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## **Supplemental Material**

# **Disinfection By-Product Exposures and the Risk of Specific Cardiac Birth Defects**

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**Table S1. Spearman Correlation Coefficients for Disinfection By-Product Metrics**

	<b>DBP9</b>	<b>HAA5</b>	<b>THM4</b>	<b>THMBr</b>	<b>BDCM</b>	<b>DBCM</b>	<b>TCM</b>	<b>TCAA</b>	<b>DCAA</b>	<b>TBM</b>	<b>MBAA</b>	<b>MCAA</b>	<b>DBAA</b>
<b>DBP9</b>	1.00												
<b>HAA5</b>	0.90	1.00											
<b>THM4</b>	0.95	0.74	1.00										
<b>THMBr</b>	0.40	0.25	0.50	1.00									
<b>BDCM</b>	0.54	0.37	0.63	0.96	1.00								
<b>DBCM</b>	0.05	-0.05	0.13	0.85	0.72	1.00							
<b>TCM</b>	0.94	0.76	0.97	0.33	0.47	-0.02	1.00						
<b>TCAA</b>	0.89	0.96	0.77	0.24	0.37	-0.08	0.79	1.00					
<b>DCAA</b>	0.84	0.93	0.70	0.23	0.34	-0.06	0.74	0.85	1.00				
<b>TBM</b>	-0.25	-0.28	-0.20	0.39	0.20	0.57	-0.30	-0.32	-0.28	1.00			
<b>MBAA</b>	0.03	0.04	0.02	0.03	0.03	0.04	0.02	0.04	0.02	0.03	1.00		
<b>MCAA</b>	0.50	0.57	0.42	0.26	0.30	0.07	0.42	0.46	0.55	-0.13	0.04	1.00	
<b>DBAA</b>	-0.12	-0.09	-0.11	0.31	0.19	0.41	-0.18	-0.17	-0.07	0.54	0.15	0.01	1.00

Note: DBP9 = sum of chloroform (TCM), bromodichloromethane (BDCM), dibromochloromethane (DBCM), bromoform (TBM), monochloroacetic acid (MCAA), dichloroacetic acid (DCAA), trichloroacetic acid (TCAA), bromoacetic acid (MBAA), and dibromoacetic acid (DBAA); HAA5 = sum of MCAA, DCAA, TCAA, MBAA, and DBAA; THM4 = sum of TCM, BDCM, DBCM, and TBM; THMBr = sum of BDCM, DBCM, and TBM

**Table S2. Adjusted Odds Ratios (aORs) between Disinfection By-Product (DBP) Exposures and Tetralogy of Fallot Stratified by Sex**

DBP Metrics ( $\mu\text{g/L}$ )	Cases ( $n$ ) <sup>a</sup>	Total Population aOR (95% CI) <sup>b</sup>	Male aOR (95% CI) <sup>b</sup>	Female aOR (95% CI) <sup>b</sup>
<b>THM4<sup>c</sup></b>				
$\leq 23.05$	15	REF	REF	REF
$> 23.05\text{--}38.05$	17	0.32 (0.10, 1.05)	1.52 (0.17, 13.13)	0.15 (0.01, 1.64)
$> 38.05\text{--}50.41$	19	0.51 (0.15, 1.74)	3.02 (0.30, 30.43)	0.16 (0.02, 1.47)
$> 50.41\text{--}65.27$	19	0.31 (0.08, 1.21)	1.53 (0.14, 16.62)	0.22 (0.02, 2.12)
$> 65.27\text{--}125.32$	16	0.19 (0.04, 0.88)	1.06 (0.09, 12.09)	0.05 (0.00, 0.72)
<b>THMBr<sup>c</sup></b>				
$\leq 4.17$	15	REF	REF	REF
$> 4.17\text{--}6.04$	25	1.00 (0.34, 2.98)	0.29 (0.04, 2.10)	5.21 (0.58, 46.62)
$> 6.04\text{--}7.80$	12	0.23 (0.06, 0.91)	0.19 (0.02, 1.81)	0.45 (0.03, 7.88)
$> 7.80\text{--}11.51$	18	0.45 (0.14, 1.39)	0.17 (0.02, 1.32)	1.64 (0.22, 12.36)
$> 11.51\text{--}42.48$	16	0.26 (0.09, 0.76)	0.27 (0.04, 1.83)	0.28 (0.03, 2.70)
<b>Chloroform<sup>c</sup></b>				
$\leq 12.07$	15	REF	REF	REF
$> 12.07\text{--}29.99$	14	0.50 (0.16, 1.53)	1.06 (0.12, 9.48)	0.19 (0.02, 2.24)
$> 29.99\text{--}42.17$	21	0.76 (0.22, 2.69)	1.67 (0.17, 15.96)	0.23 (0.02, 3.32)
$> 42.17\text{--}55.41$	22	0.81 (0.20, 3.29)	1.91 (0.14, 26.80)	0.29 (0.02, 3.98)
$> 55.41\text{--}98.99$	14	0.33 (0.07, 1.64)	0.50 (0.03, 7.73)	0.06 (0.00, 1.46)
<b>Bromodichloromethane (BDCM)<sup>c</sup></b>				
$\leq 4.95$	34	REF	REF	REF
$> 4.95\text{--}7.55$	24	0.49 (0.19, 1.24)	0.73 (0.17, 3.09)	0.53 (0.10, 2.72)
$> 7.55\text{--}37.38$	28	0.38 (0.17, 0.82)	0.76 (0.24, 2.44)	0.30 (0.06, 1.40)
<b>Dibromochloromethane (DBCM)<sup>c</sup></b>				
$\leq 3.93$	79	REF	REF	REF
$> 3.93\text{--}14.53$	7	0.54 (0.20, 1.41)	0.34 (0.07, 1.55)	0.36 (0.05, 2.79)
<b>Bromoform<sup>c</sup></b>				
$\leq 0.26$	76	REF	REF	REF
$> 0.26\text{--}7.06$	10	1.14 (0.45, 2.87)	0.59 (0.15, 2.33)	3.00 (0.34, 26.50)

