

1 SUPPORTING INFORMATION

2 Human Serum from Urban and Rural Adolescents and Their Mothers Shows Exposure to  
3 Polychlorinated Biphenyls Not Found in Commercial Mixtures

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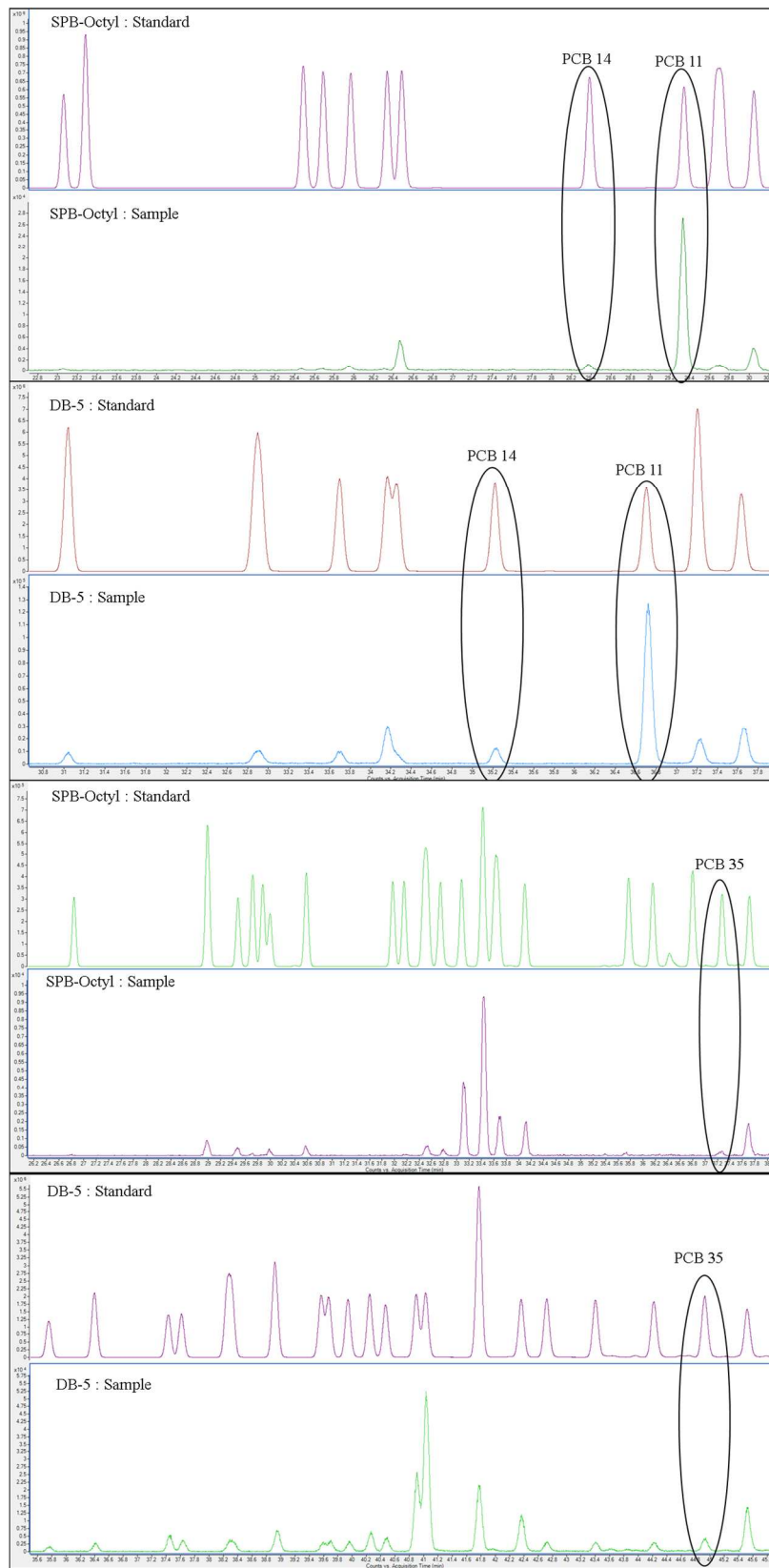
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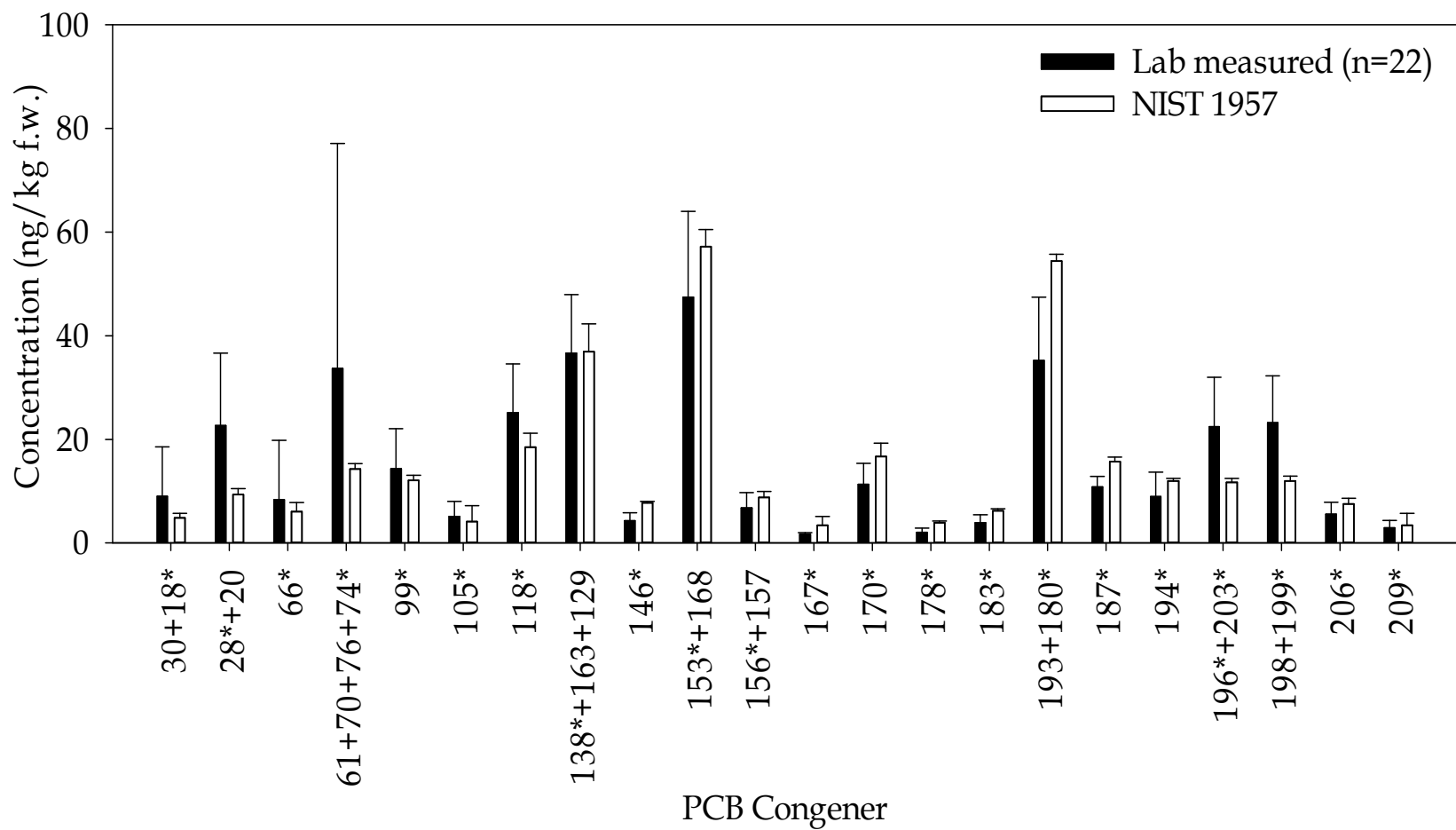
23 **Table S1.** A list of  $^{13}\text{C}$ -labelled PCB surrogate standards and internal standards

