**Supplemental Tables**

Ferguson KK, Meeker JD, Cantonwine DE, Mukherjee B, Pace GG, Weller D, McElrath TF. Environmental phenol associations with ultrasound and delivery indices of fetal growth.

Supplemental Table 1. Geometric mean (geometric standard deviation) urinary phenol averages by demographic factors.

Supplemental Table 2. Percent detection (ever vs. never) of bisphenol-S and triclocarban by demographic factors.

Supplemental Table 3. Spearman correlation coefficients for specific gravity-corrected phenol averages.

Supplemental Table 4. Weighted unit change (95% confidence intervals) in birth length or placental weight in association with an interquartile range increase in subject-specific specific gravity-corrected phenol average. Sex-stratified.

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| Supplemental Table 1. Geometric mean (geometric standard deviation) urinary phenol averages by demographic factors in µg/L.1 | | | | | | | | | |
|  |  | 2,4-DCP | 2,5-DCP | BP3 | Butyl paraben | Ethyl  paraben | Methyl paraben | Propyl paraben | Triclosan |
| Age | <25 | 1.94 (4.59) | 23.6 (6.51) | 18.5 (3.85) | 0.61 (5.38) | 2.56 (4.93) | 254 (4.21) | 50.0 (3.90) | 16.8 (4.90) |
| 25-30 | 1.06 (2.65)\* | 6.02 (5.46)\* | 43.7 (6.20)\* | 1.23 (4.97)\* | 3.15 (4.75) | 187 (3.40) | 39.9 (4.49) | 15.3 (4.70) |
| 30-35 | 0.81 (2.65)\* | 3.88 (4.62)\* | 68.5 (6.96)\* | 1.68 (5.43)\* | 4.58 (4.68)\* | 167 (3.17)\* | 43.1 (3.73) | 16.0 (4.89) |
| >35 | 0.65 (2.43)\* | 3.38 (4.54)\* | 82.4 (6.17)\* | 1.27 (4.80)\* | 4.08 (4.26) | 127 (3.08)\* | 27.5 (4.34)\* | 15.3 (5.66) |
| Race/  ethnicity | White | 0.66 (2.15) | 2.51 (3.08) | 102 (5.88) | 1.80 (5.03) | 4.48 (4.28) | 135 (3.15) | 33.5 (4.16) | 17.4 (5.28) |
| Black | 1.36 (3.29)\* | 15.7 (4.73)\* | 20.1 (5.30)\* | 0.58 (4.52)\* | 2.47 (4.69)\* | 319 (3.77)\* | 64.7 (3.91)\* | 10.6 (4.51)\* |
| Other | 1.36 (3.94)\* | 12.5 (8.03)\* | 27.8 (5.55)\* | 0.97 (5.24)\* | 3.52 (5.27) | 178 (3.13)\* | 36.1 (3.94) | 16.0 (4.77) |
| BMI | < 25 kg/m2 | 0.79 (2.63) | 3.42 (4.42) | 77.9 (7.07) | 1.78 (5.17) | 5.12 (4.92) | 171 (3.19) | 40.4 (3.88) | 16.5 (5.05) |
| 25-30 kg/m2 | 0.95 (3.54) | 6.53 (6.42)\* | 44.9 (5.52)\* | 1.05 (5.33)\* | 3.42 (4.11)\* | 187 (3.51) | 40.5 (4.31) | 16.6 (5.13) |
| >30 kg/m2 | 1.19 (3.08)\* | 12.4 (6.05)\* | 28.2 (5.31)\* | 0.64 (4.55)\* | 1.99 (3.83)\* | 132 (3.66) | 29.6 (4.62) | 12.8 (4.97) |
| Health insurance | Private | 0.74 (2.53) | 3.60 (4.50) | 75.9 (6.45) | 1.44 (5.22) | 4.23 (4.46) | 154 (3.27) | 36.4 (4.04) | 17.0 (5.20) |
| Public | 1.87 (3.75)\* | 20.7 (5.98)\* | 17.4 (4.05)\* | 0.80 (5.43)\* | 2.72 (5.26)\* | 229 (3.70)\* | 45.8 (4.55) | 11.5 (4.61)\* |