**Table S2. Adjusted Odds Ratios (aORs) between Disinfection By-Product (DBP) Exposures and Tetralogy of Fallot Stratified by Sex (continued)**

<b>DBP Metrics (µg/L)</b>	<b>Cases (n)<sup>a</sup></b>	<b>Total Population aOR (95% CI)<sup>b</sup></b>	<b>Male aOR (95% CI)<sup>b</sup></b>	<b>Female aOR (95% CI)<sup>b</sup></b>
<b>HAA5<sup>d</sup></b>				
≤8.17	11	REF	REF	REF
>8.17–19.33	21	2.13 (0.53, 8.65)	2.59 (0.13, 50.10)	1.36 (0.11, 16.16)
>19.33–25.79	21	4.98 (1.02, 24.35)	8.27 (0.25, 276.35)	6.14 (0.32, 118.72)
>25.79–33.97	17	5.88 (1.06, 32.57)	2.95 (0.08, 114.41)	7.57 (0.30, 192.35)
>33.97–100.00	16	6.51 (1.23, 34.59)	4.79 (0.16, 142.97)	2.97 (0.14, 62.87)
<b>Trichloroacetic acid (TCAA)<sup>d</sup></b>				
≤5.23	15	REF	REF	REF
>5.23–11.09	28	2.72 (0.91, 8.13)	5.79 (0.60, 55.49)	3.35 (0.35, 32.18)
>11.09–16.38	22	4.30 (1.09, 16.88)	6.82 (0.55, 83.94)	2.97 (0.20, 44.62)
>16.38–73.39	19	3.89 (0.97, 15.66)	5.92 (0.51, 68.40)	2.25 (0.13, 39.31)
<b>Dichloroacetic acid (DCAA)<sup>d</sup></b>				
≤5.18	17	REF	REF	REF
>5.18–10.44	22	1.39 (0.50, 3.88)	4.09 (0.52, 31.94)	0.87 (0.07, 11.29)
>10.44–13.85	24	3.08 (0.92, 10.34)	2.31 (0.27, 19.90)	7.45 (0.34, 164.24)
>13.85–38.89	21	3.34 (0.90, 12.43)	1.54 (0.11, 20.85)	26.35 (0.94, 737.88)
<b>Monochloroacetic acid (MCAA)<sup>d</sup></b>				
≤1.53	80	REF	REF	REF
>1.53–62.39	4	0.83 (0.27, 2.54)	0.59 (0.09, 3.78)	0.47 (0.05, 4.67)
<b>Monobromoacetic acid (MBAA)<sup>d</sup></b>				
≤0.04	81	REF	REF	REF
>0.04–10.63	3	0.80 (0.08, 7.48)	0.53 (0.01, 20.59)	N/E
<b>Dibromoacetic acid (DBAA)<sup>d</sup></b>				
≤0.47	77	REF	REF	REF
>0.47–21.78	7	0.59 (0.23, 1.54)	0.64 (0.12, 3.38)	0.24 (0.03, 2.22)

