Supplemental Material

Blood Pressure in Relation to Concentrations of PCB Congeners and Chlorinated Pesticides

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Supplemental Material, Table 1. Characteristics of serum PCB congener concentrations (ppb) for total PCBs, PCB groups and all PCB congeners and pesticides and their percent above LOD (n = 394)[a]

Toxicant	Median	Mean±SD	Range	Missing values	Mean LOD	n > LOD	% > LOD
Total PCB (of 35 congeners)							
Total PCB (LOD=1/2)	2.12	4.72±11.0	0.09-170.4	0	na	394	100
Estrogen-like	0.12	0.26±	0.01-13.81	0	na	394	100
Dioxin-like TEQs	8.9×10^{-6}	$2.2\times10^{-5} \pm 6.6 \times 10^{-5}$	4.5×10^{-7}-1.1×10^{-3}	0	na	394	100
Mono-*ortho*	0.26	0.59±1.87	0.02-34.2	0	na	394	100
Di-*ortho*	1.31	2.95±6.99	0.05-107.9	0	na	394	100
Tri- and tetra-*ortho*	0.46	1.16±2.54	0.02-28.1	0	na	394	100
Congeners							
PCB – 28	0.008	0.015±0.03	< LOD-0.62	0	0.004	317	80.46
PCB – 52	0.001	0.004±0.02	< LOD-0.38	0	0.002	67	17.01
PCB – 49	0.001	0.002±0.007	< LOD-0.13	15	0.002	25	6.60
PCB – 44	0.001	0.002±0.002	< LOD-0.03	15	0.002	40	10.55
PCB – 74	0.043	0.08±0.18	< LOD-3.13	0	0.002	392	99.49
PCB – 66	0.005	0.01±0.04	< LOD-0.77	0	0.002	300	76.14
PCB – 101	0.001	0.005±0.02	< LOD-0.39	0	0.002	121	30.71
PCB – 99	0.048	0.14±0.51	< LOD-9.15	0	0.002	389	98.73
PCB – 87	0.001	0.006±0.02	< LOD-0.37	12	0.002	154	40.31
PCB – 110	0.001	0.004±0.01	< LOD-0.22	0	0.002	78	19.80
PCB – 118	0.071	0.26±0.08	< LOD-20.3	0	0.005	393	99.75
PCB – 105	0.012	0.05±0.23	< LOD-4.46	13	0.002	354	92.91
PCB – 151	0.001	0.006±0.02	< LOD-0.36	0	0.002	106	26.90
PCB – 149	0.001	0.005±0.01	< LOD-0.24	0	0.002	98	24.87

Supplemental Material, Table 1 (cont.)

PCB – 146	0.051	0.13±0.36	< LOD-5.64	0	0.002	380	96.45
PCB – 153	0.401	0.92±2.29	< LOD-35.2	0	0.007	393	99.75
PCB – 138+158	0.264	0.63±1.77	< LOD-30.5	0	0.002	393	99.75
PCB – 128	0.001	0.006±0.02	< LOD-0.47	0	0.002	87	22.08
PCB – 167	0.014	0.03±0.10	< LOD-1.86	0	0.002	319	80.96
PCB – 156	0.052	0.09±0.18	< LOD-2.61	0	0.002	384	97.46
PCB – 157	0.013	0.026±0.05	< LOD-0.76	0	0.002	330	83.76
PCB – 178	0.027	0.063±0.14	< LOD-1.92	0	0.002	344	87.31
PCB – 187	0.106	0.27±0.71	< LOD-10.7	0	0.002	389	98.73
PCB – 183	0.027	0.06±0.18	< LOD-3.08	0	0.002	365	92.64
PCB – 177	0.018	0.04±0.12	< LOD-2.03	0	0.002	355	90.10
PCB – 172	0.016	0.035±0.07	< LOD-1.01	0	0.002	328	83.25
PCB – 180	0.307	0.63±1.32	< LOD-16.9	0	0.008	392	99.49
PCB – 170	0.112	0.22±0.46	0.0036?-6.11	0	0.002	394	100
PCB – 189	0.005	0.011±0.01	< LOD-0.25	0	0.002	255	64.72
PCB – 199	0.085	0.20±0.44	< LOD-4.19	0	0.002	387	98.22
PCB – 196+203	0.072	0.15±0.32	< LOD-3.24	0	0.002	384	97.46
PCB – 195	0.014	0.03±0.07	< LOD-0.86	3	0.002	322	82.35
PCB – 194	0.076	0.17±0.38	< LOD-3.42	3	0.002	368	94.12
PCB – 206	0.049	0.15±0.40	< LOD-4.77	0	0.002	386	97.97
PCB – 209	0.025	0.13±0.49	< LOD-7.44	0	0.002	364	92.39
Pesticides							
HCB	0.051	0.057±0.02	<LOD-0.22	0	0.007	394	100
β-HCCH	0.033	0079±0.14	< LOD-1.75	2	0.013	356	90.82
γ-HCCH	0.006	0.007±0.009	< LOD-0.09	0	0.013	129	32.74
Oxychlordane	0.089	0.12±0.14	< LOD-1.62	1	0.013	356	90.59
Transnonachlor	0.155	0.24±0.31	< LOD-4.19	1	0.013	386	98.22
pp-DDE	1.265	2.61±4.02	<LOD-36.36	0	0.068	394	100

