

Supporting Information

Exposures to Contemporary and Emerging Chemicals Among Children Aged 2 to 4 Years in the United States Environmental Influences on Child Health Outcomes (ECHO) Cohort

Jiwon Oh, Jessie P. Buckley, Kurunthachalam Kannan, Edo Pellizzari, Rachel L. Miller, Theresa M. Bastain, Anne L. Dunlop, Christian Douglas, Frank D. Gilliland, Julie B. Herbstman, Catherine Karr, Christina A. Porucznik, Irva Hertz-Picciotto, Rachel Morello-Frosch, Sheela Sathyanarayana, Rebecca J. Schmidt, Tracey J. Woodruff, Deborah H. Bennett, and the ECHO Cohort Consortium

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Table S1. Information on the 111 quantified analytes.

Analyte class/name	Parent compound (if any)	CASRN	Internal standard	NHANES ^a
Bactericides				
Triclocarban (TCC)		101-20-2	¹³ C ₆ -TCC	Y
Triclosan (TCS)		3380-34-5	D ₃ -TCS	Y
Benzophenones				
Benzophenone-1 (BP1)		131-56-6	D ₅ -BP1	
Benzophenone-2 (BP2)	Benzophenone	131-55-5	¹³ C ₆ -EtPB	
Benzophenone-3 (BP3)		131-57-7	¹³ C ₆ -BP3	Y
Benzophenone-6 (BP6)		131-54-4	¹³ C ₆ -BP3	
Benzophenone-8 (BP8)	Benzophenone-3	131-53-3	D ₃ -BP8	
4-hydroxybenzophenone (OH4BP)	Benzophenone-1, -3	1137-42-4	¹³ C ₆ -EtPB	
Bisphenols				
Bisphenol A (BPA)		80-05-7	¹³ C ₁₂ -BPA	Y
Bisphenol F (BPF)		620-92-8	¹³ C ₁₂ -BPF	Y
Bisphenol S (BPS)		80-09-1	¹³ C ₁₂ -BPS	Y
Bisphenol AF (BPAF)		1478-61-1	¹³ C ₁₂ -BPAF	
Bisphenol AP (BPAP)		1571-75-1	¹³ C ₁₂ -BPAF	
Bisphenol B (BPB)		77-40-7	¹³ C ₄ -BPP	
Bisphenol P (BPP)		2167-51-3	¹³ C ₄ -BPP	
Bisphenol Z (BPZ)		843-55-0	¹³ C ₁₂ -BPZ	
2,2',6,6'-tetrachlorobisphenol A (TECBPA)	Bisphenol A	79-95-8	¹³ C ₁₂ -TBBPA	
3,3',5,5'-tetrabromobisphenol A (TBBPA)	Bisphenol A	79-94-7	¹³ C ₁₂ -TBBPA	
3,3',5-trichlorobisphenol A (TCBPA)	Bisphenol A	40346-55-2	¹³ C ₁₂ -TBBPA	
Bisphenol A (2,3-dihydroxypropyl) glycidyl ether (BADGEH2O)	Bisphenol A	76002-91-0	D ₆ -BADGE	
Bisphenol A bis(2,3-dihydroxypropyl) glycidyl ether (BADGE2H2O)	Bisphenol A	5581-32-8	D ₆ -BADGE	
Bisphenol A diglycidyl ether (BADGE)	Bisphenol A	1675-54-3	D ₆ -BADGE	
Parabens				
Butyl paraben (BuPB)		94-26-8	¹³ C-BuPB	Y
Ethyl paraben (EtPB)		120-47-8	¹³ C-EtPB	Y
Methyl paraben (MePB)		99-76-3	¹³ C-MePB	Y
Propyl paraben (PrPB)		94-13-3	¹³ C-PrPB	Y
Benzyl paraben (BzPB)		94-18-8	D ₄ -BzPB	
Heptyl paraben (HePB)		1085-12-7	D ₄ -HePB	
Other phenols				
2,3,4,5-tetrachlorophenol (2,3,4,5-TECP)	Pentachlorophenol	4901-51-3	¹³ C ₆ -2,4,5,6-TECP	
2,3,4,6-tetrachlorophenol (2,3,4,6-TECP)	Pentachlorophenol	58-90-2	¹³ C ₆ -2,4,5,6-TECP	
2,3,5,6-tetrachlorophenol (2,3,5,6-TECP)	Pentachlorophenol	935-95-5	¹³ C ₆ -2,4,5,6-TECP	
Fungicides and herbicides				
Fungicides				
4-nitrophenol (PNP)		100-02-7	D ₄ -PNP	Y
Pentachlorophenol (PCP)		87-86-5	¹³ C ₆ -PCP	Y
Metalaxyl (MET)		57837-19-1	D ₃ -MET	

Analyte class/name	Parent compound (if any)	CASRN	Internal standard	NHANES ^a
Pyrimethanil (PYRM)		53112-28-0	D ₅ -PYRM	
Tebuconazole (TBZ)		107534-96-3	D ₉ -TBZ	
Tetraconazole (TETZ)		112281-77-3	D ₉ -TBZ	
Azoxystrobin (AZO)		131860-33-8	D ₄ -AZO	
Cyprodinil (CYP)		121552-61-2	D ₅ -CYP	
Metribuzin (METB)	Pentachlorophenol	21087-64-9	D ₆ -METB	
Propiconazole (PRPCN)		60207-90-1	D ₇ -PRPCN	
Herbicides				
2,4-dichlorophenoxyacetic acid (2,4-D)		94-75-7	¹³ C-2,4-D	Y
Atrazine (ATZ)		1912-24-9	D ₅ -ATZ	Y
Insecticides				
Neonicotinoid insecticides				
Acetamiprid (ACE)		160430-64-8	¹³ C ₆ -ACE	Y
Clothianidin (CLO)		210880-92-5	¹³ C ₄ - ¹⁵ N-CLO	Y
Imidacloprid (IMI)		138261-41-3	D ₄ -IMI	Y
Thiacloprid (THI)		111988-49-9	¹³ C ₆ -THI	Y
N-desmethyl-acetamiprid (NDMA)		190604-92-3	¹³ C ₂ - ¹⁵ N-NDMA	Y
Nitenpyram (NIT)		150824-47-8	¹³ C ₃ - ¹⁵ N ₂ -NIT	
Thiamethoxam (THX)		153719-23-4	¹³ C ₄ - ¹⁵ N-THX	
Imidaclothiz (IMZ)		105843-36-5	D ₄ -IMI	
Thiacloprid-amide (TA)		676228-91-4	¹³ C-TA	
N-desmethyl thiamethoxam (NDMT)	Thiamethoxam	171103-04-1	¹³ C ₂ - ¹⁵ N-NDMA	
Dinotefuran (DINF)		165252-70-0	¹³ C ₅ -DINF	
Flonicamid (FLNC)	Nicotinoid	158062-67-0	¹⁵ N- ¹⁸ O-FLNC	
Pyrethroid insecticides				
cis-3-(2,2-di-chlorovinyl)-2,2-dimethyl-cyclopropane-1-carboxylic acid (cis-DCCA)	cis-permethrin and other pyrethroids	55701-05-8	¹³ C ₂ -cis-DCCA	
trans-3-(2,2-di-chlorovinyl)-2,2-dimethyl-cyclopropane-1-carboxylic acid (trans-DCCA)	trans-permethrin and other pyrethroids	55701-05-8	¹³ C ₂ -trans-DCCA	Y
3-phenoxybenzoic acid (3-PBA)	Permethrin and other pyrethroids	3739-38-6	¹³ C ₆ -3-PBA	Y
4-fluoro-3-phenoxybenzoic acid (FBPA)	Beta-cyfluthrin	77279-89-1	¹³ C ₆ -FBPA	Y
Other insecticides				
Composite of 2,4,5- and 2,4,6 trichlorophenol (2,4,5-/2,4,6-TCP)		-	¹³ C ₆ -2,4,5-TCP ¹³ C ₆ -2,4,6-TCP	Y
3,5,6-trichloro-2-pyridinol (TCP)	Chlorpyrifos	6515-38-4	¹³ C ₃ -TCP	Y
Sulfoxaflo (SUF)		946578-00-3	D ₃ - ¹³ C ₂ - ¹⁵ N ₂ -SUF	
Organophosphate esters				
Bis(1,3-dichloro-2-propyl) phosphate (BDCIPP)	Tris(1,3-dichloro-2-propyl) phosphate	72236-72-7	D ₁₀ -BDCIPP	Y
Composite of di-n-butyl phosphate and di-isobutyl phosphate (DnBP/DiBP)	Tri-n-butyl phosphate and tris-isobutyl phosphate	-	D ₁₈ -DnBP D ₁₄ -DiBP	Y
Diphenyl phosphate (DPHP)	Triphenyl phosphate and other organophosphate esters	838-85-7	D ₁₀ -DPHP	Y
Bis(2-methylphenyl) hydrogen phosphate (BMPP)	Tris(2-methylphenyl) phosphate	35787-74-7	D ₁₄ -BMPP	Y