**Table S2. Adjusted Odds Ratios (aORs) between Disinfection By-Product (DBP) Exposures and Tetralogy of Fallot Stratified by Sex (continued)**

<b>DBP Metrics (µg/L)</b>	<b>Cases (n)<sup>a</sup></b>	<b>Total Population aOR (95% CI)<sup>b</sup></b>	<b>Male aOR (95% CI)<sup>b</sup></b>	<b>Female aOR (95% CI)<sup>b</sup></b>
DBP9				
≤33.07	13	REF	REF	REF
>33.07–59.95	17	0.80 (0.24, 2.63)	1.70 (0.19, 14.97)	0.97 (0.09, 10.84)
>59.95–79.13	24	1.15 (0.32, 4.08)	2.62 (0.31, 22.08)	2.95 (0.20, 42.62)
>79.13–97.67	18	1.39 (0.39, 5.01)	4.25 (0.43, 42.28)	0.26 (0.02, 4.49)
>97.67–181.59	14	0.94 (0.23, 3.79)	0.74 (0.07, 7.34)	0.55 (0.03, 9.92)

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

<sup>a</sup>The numbers represent the TOF case distribution across exposure groups prior to modeling and stratification.

<sup>b</sup>Models adjusted for the type of water source and treatment, infant birth weight, ZIP code-level income quartile, trimester prenatal care began (first, after first), health index (gestational diabetes, non-gestational diabetes, chronic hypertension, gestational hypertension, and hydramnios/oligohydramnios), and other maternal reproductive risk factors.

<sup>c</sup>Models also include adjustment for HAA5 concentrations.

<sup>d</sup>Models also include adjustment for THM4 concentrations.

**Table S3. Adjusted Odds Ratios (aORs) between Disinfection By-Product (DBP) Exposures and Ventricular Septal Defects Stratified by Sex**

DBP Metrics ( $\mu\text{g/L}$ )	Cases ( $n$ ) <sup>a</sup>	Total Population aOR (95% CI) <sup>b</sup>	Male aOR (95% CI) <sup>b</sup>	Female aOR (95% CI) <sup>b</sup>
<b>THM4<sup>c</sup></b>				
$\leq 23.05$	62	REF	REF	REF
$>23.05\text{--}38.05$	61	1.39 (0.72, 2.69)	1.85 (0.49, 6.93)	1.15 (0.49, 2.71)
$>38.05\text{--}50.41$	80	1.77 (0.87, 3.59)	2.47 (0.60, 10.11)	1.69 (0.66, 4.34)
$>50.41\text{--}65.27$	73	1.70 (0.80, 3.63)	1.93 (0.43, 8.62)	1.60 (0.59, 4.29)
$>65.27\text{--}125.32$	58	1.57 (0.70, 3.53)	1.35 (0.29, 6.37)	2.08 (0.71, 6.12)
<b>THMBr<sup>c</sup></b>				
$\leq 4.17$	67	REF	REF	REF
$>4.17\text{--}6.04$	56	0.81 (0.39, 1.68)	0.39 (0.12, 1.26)	1.70 (0.57, 5.04)
$>6.04\text{--}7.80$	73	0.79 (0.41, 1.55)	0.48 (0.17, 1.38)	1.72 (0.63, 4.69)
$>7.80\text{--}11.51$	55	0.89 (0.47, 1.69)	0.54 (0.20, 1.45)	1.96 (0.73, 5.23)
$>11.51\text{--}42.48$	82	1.34 (0.73, 2.46)	0.96 (0.37, 2.46)	2.52 (0.99, 6.42)
<b>Chloroform<sup>c</sup></b>				
$\leq 12.07$	66	REF	REF	REF
$>12.07\text{--}29.99$	61	1.05 (0.58, 1.90)	1.18 (0.38, 3.69)	1.06 (0.48, 2.34)
$>29.99\text{--}42.17$	74	0.86 (0.43, 1.72)	0.79 (0.22, 2.88)	0.90 (0.34, 2.35)
$>42.17\text{--}55.41$	75	1.00 (0.47, 2.12)	0.75 (0.18, 3.09)	1.04 (0.38, 2.84)
$>55.41\text{--}98.99$	57	0.79 (0.35, 1.80)	0.32 (0.07, 1.43)	1.43 (0.48, 4.22)
<b>Bromodichloromethane (BDCM)<sup>c</sup></b>				
$\leq 4.95$	105	REF	REF	REF
$>4.95\text{--}7.55$	112	0.81 (0.50, 1.31)	0.76 (0.34, 1.71)	1.01 (0.51, 2.01)
$>7.55\text{--}37.38$	116	1.21 (0.79, 1.85)	1.07 (0.53, 2.17)	1.51 (0.84, 2.70)
<b>Dibromochloromethane (DBCM)<sup>c</sup></b>				
$\leq 3.93$	293	REF	REF	REF
$>3.93\text{--}14.53$	40	1.54 (1.00, 2.37)	2.17 (1.06, 4.46)	1.61 (0.87, 2.96)
<b>Bromoform<sup>c</sup></b>				
$\leq 0.26$	290	REF	REF	REF
$>0.26\text{--}7.06$	43	1.85 (1.20, 2.83)	2.23 (1.10, 4.52)	1.88 (1.01, 3.52)