| Education | High school | 1.97 (4.49) | 21.8 (7.02) | 13.2 (3.79) | 0.80 (6.37) | 2.8 (5.06) | 215 (3.99) | 45.1 (4.81) | 15.4 (5.68) |
| Technical | 1.09 (3.09)\* | 9.53 (6.24)\* | 32.6 (5.68)\* | 0.78 (5.17) | 2.29 (4.34) | 227 (3.56) | 49.4 (4.05) | 11.3 (4.16) |
| Some college | 0.85 (2.56)\* | 4.26 (4.96)\* | 62.3 (6.08)\* | 1.68 (4.81)\* | 4.56 (4.54)\* | 171 (3.01) | 41.4 (3.53) | 16.8 (4.59) |
| College grad | 0.64 (2.26)\* | 2.66 (3.38)\* | 112 (6.12)\* | 1.59 (5.09)\* | 4.91 (4.48)\* | 130 (3.16)\* | 30.4 (4.25) | 17.4 (5.50) |
| Fetal sex | Male | 0.98 (3.06) | 5.53 (5.96) | 51.9 (6.64) | 1.18 (5.66) | 3.24 (4.31) | 155 (3.57) | 36.5 (4.16) | 15.8 (5.10) |
| Female | 0.82 (2.84) | 4.65 (5.17) | 61.0 (6.44) | 1.39 (4.98) | 4.4 (4.87) | 174 (3.20) | 38.9 (4.12) | 15.7 (5.05) |
| ART | No | 0.91 (3.02) | 5.30 (5.73) | 54.6 (6.46) | 1.22 (5.36) | 3.73 (4.66) | 164 (3.40) | 38.0 (4.11) | 15.0 (4.87) |
| Yes | 0.71 (2.31) | 3.16 (3.60)\* | 79.2 (7.03) | 2.15 (4.27)\* | 4.89 (4.54) | 183 (3.06) | 36.0 (4.34) | 23.1 (6.62) |
| IVF | No | 0.89 (2.99) | 5.12 (5.66) | 55.4 (6.54) | 1.26 (5.37) | 3.75 (4.63) | 164 (3.39) | 37.7 (4.12) | 15.6 (4.99) |
| Yes | 0.91 (2.32) | 3.68 (3.39) | 82.6 (6.36) | 1.97 (3.75) | 5.56 (4.83) | 203 (2.94) | 39.7 (4.37) | 17.4 (6.46) |
| Nulliparous | No | 0.88 (2.8) | 5.00 (5.68) | 52.0 (6.74) | 1.20 (4.78) | 3.58 (4.49) | 156 (3.38) | 34.1 (4.33) | 14.3 (5.24) |
| Yes | 0.89 (3.14) | 5.05 (5.34) | 63.3 (6.26) | 1.42 (5.92) | 4.19 (4.84) | 179 (3.34) | 43.1 (3.86) | 17.7 (4.82) |
| Gravid | No | 0.85 (2.86) | 4.56 (4.81) | 74.0 (6.12) | 1.53 (5.76) | 4.31 (4.88) | 179 (3.29) | 41.3 (4.00) | 19.2 (4.75) |
| Yes | 0.90 (2.99) | 5.24 (5.84) | 50.6 (6.65) | 1.20 (5.06) | 3.65 (4.54) | 160 (3.40) | 36.4 (4.19) | 14.4 (5.17) |
| Tobacco use | No | 0.88 (2.94) | 4.97 (5.56) | 58.3 (6.56) | 1.30 (5.23) | 3.85 (4.68) | 164 (3.32) | 38.2 (4.06) | 15.6 (5.05) |
| Yes | 1.03 (3.04) | 5.94 (4.94) | 35.8 (5.78) | 1.24 (6.28) | 3.61 (4.24) | 190 (4.19) | 32.1 (5.50) | 17.3 (5.33) |
| Alcohol use | No | 0.89 (3.02) | 5.04 (5.70) | 55.0 (6.50) | 1.27 (5.27) | 3.77 (4.55) | 167 (3.37) | 38.2 (4.15) | 15.9 (5.13) |
| Yes | 0.93 (1.96) | 5.77 (3.52) | 88.4 (8.50) | 1.94 (6.97) | 6.25 (6.38) | 182 (3.61) | 40.6 (4.09) | 16.4 (4.42) |
| 1Estimates weighted for study design and corrected for urinary specific gravity. \*Denotes p<0.05 difference in average urinary phenol concentration from reference (first category) from generalized linear model. Abbreviations: 2,4-DCP, 2,4-dichlorophenol; 2,5-DCP, 2,5-dichlorophenol; BP3, benzophenone 3; BMI, pre-pregnancy body mass index; ART, assisted reproductive technology; IVF, in vitro fertilization. | | | | | | | | | |