Analyte class/name	Parent compound (if any)	CASRN	Internal standard	NHANES ^a
Triethyl phosphate (TEP)		78-40-0	D ₁₅ -TEP	
Composite of tri-n-butyl phosphate/tri-iso-butyl phosphate (TnBP/TiBP)		-	D ₂₇ -TnBP	
Tris(2-chloroethyl) phosphate (TCETP)		115-96-8	D ₁₂ -TCETP	X
Triphenyl phosphate (TPHP)		115-86-6	D ₁₅ -TPHP	X
Tripropyl phosphate (TPP)		513-08-6	D ₂₁ -TPP	X
Tris(2-butoxyethyl) phosphate (TBOEP)		78-51-3	D ₂₇ -TBOEP	X
Phthalates and phthalate alternatives				
<i>Phthalate alternatives</i>				
Cyclohexane-1,2-dicarboxylic acid-monocarboxy isooctyl ester (MCOCH)	Di-iso-nonyl-cyclohexane-1,2-dicarboxylic acid	5393-19-1	¹³ C ₄ -MCOCH	
Cyclohexane-1,2-dicarboxylic acid-mono (hydroxy-isononyl) ester (MHNCH)	Di-iso-nonyl-cyclohexane-1,2-dicarboxylic acid	5393-19-1	¹³ C ₄ -MHNCH	
Cyclohexane-1,2-dicarboxylic acid-mono (oxo-isononyl) ester (MONCH)	Di-iso-nonyl-cyclohexane-1,2-dicarboxylic acid	5393-19-1	¹³ C ₄ -MONCH	
Mono-benzyl terephthalate (MBzTP)	Benzylbutyl terephthalate	18520-63-3	¹³ C ₄ -MBzP	
Mono-ethyl terephthalate (METP)	Diethyl terephthalate	27378-80-9	¹³ C ₄ -MEP	
Mono-tert-butyl terephthalate (MTBTP)	Di-tert-butyl terephthalate	20576-82-3	¹³ C ₄ -MBzP	
<i>Phthalates</i>				
Mono (2-ethyl-5-hydroxyhexyl) phthalate (MEHHP)	Di-2-ethylhexyl phthalate	40321-99-1	¹³ C ₄ -MEHHP	Y
Mono (2-ethyl-5-oxohexyl) phthalate (MEOHP)	Di-2-ethylhexyl phthalate	40321-98-0	¹³ C ₄ -MEOHP	Y
Mono (5-carboxy-2-ethylpentyl) phthalate (MECPP)	Di-2-ethylhexyl phthalate	40809-41-4	¹³ C ₄ -MECPP	Y
Mono-benzyl phthalate (MBzP)	Benzylbutyl phthalate	2528-16-7	¹³ C ₄ -MBzP	Y
Mono-carboxy isononyl phthalate (MCiNP)	Di-iso-decyl phthalate	-	¹³ C ₄ -MCiNP	Y
Mono-carboxy isooctyl phthalate (MCiOP)	Di-iso-nonyl phthalate	-	¹³ C ₄ -MCiOP	Y
Mono ethyl hexyl phthalate (MEHP)	Di-2-ethylhexyl phthalate	4376-20-9	¹³ C ₄ -MEHP	Y
Monoethyl phthalate (MEP)	Diethyl phthalate	2306-33-4	¹³ C ₄ -MEP	Y
Mono-methyl phthalate (MMP)	Dimethyl phthalate	4376-18-5	¹³ C ₄ -MMP	Y
Composite of mono-n-butyl phthalate and mono-isobutyl phthalate (MnBP/MiBP)	Dibutyl phthalate and di-iso-butyl phthalate	-	¹³ C-MnBP D ₄ -MiBP	Y
Mono-n-octyl phthalate (MOP)	Di-n-octyl phthalate	5393-19-1	¹³ C ₄ -MOP	Y
Mono (3-carboxypropyl) phthalate (MCPP)	Di-n-octyl phthalate	66851-46-5	¹³ C ₄ -MCPP	Y
Mono-2-(carboxymethyl) hexyl phthalate (MCMHP)	Di-2-ethylhexyl phthalate	82975-93-7	¹³ C ₄ -MCMHP	
Mono (7-carboxyheptyl) phthalate (MCHPP)	Di-n-octyl phthalate	856869-57-3	¹³ C ₄ -MECPP	
Mono-2-heptyl phthalate (MHPP)	Di-n-heptyl phthalate	-	D ₄ -MHPP	
Mono-2-(propyl-6-carboxy-hexyl) phthalate (MPCHP)	Di-(2-propylheptyl) phthalate	-	¹³ C ₄ -MPCHP	
Mono-2-(propyl-6-hydroxy-heptyl) phthalate (MPHHP)	Di-(2-propylheptyl) phthalate	1372605-11-2	¹³ C ₄ -MPHHP	
Mono-2-(propyl-6-oxoheptyl) phthalate (MPOHP)	Di-(2-propylheptyl) phthalate	1373125-92-8	¹³ C ₄ -MPOHP	
Monohydroxy-iso-decyl phthalate (MHiDP)	Di-iso-decyl phthalate	-	¹³ C ₄ -MCiOP	
Mono-isopropyl phthalate (MiPP)	Di-iso-propyl phthalate	35118-50-4	D ₄ -MiPP	
Mono-propyl phthalate (MPPrP)	Di-propyl phthalate	4376-19-6	D ₄ -MPPrP	
Mono-pentyl phthalate (MPeP)	Di-pentyl phthalate	24539-56-8	D ₄ -MPeP	
Mono-hexyl phthalate (MHxP)	Di-n-hexyl phthalate	24539-57-9	D ₄ -MHxP	

Analyte class/name	Parent compound (if any)	CASRN	Internal standard	NHANES ^a
Mono-isodecyl phthalate (MiDP)	Di-iso-decyl phthalate	31047-64-0	D ₂ -MiDP	
Monohydroxy-iso-nonyl phthalate (MHiNP)	Di-iso-nonyl phthalate	898544-10-0	¹³ C ₄ -MCiOP	
Phthalic acid (PA)		88-99-3	D ₄ -PA	
Polycyclic aromatic hydrocarbons				
1-hydroxynaphthalene (NAP1)	Naphthalene	90-15-3	¹³ C ₆ -NAP1	Y
2-hydroxynaphthalene (NAP2)	Naphthalene	135-19-3	¹³ C ₆ -NAP2	Y
1-hydroxypyrene (PYR1)	Pyrene	5315-79-7	¹³ C ₆ -PYR1	Y
Composite of 1- and 9-hydroxyphenanthrene (PHEN1,9)	Phenanthrene	-	¹³ C ₆ -PHEN1	Y
Composite of 2- and 3-hydroxyphenanthrene (PHEN2,3)	Phenanthrene	-	¹³ C ₆ -PHEN2	Y
4-hydroxyphenanthrene (PHEN4)	Phenanthrene	7651-86-7	¹³ C ₆ -PHEN2	Y
Composite of 2-, 3-, 9-hydroxyfluorene (FLUOs)	Fluorene	-	¹³ C ₆ -FLUO2	Y

Abbreviations: CASRN, Chemical Abstracts Service Registry Number; NHANES, National Health and Nutrition Examination Survey

^aSources of information were PubChem, the EPA Chemical Dashboard, and ChemSpider (owned by the Royal Society of Chemistry). Y indicates that the analyte has been previously included in NHANES biomonitoring.

Table S2. Equations used to calculate molar sums.

Molar sum	Equations	Primary metabolite
\sum BP	$(BP-1*(1/214) + BP-3*(1/228)) * 228$	BP-3
\sum PB	$(MePB*(1/152) + EtPB*(1/166) + PrPB*(1/180)) * 152$	MePB
\sum DEHP	$(MEHHP*(1/294) + MECPP*(1/308) + MCMHP*(1/308) + MEOHP*(1/292) + MEHP*(1/278)) * 308$	MECPP
\sum DPhP	$(MPCHP*(1/340) + MPOHP*(1/324)) * 324$	MPOHP
\sum DnOP/DiNP	$(MHiNP*(1/308) + MCiOP*(1/322) + MCPP*(1/252) + MCHPP*(1/308)) * 308$	MHiNP
\sum DINCH	$(MCOCH*(1/328) + MHNCH*(1/314) + MONCH*(1/312)) * 312$	MONCH

Abbreviations: BP, benzophenone; DEHP, di-2-ethylhexyl phthalate; DINCH, di-iso-nonyl-cyclohexane-1,2-dicarboxylic acid; DnOP/DiNP, di-n-octyl phthalate/di-iso-nonyl phthalate; DPhP, di-(2-propylheptyl) phthalate; EtPB, ethyl paraben; MCHPP, mono (7-carboxyheptyl) phthalate; MCiOP, mono-carboxy isooctyl phthalate; MCMHP, Mono-2-(carboxymethyl) hexyl phthalate; MCOCH, cyclohexane-1,2-dicarboxylic acid-monocarboxy isooctyl ester; MCPP, mono (3-carboxypropyl) phthalate; MEHHP, mono (2-ethyl-5-hydroxyhexyl) phthalate; MEHP, mono ethyl hexyl phthalate; MECPP, mono (5-carboxy-2-ethylpentyl) phthalate; MEOHP, mono (2-ethyl-5-oxohexyl) phthalate; MePB, methyl paraben; MHiNP, monohydroxy-iso-nonyl phthalate; MHNCH, cyclohexane-1,2-dicarboxylic acid-mono (hydroxy-isononyl) ester; MONCH, cyclohexane-1,2-dicarboxylic acid-mono (oxo-isononyl) ester; MPCHP, mono-2-(carboxymethyl) hexyl phthalate; MPOHP, mono-2-(propyl-6-oxoheptyl) phthalate; PB, paraben, PrPB, propyl paraben.

Note: The molar sums were calculated by dividing the concentration of each analyte by its molecular weight and summing these values; the molar sum was then multiplied by the molecular weight of the primary analyte.

Table S3. Quality control/quality assurance results.

