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Corrections to PCBs and OH-PCBs in Serum from Children and Mothers in Urban and Rural U.S. Communities

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We correct a coding error in the data that affects some of the figures and statistical analyses described. There are small, but discernible, changes to Figures 1–4 and the corresponding text as well as to Supporting Information Tables S6 and S7. These changes have no impact on the conclusions presented in the article. Corrections to the manuscript are made here, and a revised Supporting Information has been posted.

Correction 1. The following Figure 1 replaces the original Figure 1.

Affected text, p. 3358, paragraph 2: Our detection of PCB 11 in more than 50% of participants is important when considering environment as a source of PCB exposure.

Correction 2. The following Figure 2 replaces the original Figure 2.

Affected text, p. 3356, paragraph 2: Interestingly, East Chicago children had a higher proportion of less chlorinated PCBs compared to their mothers (Figure 2, $P < 0.0001$) than Columbus Junction children and their mothers ($P = 0.013$).

Correction 3. The following Figure 3 replaces the original Figure 3.

Affected text, p. 3359, paragraph 2: We found a strong relationship between levels of metabolites and their possible parent PCBs in the East Chicago and Columbus Junction participants ($R^2 = 0.53$, $P < 0.0001$).

Correction 4. The following Figure 4 replaces the original Figure 4.

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

Figure 1. Detection frequency of each PCB and OH-PCB congener in our sample set of East Chicago and Columbus Junction residents ($N=175$). See SI Tables S6 and S7 for congener-specific data.

Figure 2.

Fraction of low-molecular weight PCBs, defined as mono- to penta-CBs divided by total PCBs in mothers and children from East Chicago (left) and Columbus Junction (right). Data are plotted as box plots with the median indicated by the bold horizontal line, the two middle quartiles shown as polyhedrons above and below the median, and the 95th percentiles shown as the horizontal lines connected by the vertical line. Outlier points are indicated by open circles.

Figure 3.

Fresh weight concentrations of sum OH-PCBs and sum of their parent PCBs display a linear trend ($R^2 = 0.53$, $P < 0.0001$). Each data point represents one participant. One leverage point, a mother with much higher concentrations than the other participants, was excluded. Participants with values <LOQ were excluded.

Figure 4.

Best fitting linear regressions between specific PCB parents and their OH-PCB metabolites in mothers and children: (a) 4-OH-PCB 107 with PCB 105 ($R^2 = 0.059$) and PCB 118 ($R^2 = 0.17$, $P = 0.0006$); (b) 3-OH-PCB 138 with PCB 138 ($R^2 = 0.13$), and PCB 157 ($R^2 = 0.23$); (c) 4-OH-PCB 146 with PCB 138 ($R^2 = 0.31$, $P < 0.0001$), PCB 146 ($R^2 = 0.81$, $P = 0.0004$), and PCB 153 ($R^2 = 0.40$, $P < 0.0001$); (d) 4-OH-PCB 187 with PCB 183 ($R^2 = 0.27$, $P = 0.057$) and PCB 187 ($R^2 = 0.47$, $P < 0.0001$). One leverage point, a mother with much higher concentrations than the other participants, was removed from all 4 graphs. An outlier, a mother with a very high concentration of 4-OH-PCB 146 compared to the other metabolites was also removed from graph (c). Participants with values <LOQ were excluded; it was therefore not possible to determine correlations between PCB 107 and PCB 130 and their respective metabolites.