Supplemental Table 2: Adjusted Odds Ratios (aORs) between Disinfection By-Product (DBP) Exposures and Cleft Lip with or without Cleft Palate Stratified by Sex

| **DBP Metrics (μg/L)** | | **na** | **Total Population aOR (95% CI)** | | **n** | **Male aOR (95% CI)** | **n** | **Female aOR (95% CI)** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| THM4b | | | | | | | | |
| 0.00-20.27 | | 37 | Ref | | 22 | Ref | 15 | Ref |
| >20.27–37.69 | | 24 | 0.75 (0.31, 1.84) | | 15 | 1.50 (0.38, 5.89) | 9 | 0.15 (0.03, 0.70) |
| >37.69–49.90 | | 31 | 0.98 (0.39, 2.45) | | 20 | 2.84 (0.71, 11.38) | 11 | 0.17 (0.03, 0.85) |
| >49.90–63.86 | | 28 | 0.89 (0.34, 2.33) | | 17 | 2.03 (0.48, 8.55) | 11 | 0.26 (0.04, 1.56) |
| >63.86-118.35 | | 27 | 0.66 (0.24, 1.87) | | 16 | 1.48 (0.33, 6.61) | 11 | 0.15 (0.02, 1.08) |
| THMBrc | | | | | | | | |
| 0.00-5.16 | | 66 | Ref | | 44 | Ref | 22 | Ref |
| >5.16-8.11 | | 33 | 0.51 (0.29, 0.90) | | 17 | 0.40 (0.18, 0.88) | 16 | 0.91 (0.34, 2.44) |
| >8.11-35.68 | | 48 | 0.73 (0.44, 1.21) | | 29 | 0.62 (0.32, 1.20) | 19 | 1.08 (0.41, 2.80) |
| Chloroformb | | | | | | | | |
| 0.00-10.88 | | 37 | Ref | | 21 | Ref | 16 | Ref |
| >10.88–29.91 | | 28 | 0.84 (0.35, 2.03) | | 19 | 3.25 (0.67, 15.85) | 9 | 0.14 (0.03, 0.59) |
| >29.91–41.89 | | 28 | 0.76 (0.29, 1.99) | | 16 | 4.04 (0.77, 21.21) | 12 | 0.13 (0.03, 0.64) |
| >41.89–54.53 | | 27 | 0.71 (0.26, 1.97) | | 18 | 3.20 (0.57, 17.85) | 9 | 0.10 (0.02, 0.60) |
| >54.53-99.49 | | 27 | 0.59 (0.20, 1.58) | | 16 | 2.56 (0.44, 14.75) | 11 | 0.10 (0.01, 0.75) |
| Bromodichloromethane (BDCM)c | | | | | | | | |
| 0.00-4.84 | | 63 | Ref | | 40 | Ref | 23 | Ref |
| >4.84–7.06 | | 39 | 0.68 (0.39, 1.19) | | 23 | 0.74 (0.33, 1.68) | 16 | 0.45 (0.17, 1.21) |
| >7.06-34.90 | | 45 | 0.74 (0.45, 1.23) | | 27 | 0.74 (0.39, 1.44) | 18 | 0.63 (0.24, 1.68) |
| Dibromochloromethane (DBCM)c | | | | | | | | |
| 0.00 | | 61 | Ref | | 37 | Ref | 24 | Ref |
| >0.00-14.24 | | 86 | 0.69 (0.40, 1.21) | | 53 | 0.77 (0.36, 1.64) | 33 | 0.60 (0.23, 1.52) |
| Bromoformc | | | | | | | | |
| 0.00 | | 126 | Ref | | 80 | Ref | 46 | Ref |
| >0.00-5.91 | | 21 | 1.17 (0.63, 2.17) | | 10 | 0.64 (0.27, 1.52) | 11 | 1.99 (0.78, 5.12) |
| HAA5d | | | | | | | | |
| 0.00 – 7.38 | 38 | | Ref | 24 | | Ref | 14 | Ref |
| >7.38–19.62 | 21 | | 0.60 (0.25, 1.46) | 14 | | 0.91 (0.26, 3.14) | 7 | 0.36 (0.07, 1.72) |