Analyte class/name ^a	SRMs (n=3)		Matrix spikes (n=6)	QC pools (n=9)			Duplicate aliquots (n=8)	
	Type	Mean recoveries (%)	CV (%)	Type	# valid pools	CV (%)	# valid pairs	Median RPD (%)
Bactericides								
Triclocarban (TCC)	3672	NA	4	A	6	17	2	9
	3673	NA		B	9	15		
Triclosan (TCS)	3672	73	4	A	9	6	8	7
	3673	79		B	9	9		
Benzophenones								
Benzophenone-1 (BP1)	3672	NA	7	A	9	6	8	7
	3673	NA		B	9	9		
Benzophenone-2 (BP2)	3672	NA	8	A	0	NC	2	12
	3673	NA		B	0	NC		
Benzophenone-3 (BP3)	3672	122	4	A	9	13	8	15
	3673	129		B	9	11		
Benzophenone-6 (BP6)	3672	NA	15	A	0	NC	1	44
	3673	NA		B	0	NC		
Benzophenone-8 (BP8)	3672	NA	33	A	9	14	5	5
	3673	NA		B	9	12		
4-hydroxybenzophenone (OH4BP)	3672	NA	16	A	0	NC	3	2
	3673	NA		B	0	NC		
Bisphenols								
Bisphenol A (BPA)	3672	75	5	A	0	NC	4	26
	3673	87		B	0	NC		
Bisphenol F (BPF)	3672	NA	7	A	9	13	3	24
	3673	NA		B	8	20		
Bisphenol S (BPS)	3672	NA	7	A	9	17	8	5
	3673	NA		B	9	3		
Bisphenol AF (BPAF)	3672	NA	3	A	0	NC	0	NC
	3673	NA		B	0	NC		
Bisphenol AP (BPAP)	3672	NA	13	A	0	NC	2	32
	3673	NA		B	0	NC		
Bisphenol B (BPB)	3672	NA	10	A	0	NC	0	NC
	3673	NA		B	0	NC		
Bisphenol P (BPP)	3672	NA	7	A	0	NC	0	NC

Analyte class/name ^a	SRMs (n=3)		Matrix spikes (n=6)	QC pools (n=9)			Duplicate aliquots (n=8)	
	Type	Mean recoveries (%)	CV (%)	Type	# valid pools	CV (%)	# valid pairs	Median RPD (%)
Bisphenol Z (BPZ)	3673	NA	4	4B	0	NC	0	NC
	3672	NA		A	0	NC		
	3673	NA		B	0	NC		
2,2',6,6'-tetrachlorobisphenol A (TECBPA)	3672	NA	5	A	0	NC	0	NC
	3673	NA		B	0	NC		
3,3',5,5'-tetrabromobisphenol A (TBBPA)	3672	NA	3	A	0	NC	0	NC
	3673	NA		B	0	NC		
3,3',5-trichlorobisphenol A (TCBPA)	3672	NA	10	A	0	NC	0	NC
	3673	NA		B	0	NC		
Bisphenol A (2,3-dihydroxypropyl) glycidyl ether (BADGEH2O)	3672	NA	34	A	0	NC	0	NC
	3673	NA		B	0	NC		
Bisphenol A bis(2,3-dihydroxypropyl) glycidyl ether (BADGE2H2O)	3672	NA	16	A	0	NC	0	NC
	3673	NA		B	0	NC		
Bisphenol A diglycidyl ether (BADGE)	3672	NA	26	A	0	NC	0	NC
	3673	NA		B	1	NC		
Parabens								
Butyl paraben (BuPB)	3672	93	4	A	9	5	3	8
	3673	91		B	6	9		
Ethyl paraben (EtPB)	3672	70	6	A	9	6	8	5
	3673	75		B	9	7		
Methyl paraben (MePB)	3672	94	6	A	9	7	8	2
	3673	92		B	9	7		
Propyl paraben (PrPB)	3672	105	4	A	9	7	8	5
	3673	115		B	9	6		
Benzyl paraben (BzPB)	3672	NA	6	A	9	6	1	12
	3673	NA		B	9	15		
Heptyl paraben (HePB)	3672	NA	4	A	0	NC	0	NC
	3673	NA		B	0	NC		
Other phenols								
2,3,4,5-tetrachlorophenol (2,3,4,5-TECP)	3672	NA	8	A	0	NC	0	NC
	3673	NA		B	0	NC		
2,3,4,6-tetrachlorophenol (2,3,4,6-TECP)	3672	NA	7	A	0	NC	0	NC
	3673	NA		B	0	NC		

Analyte class/name ^a	SRMs (n=3)		Matrix spikes (n=6)	QC pools (n=9)			Duplicate aliquots (n=8)	
	Type	Mean recoveries (%)	CV (%)	Type	# valid pools	CV (%)	# valid pairs	Median RPD (%)
2,3,5,6-tetrachlorophenol (2,3,5,6-TECP)	3672	NA	8	A	6	19	1	17
	3673	NA		B	4	9		
Fungicides and herbicides								
Fungicides								
4-nitrophenol (PNP)	3672	NA	23	A	1	NC	5	30
	3673	NA		B	9	19		
Pentachlorophenol (PCP)	3672	NA	3	A	9	11	7	4
	3673	NA		B	9	11		
Metalaxyl (MET)	3672	NA	6	A	0	NC	0	NC
	3673	NA		B	0	NC		
Pyrimethanil (PYRM)	3672	NA	6	A	0	NC	0	NC
	3673	NA		B	0	NC		
Tebuconazole (TBZ)	3672	NA	6	A	0	NC	0	NC
	3673	NA		B	0	NC		
Tetraconazole (TETZ)	3672	NA	12	A	0	NC	0	NC
	3673	NA		B	0	NC		
Azoxystrobin (AZO)	3672	NA	16	A	0	NC	0	NC
	3673	NA		B	0	NC		
Cyprodinil (CYP)	3672	NA	6	A	0	NC	0	NC
	3673	NA		B	2	21		
Metribuzin (METB)	3672	NA	60	A	0	NC	1	5
	3673	NA		B	0	NC		
Propiconazole (PRPCN)	3672	NA	6	A	0	NC	0	NC
	3673	NA		B	0	NC		
Herbicides								
2,4-dichlorophenoxyacetic acid (2,4-D)	3672	NA	7	A	9	18	8	5
	3673	NA		B	9	11		
Atrazine (ATZ)	3672	NA	4	A	0	NC	2	32
	3673	NA		B	0	NC		
Insecticides								
Neonicotinoid insecticides								
Acetamiprid (ACE)	3672	NA	6	A	3	4	4	25
	3673	NA		B	9	23		
Clothianidin (CLO)	3672	NA	11	A	0	NC	0	NC

Analyte class/name ^a	SRMs (n=3)		Matrix spikes (n=6)	QC pools (n=9)			Duplicate aliquots (n=8)	
	Type	Mean recoveries (%)	CV (%)	Type	# valid pools	CV (%)	# valid pairs	Median RPD (%)
Imidacloprid (IMI)	3673	NA	7	B	0	NC	5	3
	3672	NA		A	8	15		
	3673	NA		B	2	5		
Thiacloprid (THI)	3672	NA	3	A	0	NC	0	NC
	3673	NA		B	0	NC		
N-desmethyl-acetamiprid (NDMA)	3672	NA	8	A	9	15	4	5
	3673	NA		B	9	16		
Nitenpyram (NIT)	3672	NA	5	A	0	NC	0	NC
	3673	NA		B	0	NC		
Thiamethoxam (THX)	3672	NA	8	A	9	15	2	14
	3673	NA		B	9	14		
Imidaclothiz (IMZ)	3672	NA	8	A	0	NC	2	31
	3673	NA		B	0	NC		
Thiacloprid-amide (TA)	3672	NA	3	A	0	NC	0	NC
	3673	NA		B	0	NC		
N-desmethyl thiamethoxam (NDMT)	3672	NA	14	A	0	NC	1	20
	3673	NA		B	0	NC		
Dinotefuran (DINF)	3672	NA	3	A	9	19	1	2
	3673	NA		B	0	NC		
Flonicamid (FLNC)	3672	NA	8	A	0	NC	2	15
	3673	NA		B	2	1		
Pyrethroid insecticides								
cis-3-(2,2-di-chlorovinyl)-2,2-dimethyl-cyclopropane-1-carboxylic acid (cis-DCCA)	3672	NA	9	A	2	5	0	NC
	3673	NA		B	0	NC		
trans-3-(2,2-di-chlorovinyl)-2,2-dimethyl-cyclopropane-1-carboxylic acid (trans-DCCA)	3672	NA	13	A	9	19	8	5
	3673	NA		B	9	15		
3-phenoxybenzoic acid (3-PBA)	3672	NA	3	A	9	7	8	4
	3673	NA		B	9	6		
4-fluoro-3-phenoxybenzoic acid (FBPA)	3672	NA	4	A	4	6	2	4
	3673	NA		B	3	1		
Other insecticides								

Analyte class/name ^a	SRMs (n=3)		Matrix spikes (n=6)	QC pools (n=9)			Duplicate aliquots (n=8)	
	Type	Mean recoveries (%)	CV (%)	Type	# valid pools	CV (%)	# valid pairs	Median RPD (%)
Composite of 2,4,5- and 2,4,6 trichlorophenol (2,4,5-/2,4,6-TCP)	3672	NA	17	A	0	NC	1	15
	3673	NA		B	6	15		
3,5,6-trichloro-2-pyridinol (TCP)	3672	NA	5	A	9	17	8	12
	3673	NA		B	9	15		
Sulfoxaflo (SUF)	3672	NA	5	A	9	17	1	16
	3673	NA		B	9	13		
Organophosphate esters								
Bis(1,3-dichloro-2-propyl) phosphate (BDCIPP)	3672	NA	5	A	9	17	8	10
	3673	NA		B	9	7		
Composite of di-n-butyl phosphate and di-isobutyl phosphate (DnBP/DiBP)	3672	NA	7	A	0	NC	2	5
	3673	NA		B	0	NC		
Diphenyl phosphate (DPHP)	3672	NA	34	A	9	17	6	33
	3673	NA		B	9	19		
Bis(2-methylphenyl) hydrogen phosphate (BMPP)	3672	NA	11	A	0	NC	3	34
	3673	NA		B	0	NC		
Triethyl phosphate (TEP)	3672	NA	8	A	9	16	8	28
	3673	NA		B	9	14		
Composite of tri-n-butyl phosphate/tri-iso-butyl phosphate (TnBP/TiBP)	3672	NA	8	A	0	NC	0	NC
	3673	NA		B	0	NC		
Tris(2-chloroethyl) phosphate (TCETP)	3672	NA	12	A	0	NC	0	NC
	3673	NA		B	0	NC		
Triphenyl phosphate (TPHP)	3672	NA	5	A	0	NC	0	NC
	3673	NA		B	0	NC		
Tripropyl phosphate (TPP)	3672	NA	6	A	0	NC	0	NC
	3673	NA		B	0	NC		
Tris(2-butoxyethyl) phosphate (TBOEP)	3672	NA	3	A	0	NC	1	50
	3673	NA		B	0	NC		
Phthalates and alternatives								
<i>Phthalate alternatives</i>								
Cyclohexane-1,2-dicarboxylic acid-monocarboxy isooctyl ester (MCOCH)	3672	NA	6	A	9	4	8	11
	3673	NA		B	9	9		