Congener	Mean recovery (SD)
<i>Surrogate Standard</i>	
$^{13}\text{C}$ PCB 3	55% (16%)
$^{13}\text{C}$ PCB 28	79% (10%)
$^{13}\text{C}$ PCB 52	84% (10%)
$^{13}\text{C}$ PCB 118	96% (12%)
$^{13}\text{C}$ PCB 153	90% (8%)
$^{13}\text{C}$ PCB 180	90% (9%)
$^{13}\text{C}$ PCB 208	61% (13%)
$^{13}\text{C}$ PCB 209	60% (15%)
<i>Internal Standard</i>	
$^{13}\text{C}$ PCB 70	
$^{13}\text{C}$ PCB 111	
$^{13}\text{C}$ PCB 138	
$^{13}\text{C}$ PCB 170	



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25 **Figure S1.** Example chromatogram of PCB 11, 14 and 35 in PCB standards and serum sample of one of  
 26 our participants analyzed in GC-MS/MS using SPB-Octyl and DB-5 columns.



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28 **Figure S2.** Comparison of average lab measured (n=22) on each PCB congener in NIST SRM 1957 to values certified by NIST. (\* represents  
 29 PCB congener that is certified by NIST)

30 **Table S2.** Limit of Quantification (LOQ) for each non-Aroclor PCB congener

<b>Non-Aroclor PCB Congener</b>	<b>LOQ (ng/sample)</b>	<b>Non-Aroclor PCB Congener</b>	<b>LOQ (ng/sample)</b>
11	0.2413	121	0.0006
14	0.0083	126	0.0014
23	0.0015	127	0.0010
24	0.0014	131	0.0007
34	0.0009	133	0.0004
35	0.0041	139+140	0.0011
36	0.0011	142	0.0004
38	0.0009	143	0.0005
39	0.0010	145	0.0005
54	0.0018	148	0.0004
55	0.0030	150	0.0004
57	0.0015	152	0.0005
58	0.0019	154	0.0003
67	0.0024	155	0.0004
68	0.0020	159	0.0005
72	0.0016	160	0.0016
73	0.0014	161	0.0004
78	0.0024	162	0.0007
79	0.0014	165	0.0003
80	0.0015	169	0.0008
81	0.0018	175	0.0017
88	0.0039	181	0.0021
89	0.0010	182	0.0015
100+93	0.0017	184	0.0002
94	0.0012	186	0.0002
96	0.0010	188	0.0003
98	0.0013	189	0.0042
103	0.0009	191	0.0012
104	0.0008	192	0.0012
106	0.0006	197	0.0009
111	0.0008	204	0.0019
112	0.0099	205	0.0017
117	0.0043	207	0.0025
120	0.0005	209	0.0017

32 **Table S3.** Weight percent of 209 PCB congeners in our laboratory measurement of Aroclor 1016, 1221,  
 33 1242, 1254 and 1248  
 34