**Table S3. Adjusted Odds Ratios (aORs) between Disinfection By-Product (DBP) Exposures and Ventricular Septal Defects Stratified by Sex (continued)**

DBP Metrics ( $\mu\text{g/L}$ )	Cases ( $n$ ) <sup>a</sup>	Total Population aOR (95% CI) <sup>b</sup>	Male aOR (95% CI) <sup>b</sup>	Female aOR (95% CI) <sup>b</sup>
<b>HAA5<sup>d</sup></b>				
$\leq 8.17$	69	REF	REF	REF
$> 8.17\text{--}19.33$	50	0.66 (0.37, 1.20)	0.75 (0.26, 2.16)	0.49 (0.21, 1.12)
$> 19.33\text{--}25.79$	74	1.00 (0.51, 1.94)	0.74 (0.22, 2.52)	0.85 (0.34, 2.13)
$> 25.79\text{--}33.97$	63	1.01 (0.49, 2.08)	1.65 (0.47, 5.79)	0.39 (0.13, 1.12)
$> 33.97\text{--}100.00$	78	1.02 (0.49, 2.12)	1.23 (0.33, 4.64)	0.62 (0.22, 1.75)
<b>Trichloroacetic acid (TCAA)<sup>d</sup></b>				
$\leq 5.23$	80	REF	REF	REF
$> 5.23\text{--}11.09$	81	0.90 (0.55, 1.50)	1.18 (0.47, 2.91)	0.63 (0.31, 1.27)
$> 11.09\text{--}16.38$	83	0.81 (0.44, 1.51)	1.01 (0.34, 3.00)	0.46 (0.19, 1.10)
$> 16.38\text{--}73.39$	86	0.79 (0.41, 1.50)	1.08 (0.34, 3.46)	0.43 (0.18, 1.08)
<b>Dichloroacetic acid (DCAA)<sup>d</sup></b>				
$\leq 5.18$	78	REF	REF	REF
$> 5.18\text{--}10.44$	72	0.84 (0.51, 1.39)	0.51 (0.21, 1.19)	0.79 (0.39, 1.59)
$> 10.44\text{--}13.85$	92	1.28 (0.72, 2.25)	1.02 (0.41, 2.53)	1.19 (0.52, 2.73)
$> 13.85\text{--}38.89$	88	1.18 (0.65, 2.14)	1.14 (0.45, 2.91)	0.83 (0.35, 1.95)
<b>Monochloroacetic acid (MCAA)<sup>d</sup></b>				
$\leq 1.53$	295	REF	REF	REF
$> 1.53\text{--}62.39$	35	1.27 (0.81, 1.97)	1.47 (0.72, 2.99)	1.06 (0.55, 2.04)
<b>Monobromoacetic acid (MBAA)<sup>d</sup></b>				
$\leq 0.04$	317	REF	REF	REF
$> 0.04\text{--}10.63$	13	1.81 (0.85, 3.84)	6.56 (1.60, 26.83)	1.92 (0.60, 6.16)
<b>Dibromoacetic acid (DBAA)<sup>d</sup></b>				
$\leq 0.47$	302	REF	REF	REF
$> 0.47\text{--}21.78$	28	1.00 (0.63, 1.61)	1.09 (0.52, 2.28)	1.08 (0.56, 2.10)