| >19.62–26.34 | 35 | | 1.18 (0.46, 3.04) | 20 | | 1.42 (0.38, 5.36) | 15 | 0.98 (0.19, 5.15) |
| >26.34–34.20 | 20 | | 0.59 (0.20, 1.75) | 14 | | 0.73 (0.16, 3.30) | 6 | 0.59 (0.09, 3.83) |
| >34.20-94.62 | 33 | | 0.98 (0.34, 2.77) | 18 | | 0.96 (0.22, 4.29) | 15 | 1.46 (0.23, 9.30) |
| Trichloroacetic acid (TCAA)d | | | | | | | | |
| 0.00-4.85 | 41 | | Ref | 25 | | Ref | 16 | Ref |
| >4.85–11.27 | 39 | | 1.28 (0.60, 2.72) | 22 | | 1.95 (0.66, 5.72) | 17 | 0.62 (0.18, 2.12) |
| >11.27–16.42 | 27 | | 0.91 (0.37, 2.27) | 19 | | 1.60 (0.45, 5.64) | 8 | 0.38 (0.08, 1.74) |
| >16.42-67.69 | 39 | | 1.20 (0.48, 3.01) | 23 | | 1.57 (0.43, 5.83) | 16 | 0.98 (0.20, 4.69) |
| Dichloroacetic acid (DCAA)d | | | | | | | | |
| 0.00-4.99 | 44 | | Ref | 29 | | Ref | 15 | Ref |
| >4.99–10.72 | 33 | | 0.90 (0.44, 1.85) | 18 | | 0.74 (0.28, 1.99) | 15 | 0.84 (0.24, 2.96) |
| >10.72–14.01 | 34 | | 0.90 (0.40, 2.02) | 23 | | 0.81 (0.28, 2.30) | 11 | 0.67 (0.16, 2.92) |
| >14.01-38.89 | 35 | | 0.80 (0.33, 1.92) | 19 | | 0.48 (0.15, 1.56) | 16 | 1.30 (0.28, 5.98) |
| Monochloroacetic acid (MCAA)d | | | | | | | | |
| 0.00 | 75 | | Ref | 47 | | Ref | 28 | Ref |
| >0.00-35.89 | 71 | | 1.11 (0.73, 1.68) | 42 | | 1.09 (0.62, 1.92) | 29 | 1.55 (0.77, 3.10) |
| Dibromoacetic acid (DBAA)d | | | | | | | | |
| 0.00 | 110 | | Ref | 69 | | Ref | 41 | Ref |
| >0.00-14.72 | 36 | | 1.23 (0.78, 1.94) | 20 | | 1.09 (0.57, 2.07) | 16 | 1.43 (0.67, 3.05) |
| DBP9e | | | | | | | | |
| 0.00-30.66 | 38 | | Ref | 23 | | Ref | 15 | Ref |
| >30.66–59.96 | 31 | | 0.93 (0.41, 2.08) | 20 | | 1.79 (0.54, 5.98) | 11 | 0.34 (0.09, 1.26) |
| >59.96–78.69 | 20 | | 0.62 (0.26, 1.50) | 13 | | 1.07 (0.30, 3.89) | 7 | 0.20 (0.05, 0.88) |
| >78.69–96.32 | 33 | | 1.10 (0.47, 2.56) | 19 | | 2.02 (0.56, 7.30) | 14 | 0.52 (0.13, 2.09) |
| >96.32-166.20 | 25 | | 0.63 (0.26, 1.54) | 15 | | 0.85 (0.23, 3.10) | 10 | 0.43 (0.10, 1.86) |

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.

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

bCL±P & THM4/chloroform: Models adjusted for water treatment type, maternal education, census tract income, HAA5

cCL±P & THMBr/BDCM/DBCM/bromoform: Models adjusted for water source and treatment type, census tract income, HAA5

dCL±P & HAA5/TCAA/DCAA/MCAA/DBAA: Models adjusted for water source and treatment type, census tract income, THM4

eCL±P & DBP9: Models adjusted for water source and treatment type, census tract income