Supplemental Material, Table 1 (cont.)

op-DDT	0.006	0.008±0.01	< LOD-0.12	0	0.013	208	52.79
pp-DDT	0.022	0.040±0.05	< LOD-0.61	0	0.013	360	91.37
Mirex	0.047	0.09±0.18	< LOD-2.57	0	0.013	388	98.48

[a]the mean and median were calculated with the values below the LOD set to LOD = ½ LOD

Supplemental Material, Table 2. Multiple linear regression analysis of mean systolic and mean diastolic blood pressure on tertiles of individual PCB congeners after adjustment[a] (only statistically insignificant congeners have been included)

Toxicant	β_1 (2nd vs. 1st) [b]	SE(β_1)	β_2 (3rd vs. 1st)[b]	SE(β_2)
mono–*ortho* PCB congeners				
PCB – 28				
Systolic	6.7×10^{-4}	0.007	3.5×10^{-3}	0.008
Diastolic	3.9×10^{-4}	0.007	-2.7×10^{-3}	0.008
PCB – 66				
Systolic	-1.0×10^{-3}	0.007	3.5×10^{-3}	0.008
Diastolic	-7.4×10^{-4}	0.007	4.4×10^{-3}	0.008
PCB – 74				
Systolic	-9.5×10^{-3}	0.008	2.1×10^{-3}	0.010
Diastolic	4.6×10^{-3}	0.008	7.7×10^{-3}	0.010
PCB – 105				
Systolic	-1.1×10^{-3}	0.007	4.1×10^{-3}	0.008
Diastolic	6.0×10^{-3}	0.007	8.0×10^{-3}	0.008
PCB – 118				
Systolic	3.5×10^{-3}	0.008	4.9×10^{-3}	0.009
Diastolic	3.7×10^{-3}	0.008	4.3×10^{-3}	0.009
PCB – 167				
Systolic	5.9×10^{-4}	0.008	6.0×10^{-3}	0.010
Diastolic	6.2×10^{-3}	0.008	9.2×10^{-3}	0.010
dioxin-like PCB congeners				
PCB – 105				
Systolic	-1.1×10^{-3}	0.007	4.1×10^{-3}	0.008
Diastolic	6.0×10^{-3}	0.007	8.0×10^{-3}	0.008
PCB – 118				
Systolic	3.5×10^{-3}	0.008	4.9×10^{-3}	0.009
Diastolic	3.7×10^{-3}	0.008	4.3×10^{-3}	0.009
PCB – 167				
Systolic	5.9×10^{-4}	0.008	6.0×10^{-3}	0.010
Diastolic	6.2×10^{-3}	0.008	9.2×10^{-3}	0.010
di–*ortho* PCB congeners				
PCB – 87				
Systolic	-2.2×10^{-2}	0.010	-9.2×10^{-3}	0.010
Diastolic	-2.7×10^{-2}	0.010	-1.7×10^{-2}	0.011
PCB – 99				
Systolic	7.4×10^{-3}	0.008	1.3×10^{-2}	0.009
Diastolic	1.0×10^{-2}	0.008	1.6×10^{-2}	0.009
PCB – 101				
Systolic	-1.1×10^{-2}	0.011	1.0×10^{-3}	0.011
Diastolic	-1.5×10^{-2}	0.011	-3.9×10^{-3}	0.011

Supplemental Material, Table 2 (cont.)

PCB – 128				
Systolic	$-1.6x10^{-2}$	0.010	$7.4x10^{-3}$	0.010
Diastolic	$-1.9x10^{-2}$	0.010	$-1.0x10^{-2}$	0.010
tri– and tetra–*ortho* PCB congeners				
PCB – 149				
Systolic	$-1.5x10^{-2}$	0.010	$2.9x10^{-3}$	0.010
Diastolic	$-2.3x10^{-2}$	0.010	$-1.2x10^{-2}$	0.011
PCB – 151				
Systolic	$-1.2x10^{-2}$	0.012	$1.5x10^{-3}$	0.012
Diastolic	$-1.7x10^{-2}$	0.012	$-1.2x10^{-2}$	0.012

[a]adjusted for age, BMI, total lipids, gender, race, smoking, physical activity.
[b]tertiles comparison.

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