Analyte class/name ^a	SRMs (n=3)		Matrix spikes (n=6)	QC pools (n=9)			Duplicate aliquots (n=8)	
	Type	Mean recoveries (%)	CV (%)	Type	# valid pools	CV (%)	# valid pairs	Median RPD (%)
Cyclohexane-1,2-dicarboxylic acid-mono (hydroxy-isononyl) ester (MHNCH)	3672	NA	7	A	9	9	7	7
	3673	NA		B	9	10		
Cyclohexane-1,2-dicarboxylic acid-mono (oxo-isononyl) ester (MONCH)	3672	NA	4	A	9	13	7	10
	3673	NA		B	9	12		
Mono-benzyl terephthalate (MBzTP)	3672	NA	7	A	0	NC	0	NC
	3673	NA		B	0	NC		
Mono-ethyl terephthalate (METP)	3672	NA	7	A	1	NC	0	NC
	3673	NA		B	9	13		
Mono-tert-butyl terephthalate (MTBTP)	3672	NA	6	A	0	NC	1	41
	3673	NA		B	0	NC		
Phthalates								
Mono (2-ethyl-5-hydroxyhexyl) phthalate (MEHHP)	3672	97	14	A	9	9	8	3
	3673	91		B	9	4		
Mono (2-ethyl-5-oxohexyl) phthalate (MEOHP)	3672	93	6	A	9	12	8	4
	3673	90		B	9	10		
Mono (5-carboxy-2-ethylpentyl) phthalate (MECPP)	3672	83	7	A	9	10	8	3
	3673	82		B	9	4		
Mono-benzyl phthalate (MBzP)	3672	115	13	A	9	16	8	8
	3673	114		B	9	16		
Mono-carboxy isononyl phthalate (MCiNP)	3672	93	4	A	9	15	8	9
	3673	101		B	9	11		
Mono-carboxy isooctyl phthalate (MCiOP)	3672	106	7	A	9	9	8	3
	3673	106		B	9	5		
Mono ethyl hexyl phthalate (MEHP)	3672	111	15	A	9	16	7	11
	3673	95		B	9	24		
Monoethyl phthalate (MEP)	3672	104	6	A	9	8	8	6
	3673	109		B	9	4		
Mono-methyl phthalate (MMP)	3672	NA	11	A	8	18	8	6
	3673	NA		B	9	12		
Composite of mono-n-butyl phthalate and mono-isobutyl phthalate (MnBP/MiBP)	3672	NA	12	A	9	9	8	5
	3673	NA		B	9	12		

Analyte class/name ^a	SRMs (n=3)		Matrix spikes (n=6)	QC pools (n=9)			Duplicate aliquots (n=8)	
	Type	Mean recoveries (%)	CV (%)	Type	# valid pools	CV (%)	# valid pairs	Median RPD (%)
Mono-n-octyl phthalate (MOP)	3672	NA	11	A	0	NC	0	NC
	3673	NA		B	0	NC		
Mono (3-carboxypropyl) phthalate (MCP)	3672	90	7	A	9	16	8	10
	3673	91		B	9	13		
Mono-2-(carboxymethyl) hexyl phthalate (MCMHP)	3672	NA	12	A	9	16	8	3
	3673	NA		B	9	7		
Mono (7-carboxyheptyl) phthalate (MCHPP)	3672	NA	15	A	9	19	7	9
	3673	NA		B	9	14		
Mono-2-heptyl phthalate (MHPP)	3672	NA	6	A	9	18	6	21
	3673	NA		B	8	13		
Mono-2-(propyl-6-carboxy-hexyl) phthalate (MPCHP)	3672	NA	6	A	9	15	8	5
	3673	NA		B	9	7		
Mono-2-(propyl-6-hydroxy-heptyl) phthalate (MPHHP)	3672	NA	10	A	1	NC	4	4
	3673	NA		B	9	11		
Mono-2-(propyl-6-oxoheptyl) phthalate (MPOHP)	3672	NA	8	A	9	6	8	6
	3673	NA		B	9	4		
Monohydroxy-iso-decyl phthalate (MHiDP)	3672	NA	24	A	9	18	3	5
	3673	NA		B	9	11		
Mono-isopropyl phthalate (MiPP)	3672	NA	6	A	9	19	7	31
	3673	NA		B	9	20		
Mono-propyl phthalate (MPPrP)	3672	NA	8	A	0	NC	0	NC
	3673	NA		B	0	NC		
Mono-pentyl phthalate (MPeP)	3672	NA	6	A	0	NC	0	NC
	3673	NA		B	0	NC		
Mono-hexyl phthalate (MHxP)	3672	NA	7	A	9	18	5	9
	3673	NA		B	0	NC		
Mono-isodecyl phthalate (MiDP)	3672	NA	2	A	3	16	0	NC
	3673	NA		B	0	NC		
Monohydroxy-iso-nonyl phthalate (MHiNP)	3672	NA	8	A	9	12	8	7
	3673	NA		B	9	15		
Phthalic acid (PA)	3672	NA	24	A	0	NC	0	NC
	3673	NA		B	0	NC		
Polycyclic aromatic hydrocarbons								
1-hydroxynaphthalene (NAP1)	3672	119	8	A	9	17	2	43

Analyte class/name ^a	SRMs (n=3)		Matrix spikes (n=6)	QC pools (n=9)			Duplicate aliquots (n=8)	
	Type	Mean recoveries (%)	CV (%)	Type	# valid pools	CV (%)	# valid pairs	Median RPD (%)
2-hydroxynaphthalene (NAP2)	3673	89	7	B	9	18	5	9
	3672	106		A	9	12		
	3673	103		B	9	14		
1-hydroxypyrene (PYR1)	3672	96	8	A	9	16	8	6
	3673	91		B	9	17		
Composite of 1- and 9-hydroxyphenanthrene (PHEN1,9)	3672	NA	7	A	9	19	4	9
	3673	NA		B	9	17		
Composite of 2- and 3-hydroxyphenanthrene (PHEN2,3)	3672	NA	12	A	0	NC	2	8
	3673	NA		B	9	10		
4-hydroxyphenanthrene (PHEN4)	3672	NC	16	A	0	NC	0	NC
	3673	NC		B	5	7		
Composite of 2-, 3-, 9-hydroxyfluorene (FLUOs)	3672	NA	3	A	9	17	4	7
	3673	NA		B	9	10		

Abbreviations: CV, coefficient of variation; NA, not available; NC, not calculated; QC, quality control; RPD, relative percent difference; SRM, standard reference material.

Note: The analytes included in the statistical analysis (due to >70% detection) are highlighted. The standard reference materials (SRMs) used in this study contain 20 analytes, but mean recoveries were calculated for 19 analytes, as spiked levels of PHEN4 were below the limit of detection. The relative percent difference (RPD) for each duplicate aliquot was calculated using the following equation: $RPD = \frac{|\text{sample result} - \text{repeat result}|}{(\text{sample result} + \text{repeat result})} * 100$.

Table S4. Distributions of specific gravity (SG)-corrected urinary analyte concentrations among the 201 ECHO children, categorized by previous inclusion in the National Health and Nutrition Examination Survey (NHANES) biomonitoring program.

Not previously included in NHANES							Previously included in NHANES						
Analyte class/name	Min	P25	P50	P75	P95	Max	Analyte class/name	Min	P25	P50	P75	P95	Max
Bactericides							Bactericides						
							TCC	<LOD	<LOD	<LOD	0.02	0.18	115
							TCS	<LOD	0.45	1.48	5.92	98.5	2267
Benzophenones							Benzophenones						
BP1	0.05	2.35	7.44	20.0	184	648	BP3	0.02	8.09	23.3	75.0	543	7043
BP2	<LOD	<LOD	<LOD	<LOD	0.18	1.68							
BP6	<LOD	<LOD	<LOD	<LOD	8.02	88.5							
BP8	<LOD	<LOD	0.26	0.58	2.21	41.1							
OH4BP	<LOD	<LOD	<LOD	0.43	1.38	12.4							
Bisphenols							Bisphenols						
BPAP	<LOD	<LOD	<LOD	<LOD	0.54	3.89	BPA	<LOD	<LOD	<LOD	0.99	6.36	58.3
BPB	<LOD	<LOD	<LOD	<LOD	0.68	2.58	BPF	<LOD	<LOD	<LOD	0.25	1.03	14.1
BPP	<LOD	<LOD	<LOD	<LOD	0.63	1.30	BPS	<LOD	0.23	0.43	0.88	3.85	219
BPZ	<LOD	<LOD	<LOD	<LOD	0.29	0.78							
BADGEH2O	<LOD	<LOD	<LOD	<LOD	1.14	2.76							
BADGE2H2O	<LOD	<LOD	<LOD	<LOD	<LOD	3.48							
BADGE	<LOD	<LOD	<LOD	<LOD	3.11	20.6							
Parabens							Parabens						
BzPB	<LOD	<LOD	<LOD	0.04	0.21	1.53	BuPB	<LOD	<LOD	0.02	0.16	4.89	97.4
							EtPB	<LOD	0.41	0.81	3.91	77.1	802
							MePB	0.51	8.49	36.2	182	1292	5174
							PrPB	0.04	1.34	4.29	22.5	325	1669
Other phenols							Other phenols						
2,3,4,6-TECP	<LOD	<LOD	<LOD	<LOD	<LOD	2.41							
2,3,5,6-TECP	<LOD	<LOD	<LOD	<LOD	<LOD	1.29							
Fungicides and herbicides							Fungicides and herbicides						
Fungicides							Fungicides						
TBZ	<LOD	<LOD	<LOD	<LOD	0.03	0.09	PNP	<LOD	<LOD	0.34	0.99	3.13	8.36