**Table S3. Adjusted Odds Ratios (aORs) between Disinfection By-Product (DBP) Exposures and Ventricular Septal Defects Stratified by Sex (continued)**

DBP Metrics ( $\mu\text{g/L}$ )	Cases ( $n$ ) <sup>a</sup>	Total Population aOR (95% CI) <sup>b</sup>	Male aOR (95% CI) <sup>b</sup>	Female aOR (95% CI) <sup>b</sup>
DBP9				
$\leq 33.07$	63	REF	REF	REF
$> 33.07\text{--}59.95$	58	1.33 (0.71, 2.48)	1.13 (0.36, 3.48)	1.29 (0.57, 2.91)
$> 59.95\text{--}79.13$	79	1.70 (0.88, 3.26)	2.23 (0.68, 7.32)	1.64 (0.69, 3.91)
$> 79.13\text{--}97.67$	71	1.64 (0.83, 3.26)	1.45 (0.43, 4.91)	1.37 (0.55, 3.40)
$> 97.67\text{--}181.59$	63	1.48 (0.73, 2.98)	1.07 (0.32, 3.62)	1.49 (0.56, 3.94)

Note:  $n$  = sample size; aOR = adjusted odds ratio; CI = confidence interval; REF = referent; THM4 = sum of chloroform, BDCM, DBCM, and bromoform; THMBr = sum of BDCM, DBCM, and bromoform; HAA5 = sum of MCAA, DCAA, TCAA, MBAA, and DBAA; DBP9 = sum of chloroform, BDCM, DBCM, bromoform, MCAA, DCAA, TCAA, MBAA, and DBAA.

<sup>a</sup>The numbers represent the case distribution across exposure groups prior to modeling and stratification.

<sup>b</sup>Models adjusted for the type of water source and treatment, maternal marital status (married, including within 300 days prior to birth; not married), maternal education category, maternal race category, health index (gestational diabetes, non-gestational diabetes, chronic hypertension, gestational hypertension, and hydramnios/oligohydramnios), and other maternal reproductive risk factors.

<sup>c</sup>Models also include adjustment for HAA5 concentrations.

<sup>d</sup>Models also include adjustment for THM4 concentrations.



**Table S4. Adjusted Odds Ratios (aORs) between Disinfection By-Product (DBP) Exposures and All Cardiovascular Defects Excluding Patent Ductus Arteriosus**

DBP Metrics (µg/L)	Cases ( <i>n</i> ) <sup>a</sup>	aOR (95% CI) <sup>b</sup>
Bromoform <sup>c</sup>		
≤0.26	532	REF
>0.26–7.06	79	1.50 (1.10, 2.04)
HAA5 <sup>d</sup>		
≤8.17	118	REF
>8.17–19.33	111	1.09 (0.71, 1.68)
>19.33–25.79	153	1.57 (0.97, 2.55)
>25.79–33.97	111	1.24 (0.72, 2.12)
>33.97–100.00	119	1.53 (0.90, 2.61)
Dichloroacetic acid (DCAA) <sup>d</sup>		
≤5.18	142	REF
>5.18–10.44	150	1.08 (0.76, 1.53)
>10.44–13.85	169	1.26 (0.83, 1.89)
>13.85–38.89	141	1.29 (0.84, 1.99)

Note: *n* = sample size; aOR = adjusted odds ratio; CI = confidence interval; REF = referent; HAA5 = sum of monochloroacetic acid, DCAA, trichloroacetic acid, monobromoacetic acid, and dibromoacetic acid.

<sup>a</sup>The numbers represent the case distribution across exposure groups prior to modeling.

<sup>b</sup>Models adjusted for the type of water source and treatment, health index (gestational diabetes, non-gestational diabetes, chronic hypertension, gestational hypertension, and hydramnios/oligohydramnios), and other maternal reproductive risk factors.

<sup>c</sup>Model also includes adjustment for HAA5 concentrations.

<sup>d</sup>Models also include adjustment for THM4 (sum of chloroform, bromodichloromethane, dibromochloromethane, and bromoform) concentrations.

