Supplemental Table 3: Adjusted Odds Ratios (aORs) between Disinfection By-Product (DBP) Exposures and Cleft Palate without Cleft Lip Stratified by Sex

| **DBP Metrics (μg/L)** | **na** | **Total PopulationaOR (95% CI)** | **n** | **MaleaOR (95% CI)** | **n** | **FemaleaOR (95% CI)** |
| --- | --- | --- | --- | --- | --- | --- |
| THM4b |
| 0.00-20.27 | 21 | Ref | 13 | Ref   | 8 | Ref |
| >20.27–37.69 | 24 | 1.03 (0.35, 3.03) | 12 | 2.18 (0.43, 11.03) | 12 | 0.88 (0.15, 5.17) |
| >37.69–49.90 | 32 | 1.67 (0.55, 5.06) | 13 | 1.86 (0.34, 9.98) | 19 | 1.48 (0.24, 9.03) |
| >49.90–63.86 | 22 | 1.06 (0.33, 3.41) | 9 | 1.67 (0.28, 10.09) | 13 | 0.90 (0.15, 5.63) |
| >63.86-118.35 | 31 | 1.91 (0.56, 6.58) | 14 | 2.80 (0.41, 18.91) | 17 | 1.04 (0.16, 6.81) |
| THMBrc |
| 0.00-5.16 | 43 | Ref | 22 | Ref | 21 | Ref |
| >5.16-8.11 | 37 | 0.84 (0.45, 1.56) | 15 | 0.63 (0.24, 1.63) | 22 | 0.67 (0.26, 1.73) |
| >8.11-35.68 | 50 | 1.18 (0.65, 2.15) | 24 | 1.22 (0.47, 3.16) | 26 | 0.70 (0.27, 1.78) |
| Chloroformb |
| 0.00-10.88 | 21 | Ref | 13 | Ref | 8 | Ref |
| >10.88–29.91 | 21 | 0.83 (0.28, 2.43) | 12 | 0.60 (0.11, 3.18) | 9 | 0.91 (0.16, 5.07) |
| >29.91–41.89 | 38 | 1.72 (0.56, 5.27) | 14 | 1.00 (0.17, 5.97) | 24 | 2.97 (0.52, 17.08) |
| >41.89–54.53 | 24 | 0.93 (0.29, 3.05) | 12 | 0.50 (0.07, 3.60) | 12 | 1.15 (0.18, 7.41) |
| >54.53-99.49 | 26 | 1.33 (0.39, 4.56) | 10 | 0.66 (0.08, 5.13) | 16 | 1.48 (0.23, 9.50) |
| Bromodichloromethane (BDCM)c |
| 0.00-4.84 | 45 | Ref | 23 | Ref | 22 | Ref |
| >4.84–7.06 | 34 | 0.64 (0.35, 1.19) | 13 | 0.47 (0.17, 1.33) | 21 | 0.43 (0.18, 1.05) |
| >7.06-34.90 | 51 | 1.04 (0.60, 1.80) | 25 | 1.20 (0.48, 3.02) | 26 | 0.57 (0.25, 1.31) |
| Dibromochloromethane (DBCM)c |
| 0.00 | 43 | Ref | 23 | Ref | 20 | Ref |
| >0.00-14.24 | 87 | 1.11 (0.62, 1.99) | 38 | 0.76 (0.31, 1.89) | 49 | 0.70 (0.29, 1.71) |
| Bromoformc |
| 0.00 | 117 | Ref | 50 | Ref | 67 | Ref |
| >0.00-5.91 | 13 | 0.84 (0.41, 1.69) | 11 | 1.82 (0.70, 4.72) | 2 | 0.19 (0.04, 0.91) |
| HAA5d |
| 0.00 – 7.38 | 19 | Ref | 13 | Ref | 6 | Ref |
| >7.38–19.62 | 25 | 1.92 (0.54, 6.87) | 12 | 0.65 (0.12, 3.51) | 13 | NE |
| >19.62–26.34 | 24 | 1.97 (0.51, 7.64) | 10 | 0.97 (0.16, 5.93) | 14 | NE |
| >26.34–34.20 | 33 | 2.95 (0.72, 12.04) | 12 | 1.43 (0.20, 10.10) | 21 | NE |
| >34.20-94.62 | 30 | 2.91 (0.70, 12.06) | 15 | 1.91 (0.25, 14.58) | 15 | NE |
| Trichloroacetic acid (TCAA)d |
| 0.00-4.85 | 23 | Ref | 14 | Ref | 9 | Ref |
