

Table S1. Geometric mean concentrations (and medians, between square brackets) of POPs in serum of pregnant women, cord blood and four years-old children, in ng/ml and $\mu\text{g/g}$ lipid, in the INMA-Asturias birth cohort.

Compound	Maternal Serum		Cord Blood		Children Serum	
	ng/ml	$\mu\text{g/g}$ lipid	ng/ml	$\mu\text{g/g}$ lipid	ng/ml	$\mu\text{g/g}$ lipid
HCB	0.36 [0.38]	70 [70]	0.13 [0.14]	50 [50]	0.081 [0.091]	16 [19]
β -HCH	0.14 [0.15]	26 [27]	0.032 [0.046]	12 [17]	0.042 [0.064]	8.3 [13]
4,4'-DDT	0.088 [0.099]	17 [18]	0.084 [0.083]	33 [33]	0.017 [0.022]	3.4 [4.3]
4,4'-DDE	1.4 [1.4]	270 [260]	0.48 [0.47]	180 [180]	0.40 [0.32]	81 [64]
PCB-118	0.044 [0.052]	8.8 [10]	0.014 [0.011]	5.3 [4.2]	0.025 [0.038]	5.0 [7.7]
PCB-138	0.19 [0.20]	36 [36]	0.080 [0.084]	31 [31]	0.11 [0.11]	21 [20]
PCB-153	0.33 [0.34]	63 [62]	0.12 [0.13]	47 [47]	0.11 [0.12]	22 [24]
PCB-180	0.22 [0.24]	42 [45]	0.065 [0.071]	25 [27]	0.048 [0.066]	9.6 [14]
BDE-28	0.0012 [0.00076]	0.23 [0.16]	0.0010 [0.00076]	0.39 [0.31]	0.0087 [0.0086]	1.7 [1.7]
BDE-47	0.0021 [0.0013]	0.41 [0.26]	0.0024 [0.0013]	0.89 [0.57]	0.0039 [0.0026]	0.76 [0.55]
BDE-99	0.0054 [0.0068]	1.1 [1.6]	0.0023 [0.0012]	0.86 [0.51]	0.0068 [0.0079]	1.3 [1.5]
BDE-100	0.0019 [0.0018]	0.35 [0.35]	0.0023 [0.0012]	0.87 [0.72]	0.0023 [0.0019]	0.46 [0.38]
BDE-138	0.00088 [0.00082]	0.17 [0.16]	0.00096 [0.00082]	0.38 [0.33]	0.0016 [0.0015]	0.32 [0.29]
BDE-153	0.012 [0.013]	2.3 [2.5]	0.0015 [0.00062]	0.57 [0.30]	0.0036 [0.0018]	0.70 [0.44]
BDE-183	0.00039 [0.00033]	0.074 [0.0065]	0.00048 [0.00033]	0.19 [0.14]	0.0013 [0.0012]	0.25 [0.23]
BDE-209	0.0082 [0.0046]	1.7 [1.0]	0.0062 [0.0046]	2.4 [1.9]	0.021 [0.013]	4.1 [3.1]

Table S2. Distribution of POP concentrations in serum of four year-old children (in ng/ml and µg/g lipid between square brackets) in the Asturias-INMA birth cohort (n=272).

Compound	DF ^a (%)	GM ^b	Median	P95 ^c	Range
HCB	96	0.081 [16.2]	0.091 [18.7]	0.39 [77.3]	0.0019 – 1.2 [0.33 – 205.2]
β-HCH	79	0.042 [8.3]	0.064 [13.1]	0.32 [62.7]	0.0024 – 0.94 [0.25 – 166.5]
4,4'-DDT	70	0.017 [3.4]	0.022 [4.3]	0.14 [29.5]	0.0027 – 1.1 [0.36 – 212.5]
4,4'-DDE	100	0.40 [81.0]	0.32 [64.1]	2.4 [519]	0.036 – 18.2 [6.7 – 3186.7]
PCB-118	79	0.025 [5.0]	0.038 [7.7]	0.12 [25.5]	0.0022 – 0.32 [0.23 – 67.5]
PCB-138	99	0.11 [21.1]	0.11 [20.4]	0.35 [72.8]	0.0047 – 1.1 [0.91 – 202.9]
PCB-153	97	0.11 [21.9]	0.12 [23.6]	0.55 [109]	0.0022 – 1.7 [0.33 – 298.2]
PCB-180	78	0.048 [9.6]	0.066 [14.5]	0.44 [84.5]	0.0036 – 1.2 [0.50 – 206.1]
BDE-28	82	0.0087 [1.7]	0.0086 [1.7]	0.044 [8.5]	0.0015 – 0.15 [0.22 – 16.5]
BDE-47	24	0.0039 [0.76]	0.0026 [0.55]	0.017 [3.4]	0.0026 – 0.28 [0.30 – 56.0]
BDE-99	75	0.0068 [1.3]	0.0079 [1.5]	0.025 [5.0]	0.0016 – 0.092 [0.19 – 18.5]
BDE-100	13	0.0023 [0.46]	0.0019 [0.38]	0.0087 [1.8]	0.0019 – 0.11 [0.22 – 18.7]
BDE-138	6	0.0016 [0.32]	0.0015 [0.29]	0.0049 [0.89]	0.0015 – 0.027 [0.15 – 5.4]
BDE-153	42	0.0036 [0.70]	0.0018 [0.44]	0.018 [3.3]	0.0018 – 0.037 [0.22 – 7.5]
BDE-183	6	0.0013 [0.25]	0.0012 [0.23]	0.0039 [0.43]	0.0012 – 0.018 [0.13 – 3.0]
BDE-209	32	0.021 [4.1]	0.013 [3.1]	0.074 [14.4]	0.013 – 0.50 [1.5 – 98.1]

^a DF: Detection Frequency (in percentage); ^b GM: Geometric Mean; ^c P95: Percentile 95.