PCB Congener	Aroclor				
	1016	1221	1242	1254	1248
1	0.57%	37.71%	0.58%	0.03%	0.05%
2	0.03%	3.58%	0.04%	0.00%	0.00%
3	0.17%	18.84%	0.21%	0.02%	0.02%
4	3.56%	6.00%	3.18%	0.01%	0.31%
5	0.19%	0.76%	0.17%	0.00%	0.01%
6	1.66%	3.33%	1.49%	0.01%	0.13%
7	0.33%	1.54%	0.29%	0.00%	0.02%
8	8.12%	10.42%	7.08%	0.03%	0.82%
9	0.58%	1.57%	0.51%	0.00%	0.04%
10	0.17%	0.58%	0.15%	0.00%	0.01%
11	0.02%	0.07%	0.01%	0.00%	0.00%
13+12	0.31%	1.13%	0.26%	0.00%	0.02%
14	0.00%	0.00%	0.00%	0.00%	0.00%
15	2.18%	2.46%	1.83%	0.01%	0.20%
16	3.83%	0.53%	3.33%	0.02%	1.14%
17	3.72%	0.55%	3.27%	0.01%	1.09%
30+18	8.56%	1.14%	7.50%	0.06%	3.67%
19	0.90%	0.13%	0.81%	0.00%	0.22%
28+20	9.01%	1.14%	7.51%	0.06%	3.80%
21+33	6.28%	0.81%	5.20%	0.03%	2.36%
22	3.48%	0.44%	2.91%	0.02%	1.40%
23	0.02%	0.00%	0.01%	0.00%	0.00%
24	0.13%	0.03%	0.12%	0.00%	0.01%
25	0.71%	0.11%	0.60%	0.00%	0.12%
29+26	1.64%	0.23%	1.37%	0.01%	0.44%
27	0.53%	0.08%	0.46%	0.00%	0.13%
31	8.85%	1.07%	7.39%	0.14%	4.90%
32	2.22%	0.29%	1.93%	0.01%	0.90%
34	0.03%	0.01%	0.03%	0.00%	0.01%
35	0.09%	0.02%	0.08%	0.01%	0.01%
36	0.00%	0.00%	0.00%	0.00%	0.00%
37	1.77%	0.25%	1.75%	0.02%	0.69%
38	0.01%	0.00%	0.01%	0.00%	0.01%
39	0.00%	0.01%	0.02%	0.00%	0.01%
71+40	2.27%	0.24%	1.99%	0.26%	3.13%
41	0.82%	0.09%	0.67%	0.02%	0.77%
42	1.48%	0.16%	1.27%	0.12%	1.79%
43	0.25%	0.03%	0.21%	0.02%	0.26%

65+47+44	4.35%	0.47%	3.70%	0.84%	6.27%
45	2.51%	0.26%	2.13%	0.09%	2.58%
46	0.43%	0.05%	0.35%	0.02%	0.45%
48	1.52%	0.16%	1.26%	0.08%	1.65%
69+49	2.96%	0.31%	2.49%	0.46%	3.97%
50+53	0.95%	0.10%	0.80%	0.08%	1.13%
51	0.26%	0.03%	0.20%	0.01%	0.24%
52	4.53%	0.50%	3.80%	1.57%	7.37%
54	0.02%	0.00%	0.01%	0.00%	0.01%
55	0.02%	0.02%	0.10%	0.02%	0.06%
56	0.14%	0.19%	1.63%	1.38%	2.86%
57	0.02%	0.01%	0.02%	0.00%	0.02%
58	0.01%	0.01%	0.00%	0.00%	0.01%
60	0.07%	0.14%	1.17%	0.72%	1.85%
61+70+76+74	2.55%	0.61%	5.66%	8.44%	10.46%
62+75+59	0.52%	0.06%	0.44%	0.03%	0.46%
63	0.11%	0.02%	0.15%	0.08%	0.23%
64	2.19%	0.23%	1.89%	0.41%	3.20%
66	0.99%	0.37%	3.24%	3.03%	5.69%
67	0.12%	0.02%	0.13%	0.02%	0.11%
68	0.01%	0.01%	0.01%	0.00%	0.01%
72	0.02%	0.01%	0.02%	0.00%	0.02%
73	0.00%	0.00%	0.00%	0.00%	0.00%
77	0.00%	0.03%	0.26%	0.14%	0.38%
78	0.00%	0.00%	0.00%	0.00%	0.00%
79	0.00%	0.00%	0.02%	0.07%	0.02%
80	0.00%	0.00%	0.00%	0.00%	0.00%
81	0.00%	0.00%	0.01%	0.00%	0.01%
82	0.00%	0.03%	0.22%	1.38%	0.72%
83	0.00%	0.01%	0.06%	0.24%	0.18%
84	0.12%	0.05%	0.33%	1.52%	1.12%
116+85	0.00%	0.03%	0.23%	2.13%	0.87%
119+109+86+97	0.01%	0.05%	0.30%	2.21%	1.02%
125+87	0.01%	0.06%	0.46%	3.55%	1.50%
88	0.00%	0.01%	0.00%	0.00%	0.00%
89	0.02%	0.01%	0.05%	0.06%	0.13%
113+90+101	0.08%	0.11%	0.69%	5.97%	2.35%
91	0.15%	0.02%	0.20%	0.52%	0.62%
92	0.03%	0.02%	0.12%	0.69%	0.40%
100+93	0.02%	0.01%	0.02%	0.02%	0.05%
94	0.01%	0.00%	0.01%	0.01%	0.03%
95	0.62%	0.10%	0.66%	2.24%	2.16%
96	0.03%	0.01%	0.03%	0.02%	0.07%