| >4.85–11.27 | 36 | 1.78 (0.71, 4.47) | 20 | 1.72 (0.44, 6.74) | 16 | 2.54 (0.60, 10.80) |
| >11.27–16.42 | 30 | 1.51 (0.53, 4.32) | 11 | 1.21 (0.22, 6.57) | 19 | 3.77 (0.79, 18.14) |
| >16.42-67.69 | 41 | 2.66 (0.90, 7.80) | 17 | 2.04 (0.36, 11.57) | 24 | 6.37 (1.23, 32.94) |
| Dichloroacetic acid (DCAA)d |
| 0.00-4.99 | 25 | Ref | 16 | Ref | 9 | Ref |
| >4.99–10.72 | 26 | 1.11 (0.47, 2.61) | 9 | 0.84 (0.22, 3.26) | 17 | 1.78 (0.41, 7.62) |
| >10.72–14.01 | 44 | 2.34 (0.93, 5.85) | 23 | 5.62 (1.23, 25.73) | 21 | 3.61 (0.73, 17.76) |
| >14.01-38.89 | 35 | 2.05 (0.78, 5.42) | 14 | 3.04 (0.61, 15.13) | 21 | 5.36 (1.04, 27.62) |
| Monochloroacetic acid (MCAA)d |
| 0.00 | 56 | Ref | 31 | Ref | 25 | Ref |
| >0.00-35.89 | 74 | 0.99 (0.65, 1.52) | 31 | 0.82 (0.41, 1.65) | 43 | 1.66 (0.88, 3.15) |
| Dibromoacetic acid (DBAA)d |
| 0.00 | 110 | Ref | 50 | Ref | 60 | Ref |
| >0.00-14.72 | 20 | 0.55 (0.32, 0.95) | 12 | 0.68 (0.30, 1.54) | 8 | 0.37 (0.15, 0.90) |
| DBP9e |
| 0.00-30.66 | 20 | Ref | 12 | Ref | 8 | Ref |
| >30.66–59.96 | 22 | 1.41 (0.45, 4.43) | 10 | 2.01 (0.33, 12.27) | 12 | 1.14 (0.21, 6.12) |
| >59.96–78.69 | 33 | 2.71 (0.87, 8.46) | 18 | 4.97 (0.83, 29.66) | 15 | 2.58 (0.46, 14.40) |
| >78.69–96.32 | 25 | 2.06 (0.64, 6.59) | 9 | 2.58 (0.39, 17.06) | 16 | 2.15 (0.40, 11.52) |
| >96.32-166.20 | 30 | 3.52 (1.07, 11.60) | 12 | 4.60 (0.72, 29.53) | 18 | 3.28 (0.60, 18.01) |

Note: aOR = adjusted odds ratios; CI = confidence interval; DBP9 = sum of chloroform, BDCM, DBCM, bromoform, MCAA, DCAA, TCAA, MBAA, and DBAA; HAA5 = sum of MCAA, DCAA, TCAA, MBAA, and DBAA; *n* = sample size; REF = referent; THM4 = sum of chloroform, BDCM, DBCM, and bromoform; THMBr = sum of BDCM, DBCM, and bromoform; NE = not estimable.

aThe numbers represent the TOF case distribution across exposure groups prior to modeling and stratification.

bCleft palate & THM4/chloroform: Models adjusted for water source and treatment type, zip code income, trimester prenatal care began, maternal race, number of prenatal care visits, HAA5

cCleft palate & THMBr/BDCM/DBCM/bromoform: Models adjusted for water source and treatment type, census tract income, number of prenatal care visits, HAA5

dCleft palate & HAA5/TCAA/DCAA/MCAA/DBAA: Models adjusted for water source and treatment type, zip code income, maternal race, THM4

eCleft palate & DBP9: Models adjusted for water source and treatment type, zip code income, maternal race, number of prenatal care visits