Not previously included in NHANES							Previously included in NHANES						
Analyte class/name	Min	P25	P50	P75	P95	Max	Analyte class/name	Min	P25	P50	P75	P95	Max
METB	<LOD	<LOD	<LOD	<LOD	<LOD	1.58	PCP	<LOD	0.11	0.15	0.29	0.79	3.01
							Herbicides						
							2,4-D	<LOD	0.15	0.28	0.48	1.31	7.31
							ATZ	<LOD	<LOD	<LOD	<LOD	0.05	0.11
Insecticides							Insecticides						
<i>Neonicotinoid insecticides</i>							<i>Neonicotinoid insecticides</i>						
NIT	<LOD	<LOD	<LOD	<LOD	0.38	1.87	ACE	<LOD	<LOD	0.04	0.09	0.19	0.57
THX	<LOD	<LOD	<LOD	0.09	0.39	2.45	CLO	<LOD	<LOD	<LOD	<LOD	0.57	2.16
IMZ	<LOD	<LOD	<LOD	0.15	0.49	1.60	IMI	<LOD	<LOD	<LOD	0.17	0.40	30.3
TA	<LOD	<LOD	<LOD	<LOD	0.26	2.13	THI	<LOD	<LOD	<LOD	<LOD	0.04	0.24
NDMT	<LOD	<LOD	<LOD	0.70	3.44	10.6	NDMA	<LOD	0.09	0.23	0.93	3.66	15.6
DINF	<LOD	<LOD	<LOD	<LOD	1.16	7.60	Pyrethroid insecticides						
FLNC	<LOD	<LOD	<LOD	<LOD	0.60	2.82	trans-DCCA	<LOD	0.15	0.27	0.56	4.46	17.9
Pyrethroid insecticides							3-PBA	0.02	0.14	0.30	0.63	3.14	29.9
cis-DCCA	<LOD	<LOD	<LOD	0.17	0.84	5.51	FBPA	<LOD	<LOD	<LOD	0.02	0.09	1.57
Other insecticides							Other insecticides						
SUF	<LOD	<LOD	<LOD	<LOD	0.08	1.84	2,4,5-/2,4,6-TCP	<LOD	<LOD	<LOD	<LOD	1.09	11.7
							TCP	<LOD	0.71	1.04	1.63	4.95	23.2
Organophosphate esters							Organophosphate esters						
TEP	<LOD	0.07	0.13	0.28	0.74	6.80	BDCIPP	<LOD	0.720	1.58	2.99	12.3	76.0
TnBP/TiBP	<LOD	<LOD	<LOD	<LOD	<LOD	0.38	DnBP/DiBP	<LOD	<LOD	<LOD	0.36	1.07	111
TPHP	<LOD	<LOD	<LOD	<LOD	<LOD	1.91	DPHP	<LOD	0.40	0.92	1.89	5.86	54.9
TBOEP	<LOD	<LOD	<LOD	<LOD	0.69	17.6	BMPP	<LOD	<LOD	<LOD	<LOD	0.46	0.92
Phthalates and phthalate alternatives							Phthalates and phthalate alternatives						
<i>Phthalate alternatives</i>							<i>Phthalate alternatives</i>						
MONCH	<LOD	0.21	0.38	1.03	5.57	16.0	MCOCH	<LOD	0.39	0.90	2.14	10.4	21.7
METP	<LOD	<LOD	<LOD	<LOD	0.16	0.38	MHNCH	<LOD	0.55	1.09	2.96	15.9	50.2
MTBTP	<LOD	<LOD	<LOD	<LOD	<LOD	0.22							
Phthalates							Phthalates						
MCMHP	<LOD	1.79	3.67	6.39	15.2	82.5	MEHHP	2.20	7.42	12.9	20.6	51.6	508
MCHPP	<LOD	0.83	1.90	4.27	26.9	623	MEOHP	1.36	4.65	7.77	12.3	34.0	275

Not previously included in NHANES							Previously included in NHANES						
Analyte class/name	Min	P25	P50	P75	P95	Max	Analyte class/name	Min	P25	P50	P75	P95	Max
MHPP	<LOD	0.08	0.22	0.54	2.38	21.2	MECPPP	2.56	9.67	17.9	29.0	85.0	563
MPCHP	0.16	0.57	0.82	1.50	3.54	26.8	MBzP	<LOD	4.03	9.80	29.9	276.1	1118
MPHHP	<LOD	<LOD	<LOD	0.18	0.96	36.3	MCiNP	0.32	1.26	1.88	3.30	8.42	36.9
MPOHP	<LOD	0.18	0.43	0.84	4.50	154	MCiOP	1.04	5.38	10.4	20.6	69.8	2213
MHiDP	<LOD	<LOD	0.03	0.16	1.07	38.0	MEHP	<LOD	0.36	1.66	2.99	9.05	124
MiPP	<LOD	0.05	0.09	0.18	0.55	1.36	MEP	2.82	12.9	30.9	64.8	287	1493
MPrP	<LOD	<LOD	<LOD	<LOD	0.17	1.14	MMP	<LOD	1.71	2.88	5.63	16.5	130
MPeP	<LOD	<LOD	<LOD	<LOD	0.07	0.31	MnBP/MiBP	3.43	18.8	31.8	47.5	125	686
MHxP	<LOD	<LOD	0.08	0.16	0.55	8.00	MOP	<LOD	<LOD	<LOD	<LOD	0.19	3.30
MiDP	<LOD	<LOD	<LOD	<LOD	0.06	0.15	MCPP	<LOD	1.19	1.98	3.29	9.72	73.5
MHiNP	0.05	0.24	0.48	1.04	5.32	92.3							
PA	<LOD	<LOD	<LOD	<LOD	12.9	32.8							
Polycyclic aromatic hydrocarbons							Polycyclic aromatic hydrocarbons						
							NAP1	<LOD	<LOD	529	1175	3037	17906
							NAP2	<LOD	<LOD	1383	3147	8243	32278
							PYR1	<LOD	72.90	131	227	409	1500
							PHEN1,9	<LOD	<LOD	513	822	1524	5970
							PHEN2,3	<LOD	<LOD	<LOD	300	623	1359
							PHEN4	<LOD	<LOD	<LOD	<LOD	393	1116
							FLUOs	<LOD	<LOD	363	584	1198	2320

Abbreviations: ECHO, Environmental influences on Child Health Outcomes; GM, geometric mean; L, liter; LOD, limit of detection; mL, milliliter; ng, nanogram; NHANES, National Health and Nutrition Examination Survey; P, percentile.

Note: Concentration units are ng/mL, except for polycyclic aromatic hydrocarbons (ng/L). Concentrations below the LOD were imputed with $LOD/\sqrt{2}$ prior to computing descriptive statistics. The full names and LODs of analytes are presented in Table S1 and Table S5, respectively. The following analytes detected in fewer than five samples were excluded from the table: bisphenol AF (BPAF, LOD=0.04); 2,2',6,6'-tetrachlorobisphenol A (TECBPA, LOD=0.14); 3,3',5,5'-tetrabromobisphenol A (TBBPA, LOD=0.07); 3,3',5-trichlorobisphenol A (TCBPA, LOD=0.24); heptyl paraben (HePB, LOD=0.02); 2,3,4,5-tetrachlorophenol (2,3,4,5-TECP, LOD=0.10); metalaxyl (MET, LOD=0.02), pyrimethanil (PYRM, LOD=0.008); tetraconazole (TETZ, LOD=0.18); azoxystrobin (AZO, LOD=0.07); cyprodinil (CYP, LOD=0.02); propiconazole (PRPCN, LOD=0.21); tris(2-chloroethyl) phosphate (TCETP, LOD=0.09); tripropyl phosphate (TPP, LOD=0.01); mono-benzyl terephthalate (MBzTP, LOD=0.03).

Table S5. Distributions of raw urinary analyte concentrations (prior to specific gravity correction) among the 201 ECHO children, categorized by previous inclusion in the National Health and Nutrition Examination Survey (NHANES) biomonitoring program.

Not previously included in NHANES						Previously included in NHANES					
Analyte class/name	LOD	N (%) > LOD	GM	P25	P75	Analyte class/name	LOD	N (%) > LOD	GM	P25	P75
Bactericides						Bactericides					
						TCC	0.01	77 (38)	0.01	<LOD	0.02
						TCS	0.01	199 (99)	1.67	0.38	5.83
Benzophenones						Benzophenones					
BP1	0.02	200 (99.5)	6.86	2.05	17.4	BP3	0.01	200 (99.5)	24.1	7.55	73.1
BP2	0.05	28 (14)	<LOD	<LOD	<LOD						
BP6	0.03	28 (14)	0.05	<LOD	<LOD						
BP8	0.13	126 (63)	0.25	<LOD	0.51						
OH4BP	0.21	80 (40)	0.23	<LOD	0.29						
Bisphenols						Bisphenols					
BPAP	0.05	36 (18)	0.05	<LOD	<LOD	BPA	0.02	96 (48)	0.10	<LOD	0.82
BPB	0.10	28 (14)	<LOD	<LOD	<LOD	BPF	0.02	58 (29)	0.03	<LOD	0.11
BPP	0.02	41 (20)	0.03	<LOD	<LOD	BPS	0.004	198 (99)	0.39	0.19	0.81
BPZ	0.11	22 (11)	<LOD	<LOD	<LOD						
BADGEH2O	0.42	21 (10)	<LOD	<LOD	<LOD						
BADGE2H2O	0.53	7 (4)	<LOD	<LOD	<LOD						
BADGE	0.12	39 (19)	0.14	<LOD	<LOD						
Parabens						Parabens					
BzPB	0.02	53 (26)	<LOD	<LOD	<LOD	BuPB	0.01	106 (53)	0.04	<LOD	0.13
						EtPB	0.01	199 (99)	1.24	0.38	3.30
						MePB	0.03	201 (100)	36.3	6.82	154.7
						PrPB	0.02	200 (99.5)	5.06	1.02	20.5
Other phenols						Other phenols					
2,3,4,6-TECP	0.30	7 (4)	<LOD	<LOD	<LOD						
2,3,5,6-TECP	0.13	6 (3)	<LOD	<LOD	<LOD						
Fungicides and herbicides						Fungicides and herbicides					
<i>Fungicides</i>						<i>Fungicides</i>					