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| Supplemental Table 2. Percent detection (ever vs. never) of bisphenol-S and triclocarban by demographic factors.1 | | | |
|  |  | Bisphenol-S | Triclocarban |
| Age | <25 | 48.5 | 18.9 |
| 25-30 | 47.2 | 18.4 |
| 30-35 | 38.7 | 14.2 |
| >35 | 35.8 | 7.90\* |
| Race/  ethnicity | White | 32.8 | 7.90 |
| Black | 62.3\* | 29.2\* |
| Other | 45.5\* | 17.8\* |
| BMI | < 25 kg/m2 | 39.0 | 13.3 |
| 25-30 kg/m2 | 36.2 | 14.9 |
| >30 kg/m2 | 55.5\* | 13.5 |
| Health insurance | Private | 34.7 | 10.6 |
| Public | 64.2\* | 24.2\* |
| Education | High school | 50.9 | 27.8 |
| Technical | 49.7 | 13.8\* |
| Some college | 36.5 | 15.7\* |
| College grad | 35.8\* | 7.60\* |
| Fetal sex | Male | 41.7 | 14.5 |
| Female | 39.8 | 13.1 |
| ART | No | 41.6 | 14.7 |
| Yes | 33.1 | 5.70 |
| IVF | No | 40.7 | 14.3 |
| Yes | 40.0 | 4.20 |
| Nulliparous | No | 45.4 | 16.8 |
| Yes | 34.7\* | 9.90\* |
| Gravid | No | 32.4 | 9.50 |
| Yes | 44.3\* | 15.6 |
| Tobacco use | No | 39.4 | 13.8 |
| Yes | 62.1\* | 12.6 |
| Alcohol use | No | 40.6 | 13.4 |
| Yes | 49.0 | 21.8 |
| 1Ever vs. never detection from the first three study visits. \*Denotes p<0.05 difference in average urinary phenol concentration from reference (first category) from generalized linear model. Abbreviations: BMI, pre-pregnancy body mass index; ART, assisted reproductive technology; IVF, in vitro fertilization. | | | |

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| Supplemental Table 3. Spearman correlation coefficients for specific gravity-corrected phenol averages. | | | | | | | | | |
|  | 2,5-DCP | BP3 | Butyl paraben | Ethyl paraben | Methyl paraben | Propyl paraben | Triclosan | Bisphenol-S | Triclocarban |
| 2,4-DCP | 0.65 | -0.13 | -0.05 | -0.01 | 0.20 | 0.17 | 0.29 | 0.14 | 0.02 |
| 2,5-DCP |  | -0.23 | -0.22 | -0.16 | 0.17 | 0.12 | -0.04 | -0.07 | -0.17 |
| BP3 |  |  | 0.24 | 0.29 | 0.07 | 0.11 | 0.11 | 0.15 | 0.15 |
| Butyl paraben |  |  |  | 0.60 | 0.36 | 0.39 | 0.13 | 0.18 | 0.16 |
| Ethyl paraben |  |  |  |  | 0.41 | 0.43 | 0.06 | 0.15 | 0.21 |
| Methyl paraben |  |  |  |  |  | 0.82 | 0.14 | 0.05 | 0.01 |
| Propyl paraben |  |  |  |  |  |  | 0.08 | 0.07 | 0.04 |
| Triclosan |  |  |  |  |  |  |  | 0.15 | 0.14 |
| Bisphenol-S |  |  |  |  |  |  |  |  | 0.58 |

Abbreviations: 2,4-DCP, 2,4-dichlorophenol; 2,5-DCP, 2,5-dichlorophenol; BP3, benzophenone 3.

