

Supplemental Digital Content 3. Quintile of phthalate and odds of preschool ADHD: sensitivity analysis excluding cases and controls where mothers reported “other” education

Phthalate	Quintile	N cases ^c	adjusted for covariates ^a	adjusted for covariates and correlated phthalate metabolites ^b
			OR (95% CI)	OR (95% CI)
MEP	1. <26.0 µg/L	44	ref.	
	2. 26.0 – 62.2 µg/L	44	0.91 (0.54, 1.52)	
	3. 62.2 – 148 µg/L	56	1.16 (0.71, 1.92)	
	4. 148 – 380 µg/L	54	1.24 (0.75, 2.03)	
	5. >380 µg/L	52	1.03 (0.62, 1.71)	
	Linear model ^d	250	1.03 (0.92, 1.14)	
MiBP ^e	1. <8.76 µg/L	31	ref.	ref.
	2. 8.76 – 13.2 µg/L	41	1.40 (0.80, 2.45)	1.61 (0.86, 2.99)
	3. 13.2 – 20.8 µg/L	64	1.85 (1.09, 3.14)	2.11 (1.13, 3.95)
	4. 20.8 – 38.9 µg/L	74	2.38 (1.40, 4.05)	2.70 (1.41, 5.16)
	5. >38.9 µg/L	40	1.20 (0.68, 2.12)	1.26 (0.63, 2.53)
	Linear model ^d	250	1.07 (0.89, 1.29)	0.97 (0.77, 1.23)
MnBP	1. <9.90 µg/L	48	ref.	ref.
	2. 9.90 – 14.6 µg/L	40	0.74 (0.44, 1.25)	0.51 (0.28, 0.93)
	3. 14.6 – 21.9 µg/L	47	0.90 (0.54, 1.49)	0.51 (0.27, 0.96)
	4. 21.9 – 34.0 µg/L	55	1.11 (0.67, 1.82)	0.56 (0.29, 1.10)
	5. >34.0 µg/L	60	1.14 (0.69, 1.87)	0.59 (0.29, 1.20)
	Linear model ^d	250	1.19 (0.96, 1.46)	1.12 (0.83, 1.50)
MBzP	1. <2.19 µg/L	38	ref.	ref.
	2. 2.19 – 3.46 µg/L	40	0.97 (0.57, 1.68)	1.01 (0.55, 1.85)
	3. 3.46 – 5.51 µg/L	52	1.32 (0.78, 2.22)	1.38 (0.76, 2.51)
	4. 5.51 – 9.60 µg/L	54	1.51 (0.90, 2.55)	1.63 (0.85, 3.12)
	5. >9.60 µg/L	66	1.48 (0.89, 2.49)	1.57 (0.80, 3.08)
	Linear model ^d	250	1.16 (0.97, 1.39)	1.11 (0.88, 1.40)
ΣDEHP	1. <0.16 µmol/L	39	ref.	ref.
	2. 0.16 – 0.21 µmol/L	52	1.29 (0.77, 2.15)	1.32 (0.78, 2.24)
	3. 0.21 – 0.27 µmol/L	48	1.25 (0.73, 2.12)	1.19 (0.69, 2.06)
	4. 0.27 – 0.38 µmol/L	47	1.28 (0.76, 2.17)	1.27 (0.74, 2.17)
	5. >0.38 µmol/L	64	1.68 (1.01, 2.78)	1.63 (0.95, 2.79)
	Linear model ^d	250	1.26 (1.01, 1.56)	1.22 (0.96, 1.55)
ΣDiNP ^e	1. <0.012 µmol/L	42	ref.	ref.
	2. 0.012 – 0.016 µmol/L	75	2.05 (1.25, 3.36)	2.02 (1.23, 3.31)
	3. 0.016 – 0.020 µmol/L	35	0.91 (0.52, 1.58)	0.87 (0.50, 1.52)
	4. 0.020 – 0.027 µmol/L	41	1.10 (0.65, 1.88)	1.03 (0.60, 1.76)
	5. >0.027 µmol/L	57	1.67 (1.01, 2.79)	1.49 (0.88, 2.53)
	Linear model ^d	250	1.18 (0.93, 1.49)	1.08 (0.84, 1.39)

^aAdjusted for specific gravity, analytic batch, child sex and maternal age, education, parity, depression during pregnancy, and ADHD-like symptoms.

^bAdjusted for specific gravity, analytic batch, child sex and maternal age, education, parity, depression during pregnancy, ADHD-like symptoms and additionally adjusted for correlated metabolites (a) MiBP, MnBP, and MBzP co-adjusted for one another; (b) ΣDEHP and ΣDiNP co-adjusted for each other).

^cNumber with no missing exposure or covariates

^dPer 1 natural log-unit increase in biomarker

^eAssociated nonlinearly (Wald test p<0.10) for MiBP and ΣDiNP when modeled using Model 2 adjustment set and restricted cubic splines with knots at 20th, 40th, 60th, and 80th percentiles.