Not previously included in NHANES						Previously included in NHANES					
Analyte class/name	LOD	N (%) > LOD	GM	P25	P75	Analyte class/name	LOD	N (%) > LOD	GM	P25	P75
TBZ	0.01	11 (6)	<LOD	<LOD	<LOD	PNP	0.07	131 (65)	0.24	<LOD	0.84
METB	0.24	6 (3)	<LOD	<LOD	<LOD	PCP	0.01	193 (96)	0.15	0.09	0.29
						Herbicides					
						2,4-D	0.005	199 (99)	0.23	0.11	0.45
						ATZ	0.02	31 (15)	<LOD	<LOD	<LOD
						Insecticides					
						<i>Neonicotinoid insecticides</i>					
Insecticides						ACE	0.01	129 (64)	0.04	<LOD	0.10
<i>Neonicotinoid insecticides</i>						CLO	0.05	33 (16)	<LOD	<LOD	<LOD
NIT	0.03	18 (9)	<LOD	<LOD	<LOD	IMI	0.05	96 (48)	0.08	<LOD	0.16
THX	0.03	73 (36)	0.04	<LOD	0.06	THI	0.01	34 (17)	<LOD	<LOD	<LOD
IMZ	0.07	58 (29)	0.08	<LOD	0.09	NDMA	0.02	184 (92)	0.24	0.07	0.84
TA	0.01	16 (8)	<LOD	<LOD	<LOD	<i>Pyrethroid insecticides</i>					
NDMT	0.24	52 (26)	0.29	<LOD	0.30	trans-DCCA	0.02	180 (90)	0.25	0.11	0.57
DINF	0.23	21 (10)	<LOD	<LOD	<LOD	3-PBA	0.01	201 (100)	0.27	0.12	0.55
FLNC	0.08	39 (19)	0.08	<LOD	<LOD	FBPA	0.01	70 (35)	0.01	<LOD	0.02
<i>Pyrethroid insecticides</i>						<i>Other insecticides</i>					
cis-DCCA	0.08	55 (27)	0.10	<LOD	0.10	2,4,5-/2,4,6-TCP	0.23	40 (20)	<LOD	<LOD	<LOD
<i>Other insecticides</i>						TCP	0.02	200 (99.5)	0.94	0.59	1.58
SUF	0.01	43 (21)	0.01	<LOD	<LOD	Organophosphate esters					
						BDCIPP	0.015	197 (98)	1.26	0.59	2.81
Organophosphate esters						DnBP/DiBP	0.14	93 (46)	0.19	<LOD	0.30
TEP	0.007	191 (95)	0.11	0.07	0.22	DPHP	0.02	198 (99)	0.72	0.33	1.76
TnBP/TiBP	0.06	5 (3)	<LOD	<LOD	<LOD	BMPP	0.14	28 (14)	<LOD	<LOD	<LOD
TPHP	0.09	18 (9)	<LOD	<LOD	<LOD	Phthalates and phthalate alternatives					
TBOEP	0.07	26 (13)	<LOD	<LOD	<LOD	<i>Phthalate alternatives</i>					
Phthalates and phthalate alternatives						MCOCH	0.06	196 (98)	0.82	0.29	1.99
<i>Phthalate alternatives</i>						MHNCH	0.02	199 (99)	1.13	0.39	2.69
MONCH	0.01	200 (99.5)	0.40	0.14	1.08	<i>Phthalates</i>					
METP	0.05	28 (14)	<LOD	<LOD	<LOD						
MTBTP	0.03	7 (3)	<LOD	<LOD	<LOD						
<i>Phthalates</i>											

Not previously included in NHANES						Previously included in NHANES					
Analyte class/name	LOD	N (%)				Analyte class/name	LOD	N (%)			
		> LOD	GM	P25	P75			> LOD	GM	P25	P75
MCMHP	0.12	196 (98)	2.79	1.47	5.98	MEHHP	0.09	201 (100)	11.1	5.62	20.3
MCHPP	0.06	198 (99)	1.81	0.66	4.37	MEOHP	0.01	201 (100)	6.77	3.44	12.4
MHPP	0.05	158 (79)	0.20	0.07	0.52	MECPP	0.05	201 (100)	15.2	7.62	28.2
MPCHP	0.01	201 (100)	0.80	0.43	1.44	MBzP	0.09	199 (99)	10.1	3.40	27.4
MPHHP	0.09	60 (30)	0.10	<LOD	0.11	MCiNP	0.04	201 (100)	1.76	1.02	3.16
MPOHP	0.01	196 (98)	0.36	0.14	0.81	MCiOP	0.009	201 (100)	9.64	3.86	21.0
MHiDP	0.01	110 (55)	0.04	<LOD	0.13	MEHP	0.05	164 (82)	0.83	0.29	3.17
MiPP	0.02	157 (78)	0.08	0.03	0.16	MEP	0.05	201 (100)	28.2	11.5	60.4
MPrP	0.06	36 (18)	<LOD	<LOD	<LOD	MMP	0.06	189 (94)	2.27	1.26	5.49
MPeP	0.02	32 (16)	<LOD	<LOD	<LOD	MnBP/MiBP	0.25	201 (100)	26.7	14.8	50.8
MHxP	0.05	118 (59)	0.08	<LOD	0.15	MOP	0.05	32 (16)	0.05	<LOD	<LOD
MiDP	0.02	12 (6)	<LOD	<LOD	<LOD	MCPP	0.04	200 (99.5)	1.75	0.95	3.34
MHiNP	0.03	201 (100)	0.47	0.17	0.96						
PA	5	12 (6)	<LOD	<LOD	<LOD						
Polycyclic aromatic hydrocarbons						Polycyclic aromatic hydrocarbons					
						NAP1	170	125 (62)	485	<LOD	1175
						NAP2	400	130 (65)	1060	<LOD	2861
						PYR1	10	184 (92)	99	65	194
						PHEN1,9	310	113 (56)	435	<LOD	708
						PHEN2,3	180	67 (33)	<LOD	<LOD	226
						PHEN4	170	15 (8)	<LOD	<LOD	<LOD
						FLUOs	140	143 (71)	287	<LOD	518

Abbreviations: ECHO, Environmental influences on Child Health Outcomes; GM, geometric mean; L, liter; LOD, limit of detection; mL, milliliter; ng, nanogram; NHANES, National Health and Nutrition Examination Survey; P, percentile.

Note: Concentration units are ng/mL, except for polycyclic aromatic hydrocarbons (ng/L). Concentrations below the LOD were imputed with LOD/ $\sqrt{2}$ prior to computing descriptive statistics. The full names of analytes are presented in Table S1. The following analytes detected in fewer than five samples were excluded from the table: bisphenol AF (BPAF, LOD=0.04); 2,2',6,6'-tetrachlorobisphenol A (TECBPA, LOD=0.14); 3,3',5,5'-tetrabromobisphenol A (TBBPA, LOD=0.07); 3,3',5-trichlorobisphenol A (TCBPA, LOD=0.24); heptyl paraben (HePB, LOD=0.02); 2,3,4,5-tetrachlorophenol (2,3,4,5-TECP, LOD=0.10); metalaxyl (MET, LOD=0.02), pyrimethanil (PYRM, LOD=0.008); tetraconazole (TETZ, LOD=0.18); azoxystrobin (AZO, LOD=0.07); cyprodinil

(CYP, LOD=0.02); propiconazole (PRPCN, LOD=0.21); tris(2-chloroethyl) phosphate (TCETP, LOD=0.09); tripropyl phosphate (TPP, LOD=0.01); mono-benzyl terephthalate (MBzTP, LOD=0.03).

Table S6. Distributions of specific gravity (SG)-corrected urinary analyte concentrations among the 180 pregnant ECHO participants, categorized by previous inclusion in the National Health and Nutrition Examination Survey (NHANES) biomonitoring program.

Not previously included in NHANES						Previously included in NHANES					
Analyte class/name	N (%)					Analyte class/name	N (%)				
	LOD	> LOD	GM	P25	P75		LOD	> LOD	GM	P25	P75
Bactericides						Bactericides					
						TCC	0.05	88 (49)	0.06	<LOD	0.20
						TCS	0.07	174 (97)	3.96	1.29	27.0
Benzophenones						Benzophenones					
BP1	0.04	179 (99)	2.38	0.56	11.4	BP-3	0.05	176 (98)	25.4	7.67	142.4
BP2	0.22	9 (5)	<LOD	<LOD	<LOD						
BP6	0.06	66 (37)	<LOD	<LOD	0.19						
BP8	0.14	114 (63)	0.15	<LOD	0.46						
OH4BP	0.17	96 (53)	<LOD	<LOD	0.42						
Bisphenols						Bisphenols					
BPAP	0.21	31 (17)	<LOD	<LOD	<LOD	BPA	0.06	115 (64)	0.19	<LOD	1.35
BPB	0.35	6 (3)	<LOD	<LOD	<LOD	BPF	0.05	147 (82)	0.19	0.07	0.67
BPP	0.06	20 (11)	<LOD	<LOD	<LOD	BPS	0.05	149 (83)	0.17	0.06	0.66
BPZ	0.08	9 (5)	<LOD	<LOD	<LOD						
BADGEH2O	0.68	17 (9)	<LOD	<LOD	<LOD						
BADGE2H2O	0.63	5 (3)	<LOD	<LOD	<LOD						
BADGE	0.18	28 (16)	<LOD	<LOD	<LOD						
Parabens						Parabens					
BzPB	0.05	32 (18)	<LOD	<LOD	<LOD	BuPB	0.10	72 (40)	0.10	<LOD	0.26
						EtPB	0.07	166 (92)	0.56	0.22	2.13
						MePB	0.03	180 (100)	39.4	12.4	238.9
						PrPB	0.03	180 (100)	6.03	1.35	37.3
Other phenols						Other phenols					
2,3,4,6-TECP	0.25	10 (6)	<LOD	<LOD	<LOD						
Fungicides and herbicides						Fungicides and herbicides					
<i>Fungicides</i>						<i>Fungicides</i>					
CYP	0.03	8 (4)	<LOD	<LOD	<LOD	PNP	0.19	131 (73)	0.26	<LOD	0.95

