-07	4.6E-07	1.4E-06	1.7E-06
	30<40 years	8.7E-08	3.8E-07	2.6E-07	2.9E-07	8.9E-07	1.1E-06
	40<50 years	8.8E-08	3.8E-07	2.6E-07	2.9E-07	9.0E-07	1.1E-06
	50<70 years	1.8E-07	7.7E-07	5.3E-07	5.8E-07	1.8E-06	2.1E-06
	Lifetime	4.6E-07	2.1E-06	1.5E-06	1.6E-06	4.9E-06	5.9E-06
Spectators	Third trimester fetus	9.6E-09	4.0E-08	2.7E-08	3.1E-08	9.4E-08	1.1E-07
	0<2 years	1.2E-06	3.4E-06	1.9E-06	2.9E-06	7.0E-06	7.8E-06
	2<6 years	3.5E-07	1.0E-06	5.9E-07	8.8E-07	2.2E-06	2.4E-06
	6<11 years	3.6E-07	1.2E-06	6.8E-07	9.5E-07	2.5E-06	2.8E-06
	11<16 years	1.0E-07	4.2E-07	2.8E-07	3.2E-07	9.8E-07	1.2E-06
	16<30 years	6.1E-08	2.6E-07	1.7E-07	2.0E-07	6.0E-07	7.1E-07
	30<40 years	3.9E-08	1.6E-07	1.1E-07	1.2E-07	3.8E-07	4.4E-07
	40<50 years	3.9E-08	1.6E-07	1.1E-07	1.2E-07	3.8E-07	4.5E-07
	50<70 years	7.7E-08	3.3E-07	2.2E-07	2.5E-07	7.6E-07	9.0E-07
	Lifetime	1.2E-06	5.5E-06	3.8E-06	4.1E-06	1.3E-05	1.6E-05

^a 35 field-specific RISK_{field} are included in the table.

^b On-field exposure to non-field-related carcinogens only via inhalation route that On-Field RISK_{field} for non-field-related carcinogens equals to On-Field Risk_{inh-sum-field} for non-field-related carcinogens for a corresponding field.

Table G-8. Off-Field Field-Specific^a Lifetime Incremental Cancer Risks for Multiple Routes Exposures (RISK_{field}, unitless)^b for Spectators—Combined Gender

Chemical Designation	RISK _{field}					
	Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
Field-Related Carcinogens						
Third trimester fetus	0.0E+00	2.3E-09	2.8E-09	9.8E-10	7.5E-09	1.1E-08
0<2 years	0.0E+00	1.5E-07	1.8E-07	6.3E-08	4.8E-07	7.0E-07
2<6 years	0.0E+00	4.6E-08	5.7E-08	2.0E-08	1.5E-07	2.2E-07
6<11 years	0.0E+00	5.5E-08	6.8E-08	2.4E-08	1.8E-07	2.6E-07
11<16 years	0.0E+00	2.4E-08	2.9E-08	1.0E-08	7.9E-08	1.1E-07
16<30 years	0.0E+00	1.5E-08	1.8E-08	6.3E-09	4.8E-08	7.0E-08
30<40 years	0.0E+00	9.1E-09	1.1E-08	3.9E-09	3.0E-08	4.4E-08
40<50 years	0.0E+00	9.2E-09	1.1E-08	4.0E-09	3.1E-08	4.4E-08



Office of Environmental Health Hazard Assessment
California Environmental Protection Agency

Chemical Designation	RISK _{field}					
	Minimum	Mean	Standard Deviation	Median	95th Percentile	Maximum
50<70 years	0.0E+00	1.8E-08	2.3E-08	7.9E-09	6.1E-08	8.8E-08
Lifetime	0.0E+00	3.2E-07	4.0E-07	1.4E-07	1.1E-06	1.5E-06
Non-Field-Related Carcinogens						
Third trimester fetus	4.0E-09	1.8E-08	1.6E-08	1.0E-08	4.8E-08	7.3E-08
0<2 years	2.6E-07	1.1E-06	1.0E-06	6.4E-07	3.1E-06	4.7E-06
2<6 years	8.1E-08	3.6E-07	3.2E-07	2.0E-07	9.7E-07	1.5E-06
6<11 years	9.7E-08	4.3E-07	3.8E-07	2.4E-07	1.2E-06	1.8E-06
11<16 years	4.2E-08	1.9E-07	1.6E-07	1.0E-07	5.0E-07	7.6E-07
16<30 years	2.6E-08	1.1E-07	1.0E-07	6.4E-08	3.1E-07	4.7E-07
30<40 years	1.6E-08	7.1E-08	6.3E-08	4.0E-08	1.9E-07	2.9E-07
40<50 years	1.6E-08	7.2E-08	6.4E-08	4.1E-08	1.9E-07	2.9E-07
50<70 years	3.3E-08	1.4E-07	1.3E-07	8.1E-08	3.9E-07	5.9E-07
Lifetime	5.7E-07	2.5E-06	2.3E-06	1.4E-06	6.8E-06	1.0E-05
All Carcinogens						
Third trimester fetus	2.3E-09	1.9E-08	1.7E-08	1.1E-08	5.4E-08	7.7E-08
0<2 years	1.5E-07	1.3E-06	1.1E-06	7.0E-07	3.4E-06	5.0E-06
2<6 years	4.8E-08	4.0E-07	3.5E-07	2.2E-07	1.1E-06	1.6E-06
6<11 years	5.7E-08	4.7E-07	4.2E-07	2.6E-07	1.3E-06	1.9E-06
11<16 years	2.5E-08	2.0E-07	1.8E-07	1.1E-07	5.6E-07	8.1E-07
16<30 years	1.5E-08	1.3E-07	1.1E-07	7.0E-08	3.4E-07	5.0E-07
30<40 years	9.4E-09	7.8E-08	7.0E-08	4.4E-08	2.2E-07	3.1E-07
40<50 years	9.5E-09	7.9E-08	7.0E-08	4.4E-08	2.2E-07	3.1E-07
50<70 years	1.9E-08	1.6E-07	1.4E-07	8.9E-08	4.4E-07	6.3E-07
Lifetime	3.4E-07	2.8E-06	2.5E-06	1.6E-06	7.7E-06	1.1E-05

^a 35 field-specific RISK_{field} are included in the table.

^b Inhalation exposure is the only route assessed for off-field chemicals that field-specific Off-Field RISK_{field} equals to field-specific off-field Risk_{inh-sum-field} of the corresponding field.