**Table S5. Adjusted Odds Ratios (aORs) between Disinfection By-Product (DBP) Exposures and Isolated Ventricular Septal Defect Cases**

DBP Metrics ( $\mu\text{g/L}$ )	Cases ( $n$ ) <sup>a</sup>	aOR (95% CI) <sup>b</sup>
<b>THM4<sup>c</sup></b>		
$\leq 23.05$	22	REF
$> 23.05\text{--}38.05$	12	1.17 (0.39, 3.57)
$> 38.05\text{--}50.41$	21	2.41 (0.74, 7.82)
$> 50.41\text{--}65.27$	23	2.46 (0.66, 9.21)
$> 65.27\text{--}125.32$	23	2.74 (0.67, 11.22)
<b>Dibromochloromethane (DBCM)<sup>c</sup></b>		
$\leq 3.93$	89	REF
$> 3.93\text{--}14.53$	12	1.07 (0.48, 2.36)
<b>Bromoform<sup>c</sup></b>		
$\leq 0.26$	87	REF
$> 0.26\text{--}7.06$	14	1.42 (0.68, 2.98)
<b>Monobromoacetic acid (MBAA)<sup>d</sup></b>		
$\leq 0.04$	97	REF
$> 0.04\text{--}10.63$	3	1.41 (0.16, 12.43)
<b>DBP9</b>		
$\leq 33.07$	22	REF
$> 33.07\text{--}59.95$	14	1.32 (0.46, 3.75)
$> 59.95\text{--}79.13$	21	2.08 (0.68, 6.42)
$> 79.13\text{--}97.67$	19	1.37 (0.41, 4.63)
$> 97.67\text{--}181.59$	25	2.14 (0.66, 6.98)

Note:  $n$  = sample size; aOR = adjusted odds ratio; CI = confidence interval; REF = referent; THM4 = sum of chloroform, BDCM, DBCM, and bromoform; DBP9 = sum of chloroform, bromodichloromethane (BDCM), DBCM, bromoform, monochloroacetic acid, dichloroacetic acid, trichloroacetic acid, MBAA, and dibromoacetic acid.

<sup>a</sup>The numbers represent the case distribution across exposure groups prior to modeling.

<sup>b</sup>Models adjusted for water source and treatment type, maternal education category, maternal marital status (married, including within 300 days prior to birth; not married), maternal race category, health index (gestational diabetes, non-gestational diabetes, chronic hypertension, gestational hypertension, and hydramnios/oligohydramnios), and other maternal reproductive risk factors.

<sup>c</sup>Models also include adjustment for HAA5 (sum of MCAA, DCAA, TCAA, MBAA, and DBAA) concentrations.

<sup>d</sup>Model also includes adjustment for THM4 concentrations.

**Table S6. Adjusted Odds Ratios (aORs) between Disinfection By-Product (DBP) Exposures and Isolated Tetralogy of Fallot Cases**

DBP Metrics ( $\mu\text{g/L}$ )	Cases ( $n$ ) <sup>a</sup>	aOR (95% CI) <sup>b</sup>
<b>HAA5</b>		
$\leq 8.17$	4	REF
$> 8.17\text{--}19.33$	6	2.64 (0.26, 26.86)
$> 19.33\text{--}25.79$	9	4.90 (0.40, 60.50)
$> 25.79\text{--}33.97$	6	3.61 (0.21, 63.15)
$> 33.97\text{--}100.00$	7	12.37 (0.75, 204.11)
<b>Dichloroacetic acid (DCAA)</b>		
$\leq 5.18$	6	REF
$> 5.18\text{--}10.44$	6	1.44 (0.27, 7.54)
$> 10.44\text{--}13.85$	7	2.77 (0.34, 22.70)
$> 13.85\text{--}38.89$	11	11.11 (1.17, 105.86)
<b>Trichloroacetic acid (TCAA)</b>		
$\leq 5.23$	5	REF
$> 5.23\text{--}11.09$	8	6.30 (0.85, 46.84)
$> 11.09\text{--}16.38$	10	12.07 (1.02, 143.10)
$> 16.38\text{--}73.39$	7	9.17 (0.65, 129.15)

Note:  $n$  = sample size; aOR = adjusted odds ratio; CI = confidence interval; REF = referent; HAA5 = sum of monochloroacetic acid, DCAA, TCAA, monobromoacetic acid, and dibromoacetic acid.

<sup>a</sup>The numbers represent the case distribution across exposure groups prior to modeling.

<sup>b</sup>Models adjusted for water source and treatment type, trimester prenatal care began (first, after first), birth weight, zip code level income, other maternal reproductive risk factors, health index (gestational diabetes, non-gestational diabetes, chronic hypertension, gestational hypertension, and hydramnios/oligohydramnios), and THM4 (sum of chloroform, bromodichloromethane, dibromochloromethane, and bromoform) concentrations.