Not previously included in NHANES						Previously included in NHANES							
Analyte class/name	LOD	N (%)		GM	P25	P75	Analyte class/name	LOD	N (%)		GM	P25	P75
		> LOD							> LOD				
METB	0.84	8 (4)		<LOD	<LOD	<LOD	PCP	0.05	120 (67)		0.06	<LOD	0.17
							<i>Herbicides</i>						
							2,4-D	0.06	109 (61)		0.07	<LOD	0.24
							ATZ	0.07	7 (4)		<LOD	<LOD	<LOD
Insecticides							Insecticides						
<i>Neonicotinoid insecticides</i>							<i>Neonicotinoid insecticides</i>						
NIT	0.06	14 (8)		<LOD	<LOD	<LOD	ACE	0.04	17 (9)		<LOD	<LOD	<LOD
THX	0.05	36 (20)		<LOD	<LOD	<LOD	CLO	0.16	38 (21)		<LOD	<LOD	<LOD
IMZ	0.21	36 (20)		<LOD	<LOD	<LOD	IMI	0.07	39 (22)		<LOD	<LOD	<LOD
TA	0.11	25 (14)		<LOD	<LOD	<LOD	THI	0.06	15 (8)		<LOD	<LOD	<LOD
NDMT	0.29	43 (24)		<LOD	<LOD	<LOD	NDMA	0.05	82 (46)		0.06	<LOD	0.20
DINF	0.16	23 (13)		<LOD	<LOD	<LOD	<i>Pyrethroid insecticides</i>						
FLNC	0.42	12 (7)		<LOD	<LOD	<LOD	trans-DCCA	0.04	136 (76)		0.15	0.03	0.64
<i>Pyrethroid insecticides</i>							3-PBA	0.03	177 (98)		0.18	0.11	0.52
cis-DCCA	0.20	42 (23)		<LOD	<LOD	<LOD	FBPA	0.03	25 (14)		<LOD	<LOD	<LOD
<i>Other insecticides</i>							<i>Other insecticides</i>						
SUF	0.04	10 (6)		<LOD	<LOD	<LOD	2,4,5-/2,4,6-TCP	0.39	18 (10)		<LOD	<LOD	<LOD
							TCP	0.04	180 (100)		0.45	0.35	1.28
Organophosphate esters							Organophosphate esters						
TEP	0.12	48 (27)		<LOD	<LOD	0.16	BDCIPP	0.08	151 (84)		0.29	0.10	1.08
TnBP/TiBP	0.25	8 (4)		<LOD	<LOD	<LOD	DnBP/DiBP	0.15	28 (16)		<LOD	<LOD	<LOD
TPHP	0.11	32 (18)		<LOD	<LOD	<LOD	DPHP	0.25	161 (89)		0.81	0.47	2.61
TBOEP	0.20	28 (16)		<LOD	<LOD	<LOD	BMPP	0.28	13 (7)		<LOD	<LOD	<LOD
Phthalates and phthalate alternatives							Phthalates and phthalate alternatives						
<i>Phthalate alternatives</i>							<i>Phthalate alternatives</i>						
MONCH	0.05	89 (49)		0.05	<LOD	0.13	MCOCH	0.06	62 (34)		<LOD	<LOD	0.09
METP	0.08	5 (3)		<LOD	<LOD	<LOD	MHNCH	0.04	81 (45)		0.04	<LOD	0.11
MTBTP	0.08	5 (3)		<LOD	<LOD	<LOD							
<i>Phthalates</i>							<i>Phthalates</i>						
MCMHP	0.18	154 (86)		1.25	0.33	6.87	MEHHP	0.07	180 (100)		7.80	5.78	28.1

Not previously included in NHANES						Previously included in NHANES							
Analyte class/name	LOD	N (%)		GM	P25	P75	Analyte class/name	LOD	N (%)		GM	P25	P75
		> LOD							> LOD				
MCHPP	0.23	167 (93)		2.05	0.69	12.5	MEOHP	0.05	180 (100)		3.98	2.88	15.6
MHPP	0.05	152 (84)		0.13	0.06	0.57	MECPP	0.35	180 (100)		7.85	5.50	33.5
MPCHP	0.05	178 (99)		0.49	0.30	1.63	MBzP	0.08	178 (99)		6.17	3.01	25.3
MPHHP	0.06	45 (25)	<LOD	<LOD	<LOD	0.10	MCiNP	0.06	177 (98)		0.54	0.33	1.88
MPOHP	0.04	147 (82)		0.15	0.05	0.50	MCiOP	0.05	171 (95)		4.16	1.73	24.7
MHiDP	0.16	28 (16)	<LOD	<LOD	<LOD	<LOD	MEHP	0.09	146 (81)		1.01	0.13	8.65
MiPP	0.10	59 (33)	<LOD	<LOD	<LOD	0.17	MEP	0.08	180 (100)		35.6	15.9	159.2
MPrP	0.11	21 (12)	<LOD	<LOD	<LOD	<LOD	MMP	0.32	104 (58)		0.54	<LOD	2.92
MPeP	0.04	5 (3)	<LOD	<LOD	<LOD	<LOD	MnBP/MiBP	0.15	179 (99)		15.9	11.0	55.3
MHxP	0.04	113 (61)		0.05	<LOD	0.17	MOP	0.07	10 (6)	<LOD	<LOD	<LOD	<LOD
MiDP	0.06	11 (6)	<LOD	<LOD	<LOD	<LOD	MCCP	0.06	165 (92)		0.68	0.37	3.09
MHiNP	0.12	166 (92)		0.65	0.24	3.34							
PA	5	17 (9)	<LOD	<LOD	<LOD	<LOD							
Polycyclic aromatic hydrocarbons						Polycyclic aromatic hydrocarbons							
							NAP1	110	146 (81)		638	96	3399
							NAP2	54	179 (99)		2540	1752	8489
							PYR1	58	133 (74)		80	<LOD	252
							PHEN1,9	190	152 (84)		463	358	1647
							PHEN2,3	110	119 (66)	<LOD	<LOD	<LOD	317
							PHEN4	150	36 (20)	<LOD	<LOD	<LOD	<LOD
							FLUOs	350	111 (62)	<LOD	<LOD	<LOD	942

Abbreviations: ECHO, Environmental influences on Child Health Outcomes; GM, geometric mean; L, liter; LOD, limit of detection; mL, milliliter; ng, nanogram; NHANES, National Health and Nutrition Examination Survey; P, percentile.

Note: Concentration units are ng/mL, except for polycyclic aromatic hydrocarbons (ng/L). Concentrations below the LOD were imputed with LOD/ $\sqrt{2}$ prior to computing descriptive statistics. The full names of analytes are presented in Table S1. The following analytes detected in fewer than five samples were excluded from the table: bisphenol AF (BPAF, LOD=0.04); 2,2',6,6'-tetrachlorobisphenol A (TECBPA, LOD=0.26); 3,3',5,5'-tetrabromobisphenol A (TBBPA, LOD=0.08); 3,3',5-trichlorobisphenol A (TCBPA, LOD=0.34); heptyl paraben (HePB, LOD=0.17); 2,3,4,5-tetrachlorophenol (2,3,4,5-TECP, LOD=0.34); 2,3,5,6-tetrachlorophenol (2,3,5,6-TECP, LOD=0.21); metalaxyl (MET, LOD=0.09), pyrimethanil (PYRM, LOD=0.08); tebuconazole (TBZ, LOD=0.09); tetraconazole (TETZ, LOD=0.26); azoxystrobin (AZO, LOD=0.09); propiconazole (PRPCN, LOD=0.34); tris(2-chloroethyl) phosphate (TCETP, LOD=0.11); tripropyl phosphate (TPP, LOD=0.31); mono-benzyl terephthalate (MBzTP, LOD=0.09).

Table S7. Distributions of ratios for specific gravity (SG)-corrected urinary analyte concentrations between the child and prenatal maternal samples ($n=180$).

Analyte	Percentiles of ratios for concentrations (children/pregnant mothers)		
	25 th	50 th	75 th
Triclosan	0.03	0.41	4.82
∑BP	0.21	1.11	8.21
BPS	0.68	2.14	13.99
∑PB	0.10	0.76	4.53
trans-DCCA	0.38	1.54	8.02
3-PBA	0.48	1.37	4.58
TCP	0.84	1.79	4.50
BDCIPP	1.03	4.42	19.60
DPHP	0.30	0.82	3.05
∑DEHP	0.44	0.98	3.68
∑DPhP	0.50	1.38	4.06
∑DnOP/DiNP	0.29	1.34	8.21
MBzP	0.32	1.14	10.13
MCiNP	0.89	2.38	8.51
MEP	0.15	0.69	2.95
MnBP/MiBP	0.50	1.07	3.93
MHPP	0.35	1.45	7.22
PYR1	0.41	1.08	3.41

Abbreviations: BDCIPP, bis(1,3-dichloro-2-propyl) phosphate; BP, benzophenone; BPS, bisphenol S; DEHP, di-2-ethylhexyl phthalate; DINCH, di-iso-nonyl-cyclohexane-1,2-dicarboxylic acid; DnOP/DiNP, di-n-octyl phthalate/di-iso-nonyl phthalate; DPhP, di-(2-propylheptyl) phthalate; DPHP, diphenyl phosphate; MBzP; mono-benzyl phthalate; MCiNP, mono-carboxy isononyl phthalate; MEP, monoethyl phthalate; MHPP, mono-2-heptyl phthalate; MnBP/MiBP, composite of mono-n-butyl phthalate and mono-isobutyl phthalate; PB, paraben; 3-PBA, 3-phenoxybenzoic acid; PYR1, 1-hydroxyoyrene; TCP, 3,5,6-trichloro-2-pyridinol; trans-DCCA, trans-3-(2,2-di-chlorovinyl)-2,2-dimethyl-cyclopropane-1-carboxylic acid.