98	0.00%	0.00%	0.00%	0.00%	0.00%
99	0.03%	0.06%	0.46%	4.50%	1.55%
102	0.07%	0.01%	0.07%	0.09%	0.21%
103	0.01%	0.00%	0.01%	0.01%	0.02%
104	0.00%	0.00%	0.00%	0.00%	0.00%
105	0.00%	0.05%	0.39%	7.68%	1.58%
106	0.00%	0.00%	0.00%	0.00%	0.00%
107	0.00%	0.01%	0.05%	0.80%	0.16%
108+124	0.00%	0.01%	0.03%	0.48%	0.09%
110	0.00%	0.11%	0.77%	8.42%	2.95%
111	0.00%	0.00%	0.00%	0.00%	0.00%
112	0.00%	0.00%	0.01%	0.00%	0.00%
114	0.00%	0.01%	0.03%	0.43%	0.11%
115	0.00%	0.00%	0.03%	0.00%	0.00%
117	0.00%	0.01%	0.02%	0.00%	0.00%
118	0.00%	0.08%	0.62%	13.91%	2.46%
120	0.00%	0.00%	0.00%	0.00%	0.00%
121	0.00%	0.00%	0.00%	0.00%	0.00%
122	0.00%	0.00%	0.02%	0.21%	0.06%
123	0.00%	0.00%	0.02%	0.27%	0.07%
126	0.00%	0.00%	0.00%	0.02%	0.00%
127	0.00%	0.00%	0.00%	0.00%	0.00%
166+128	0.00%	0.00%	0.01%	1.52%	0.09%
138+163+129	0.00%	0.02%	0.07%	6.97%	0.45%
130	0.00%	0.00%	0.01%	0.36%	0.03%
131	0.00%	0.00%	0.00%	0.09%	0.01%
132	0.00%	0.01%	0.03%	1.63%	0.18%
133	0.00%	0.00%	0.00%	0.04%	0.00%
134	0.00%	0.00%	0.01%	0.21%	0.03%
151+135	0.00%	0.01%	0.02%	0.51%	0.09%
136	0.00%	0.00%	0.01%	0.25%	0.05%
137	0.00%	0.00%	0.01%	0.59%	0.04%
139+140	0.00%	0.00%	0.00%	0.12%	0.01%
141	0.00%	0.00%	0.01%	0.66%	0.06%
142	0.00%	0.00%	0.00%	0.00%	0.00%
143	0.00%	0.00%	0.00%	0.02%	0.00%
144	0.00%	0.00%	0.00%	0.12%	0.02%
145	0.00%	0.00%	0.00%	0.00%	0.00%
146	0.00%	0.00%	0.01%	0.44%	0.04%
147+149	0.00%	0.02%	0.05%	2.02%	0.25%
148	0.00%	0.00%	0.00%	0.00%	0.00%
150	0.00%	0.00%	0.00%	0.00%	0.00%
152	0.00%	0.00%	0.00%	0.00%	0.00%