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| Supplemental Table 4. Weighted unit change (95% confidence intervals) in birth length or placental weight in association with an interquartile range increase in subject-specific specific gravity-corrected phenol average.1 Sex-stratified. | | | | | |
|  | Placental weight | | | | |
|  | Male (n=42) | | Female (n=49) | | p (interaction) |
|  | Change in grams (95% CI) | p | Change in grams (95% CI) | p |
| 2,4-DCP | -25.6 (-84.5, 33.3) | 0.40 | -17.1 (-69.8, 35.7) | 0.53 | 0.84 |
| 2,5-DCP | -9.57 (-85.6, 66.5) | 0.81 | 5.45 (-49.3, 60.2) | 0.85 | 0.75 |
| Benzophenone-3 | 16.7 (-56.6, 89.9) | 0.66 | -14.2 (-71.1, 42.8) | 0.63 | 0.51 |
| Butyl paraben | -35.8 (-108, 36.1) | 0.34 | 58.5 (-1.23, 118) | 0.06 | 0.05 |
| Ethyl paraben | 10.5 (-64.4, 85.4) | 0.79 | 23.2 (-25.6, 72.0) | 0.36 | 0.78 |
| Methyl paraben | 32.8 (-42.8, 108) | 0.40 | -9.91 (-53.1, 33.3) | 0.66 | 0.32 |
| Propyl paraben | -18.7 (-78.9, 41.4) | 0.55 | -10.6 (-63.1, 41.9) | 0.69 | 0.84 |
| Triclosan | -134 (-218, -49.3) | <0.01 | 4.19 (-56.0, 64.4) | 0.89 | <0.01 |
| Bisphenol-S | -8.17 (-121, 105) | 0.89 | 18.8 (-46.6, 84.1) | 0.58 | 0.67 |
| Triclocarban | 64.8 (-62.9, 193) | 0.33 | -86.6 (-226, 53.1) | 0.23 | 0.14 |
|  | Birth length | | | | |
|  | Male (n=186) | | Female (n=243) | | p (interaction) |
|  | Change in cm (95% CI) | p | Change in cm (95% CI) | p |
| 2,4-DCP | -0.46 (-0.9, -0.03) | 0.04 | 0.16 (-0.32, 0.63) | 0.52 | 0.06 |
| 2,5-DCP | -0.29 (-0.83, 0.24) | 0.28 | 0.37 (-0.18, 0.92) | 0.19 | 0.09 |
| Benzophenone-3 | 0.16 (-0.40, 0.72) | 0.58 | 0.30 (-0.26, 0.86) | 0.29 | 0.72 |
| Butyl paraben | 0.54 (-0.03, 1.12) | 0.07 | 0.38 (-0.26, 1.01) | 0.24 | 0.71 |
| Ethyl paraben | 0.12 (-0.51, 0.75) | 0.71 | -0.16 (-0.72, 0.40) | 0.58 | 0.52 |
| Methyl paraben | 0.13 (-0.34, 0.61) | 0.59 | 0.07 (-0.46, 0.60) | 0.80 | 0.86 |
| Propyl paraben | 0.13 (-0.33, 0.60) | 0.58 | 0.16 (-0.31, 0.64) | 0.50 | 0.93 |
| Triclosan | 0.06 (-0.50, 0.61) | 0.84 | 0.04 (-0.52, 0.61) | 0.88 | 0.98 |
| Bisphenol-S | 0.53 (-0.25, 1.32) | 0.19 | -0.35 (-1.13, 0.43) | 0.37 | 0.12 |
| Triclocarban | -0.05 (-1.17, 1.07) | 0.93 | -0.02 (-1.14, 1.10) | 0.98 | 0.97 |

1In models for phenols highlighted in gray effect estimates correspond to change in placental weight or birth weight in association with ever vs. never detection at visits 1, 2, or 3. Adjusted for maternal age, race/ethnicity, pre-pregnancy body mass index, and health insurance provider.