153+168	0.00%	0.01%	0.03%	3.65%	0.22%
154	0.00%	0.00%	0.00%	0.02%	0.00%
155	0.00%	0.00%	0.00%	0.00%	0.00%
156+157	0.00%	0.00%	0.01%	1.62%	0.07%
158	0.00%	0.00%	0.01%	0.82%	0.05%
159	0.00%	0.00%	0.00%	0.00%	0.00%
160	0.00%	0.00%	0.00%	0.00%	0.00%
161	0.00%	0.00%	0.00%	0.00%	0.00%
162	0.00%	0.00%	0.00%	0.03%	0.00%
164	0.00%	0.00%	0.00%	0.27%	0.02%
165	0.00%	0.00%	0.00%	0.00%	0.00%
167	0.00%	0.00%	0.00%	0.36%	0.02%
169	0.00%	0.00%	0.00%	0.00%	0.00%
170	0.00%	0.00%	0.00%	0.45%	0.02%
171+173	0.00%	0.00%	0.00%	0.12%	0.01%
172	0.00%	0.00%	0.00%	0.04%	0.00%
174	0.00%	0.00%	0.00%	0.16%	0.01%
175	0.00%	0.00%	0.00%	0.01%	0.00%
176	0.00%	0.00%	0.00%	0.02%	0.00%
177	0.00%	0.00%	0.00%	0.10%	0.01%
178	0.00%	0.00%	0.00%	0.02%	0.00%
179	0.00%	0.00%	0.00%	0.03%	0.00%
193+180	0.00%	0.00%	0.00%	0.48%	0.03%
181	0.00%	0.00%	0.00%	0.01%	0.00%
182	0.00%	0.00%	0.00%	0.00%	0.00%
183	0.00%	0.00%	0.00%	0.12%	0.01%
184	0.00%	0.00%	0.00%	0.00%	0.00%
185	0.00%	0.00%	0.00%	0.01%	0.00%
186	0.00%	0.00%	0.00%	0.00%	0.00%
187	0.00%	0.00%	0.00%	0.10%	0.02%
188	0.00%	0.00%	0.00%	0.00%	0.00%
189	0.00%	0.00%	0.00%	0.03%	0.00%
190	0.00%	0.00%	0.00%	0.07%	0.00%
191	0.00%	0.00%	0.00%	0.02%	0.00%
192	0.00%	0.00%	0.00%	0.00%	0.00%
194	0.00%	0.00%	0.00%	0.02%	0.00%
195	0.00%	0.00%	0.00%	0.01%	0.00%
196	0.00%	0.00%	0.00%	0.01%	0.00%
197	0.00%	0.00%	0.00%	0.00%	0.00%
198+199	0.00%	0.00%	0.00%	0.01%	0.01%
200	0.00%	0.00%	0.00%	0.00%	0.00%
201	0.00%	0.00%	0.00%	0.00%	0.00%
202	0.00%	0.00%	0.00%	0.00%	0.00%

203	0.00%	0.00%	0.00%	0.01%	0.00%
204	0.00%	0.00%	0.00%	0.00%	0.00%
205	0.00%	0.00%	0.00%	0.00%	0.00%
206	0.00%	0.00%	0.00%	0.01%	0.01%
207	0.00%	0.00%	0.00%	0.00%	0.00%
208	0.00%	0.00%	0.00%	0.00%	0.00%
209	0.00%	0.00%	0.00%	0.00%	0.00%
<b>TOTAL</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>