Note: Analytes detected in >70% of both child and prenatal maternal samples and molar sums are presented.

Table S8. Bivariate associations between potential determinants and specific gravity (SG)-corrected, natural log-transformed urinary analyte concentrations in the 201 ECHO children.

	TCS	Σ BP	BPS	Σ PB	PCP	2,4-D	NDMA
	β (95% CI)	β (95% CI)	β (95% CI)	β (95% CI)	β (95% CI)	β (95% CI)	β (95% CI)
Sampling year (ref: 2010–13)							
2014–17	-1.13 (-1.78, -0.48)	0.02 (-0.46, 0.50)	0.21 (-0.24, 0.67)	-1.49 (-2.11, -0.88)	-0.14 (-0.41, 0.12)	0.06 (-0.26, 0.38)	0.58 (0.04, 1.12)
2018–21	-2.65 (-3.25, -2.05)	-0.40 (-1.11, 0.32)	0.18 (-0.16, 0.53)	-1.68 (-2.27, -1.08)	0.03 (-0.30, 0.37)	0.35 (0.03, 0.67)	1.00 (0.50, 1.50)
Sampling season (ref: winter)							
Spring	-0.11 (-0.85, 0.64)	0.54 (-0.19, 1.27)	0.27 (-0.27, 0.81)	0.07 (-0.64, 0.78)	-0.13 (-0.46, 0.21)	0.08 (-0.33, 0.48)	0.31 (-0.40, 1.03)
Summer	0.14 (-0.53, 0.82)	0.05 (-0.48, 0.58)	-0.13 (-0.55, 0.29)	-0.18 (-0.86, 0.51)	-0.12 (-0.44, 0.19)	0.03 (-0.36, 0.43)	0.11 (-0.41, 0.64)
Fall	0.13 (-0.72, 0.97)	0.54 (-0.07, 1.16)	0.06 (-0.48, 0.59)	-0.01 (-0.83, 0.82)	-0.05 (-0.37, 0.27)	0.04 (-0.36, 0.45)	0.50 (-0.05, 1.04)
Child race/eth (ref: NH-White)							
Hispanic	0.89 (0.14, 1.64)	-0.88 (-1.46, -0.31)	0.18 (-0.31, 0.67)	1.74 (1.12, 2.35)	-0.24 (-0.51, 0.02)	-0.50 (-0.89, -0.10)	-0.38 (-0.93, 0.16)
NH-Other	0.15 (-0.54, 0.84)	-1.32 (-1.91, -0.74)	0.02 (-0.50, 0.53)	1.78 (1.15, 2.41)	-0.06 (-0.38, 0.26)	-0.27 (-0.65, 0.11)	-0.24 (-0.71, 0.22)
Child age (ref: 2 years)							
3	-0.33 (-1.04, 0.38)	-0.13 (-0.84, 0.59)	-0.09 (-0.52, 0.34)	-0.11 (-0.69, 0.47)	-0.23 (-0.56, 0.10)	-0.51 (-0.84, -0.18)	-0.37 (-0.98, 0.24)
4	-1.01 (-1.89, -0.13)	0.41 (-0.31, 1.13)	-0.44 (-1.04, 0.16)	-1.85 (-2.55, -1.15)	-0.08 (-0.43, 0.26)	-0.20 (-0.59, 0.18)	0.37 (-0.24, 0.99)
Maternal age (ref: <30 years)							
30-35	0.09 (-0.49, 0.68)	-0.09 (-0.69, 0.51)	-0.23 (-0.66, 0.19)	-0.76 (-1.34, -0.18)	-0.20 (-0.47, 0.08)	-0.08 (-0.37, 0.22)	0.53 (-0.03, 1.09)
35+	-0.06 (-0.93, 0.81)	0.44 (-0.22, 1.10)	-0.68 (-1.08, -0.27)	-0.97 (-1.70, -0.24)	-0.18 (-0.50, 0.13)	-0.16 (-0.52, 0.21)	0.22 (-0.31, 0.74)
Parity (ref: 0)							
1	1.50 (0.78, 2.21)	-0.36 (-1.01, 0.29)	0.52 (0.03, 1.01)	1.27 (0.51, 2.04)	0.08 (-0.24, 0.40)	0.15 (-0.18, 0.48)	-0.36 (-0.93, 0.20)
2+	2.06 (1.39, 2.73)	-0.17 (-0.81, 0.48)	0.52 (0.13, 0.91)	1.58 (0.89, 2.27)	0.25 (-0.02, 0.53)	0.01 (-0.31, 0.33)	-0.68 (-1.23, -0.13)
Maternal education (ref: \leqhigh school)							
Bachelor's	-0.04 (-0.61, 0.53)	0.79 (0.19, 1.39)	-0.04 (-0.51, 0.44)	0.07 (-0.58, 0.73)	0.03 (-0.29, 0.34)	0.03 (-0.32, 0.37)	0.04 (-0.47, 0.55)
Master's or higher	-0.50 (-1.24, 0.25)	1.09 (0.30, 1.89)	-0.60 (-1.02, -0.19)	-1.48 (-2.14, -0.83)	-0.18 (-0.49, 0.12)	0.07 (-0.26, 0.40)	0.16 (-0.32, 0.65)
Child opportunity (ref: high)							
Medium	0.60 (-0.44, 1.63)	-0.18 (-1.08, 0.73)	0.49 (-0.21, 1.19)	1.04 (0.20, 1.88)	0.06 (-0.36, 0.48)	0.15 (-0.37, 0.66)	0.46 (-0.15, 1.07)
Low	0.54 (-0.32, 1.40)	-1.09 (-1.68, -0.50)	0.60 (0.21, 0.99)	1.60 (0.94, 2.26)	0.21 (-0.13, 0.55)	0.01 (-0.39, 0.41)	0.00 (-0.63, 0.62)
Child sex (ref: male)							
Female	0.43 (-0.15, 1.01)	0.43 (-0.06, 0.92)	0.05 (-0.30, 0.40)	-0.22 (-0.75, 0.31)	-0.14 (-0.37, 0.10)	-0.06 (-0.33, 0.21)	-0.09 (-0.45, 0.28)

	trans-DCCA	3-PBA	TCP	TEP	BDCIPP	DPHP	Σ DINCH
	β (95% CI)	β (95% CI)					
Sampling year (ref: 2010–13)							
2014–17	0.00 (-0.44, 0.45)	0.45 (0.12, 0.77)	-0.11 (-0.33, 0.11)	0.39 (-0.03, 0.81)	-0.50 (-0.91, -0.10)	-0.60 (-0.96, -0.24)	0.31 (-0.05, 0.67)
2018–21	0.70 (0.15, 1.25)	0.72 (0.29, 1.16)	0.10 (-0.21, 0.41)	1.27 (0.94, 1.60)	-0.22 (-0.68, 0.24)	0.08 (-0.34, 0.50)	0.73 (0.28, 1.18)
Sampling season (ref: winter)							
Spring	0.08 (-0.60, 0.75)	-0.06 (-0.65, 0.53)	0.37 (0.04, 0.70)	0.30 (-0.14, 0.74)	-0.01 (-0.53, 0.52)	0.04 (-0.47, 0.55)	-0.14 (-0.61, 0.34)
Summer	-0.13 (-0.67, 0.42)	-0.12 (-0.59, 0.35)	0.08 (-0.16, 0.32)	-0.04 (-0.51, 0.42)	-0.26 (-0.73, 0.20)	-0.16 (-0.56, 0.24)	0.00 (-0.47, 0.48)
Fall	-0.34 (-0.93, 0.24)	-0.13 (-0.56, 0.31)	0.18 (-0.16, 0.52)	0.05 (-0.46, 0.56)	-0.07 (-0.57, 0.43)	0.06 (-0.40, 0.51)	-0.22 (-0.68, 0.24)
Child race/eth (ref: NH-White)							
Hispanic	-0.14 (-0.57, 0.29)	-0.09 (-0.48, 0.30)	-0.32 (-0.64, 0.00)	-0.50 (-0.91, -0.09)	-0.25 (-0.71, 0.21)	-0.50 (-0.90, -0.10)	-0.31 (-0.73, 0.11)
NH-Other	0.43 (-0.04, 0.91)	0.05 (-0.43, 0.52)	-0.42 (-0.69, -0.16)	0.00 (-0.39, 0.39)	-0.28 (-0.80, 0.24)	-0.05 (-0.49, 0.39)	-0.03 (-0.50, 0.43)
Child age (ref: 2 years)							
3	-0.20 (-0.77, 0.37)	0.16 (-0.33, 0.65)	-0.38 (-0.68, -0.07)	0.16 (-0.31, 0.63)	-0.38 (-0.79, 0.02)	-0.36 (-0.74, 0.02)	-0.12 (-0.57, 0.33)
4	-0.56 (-1.12, 0.01)	-0.16 (-0.65, 0.33)	-0.07 (-0.39, 0.25)	0.17 (-0.30, 0.65)	-0.66 (-1.17, -0.14)	-0.58 (-1.02, -0.14)	-0.10 (-0.59, 0.40)
Maternal age (ref: <30 years)							
30-35	-0.55 (-0.98, -0.12)	-0.29 (-0.67, 0.09)	0.09 (-0.16, 0.34)	0.34 (-0.06, 0.74)	-0.26 (-0.68, 0.16)	0.07 (-0.27, 0.42)	-0.11 (-0.50, 0.28)
35+	-0.32 (-0.81, 0.16)	0.08 (-0.39, 0.54)	-0.08 (-0.40, 0.24)	0.30 (-0.12, 0.72)	-0.39 (-0.89, 0.12)	-0.01 (-0.45, 0.42)	-0.22 (-0.68, 0.23)
Parity (ref: 0)							
1	0.04 (-0.51, 0.59)	-0.06 (-0.46, 0.33)	0.18 (-0.16, 0.52)	-0.54 (-0.91, -0.18)	0.50 (0.06, 0.94)	-0.01 (-0.44, 0.43)	0.11 (-0.33, 0.54)
2+	0.14 (-0.42, 0.70)	0.00 (-0.43, 0.43)	0.04 (-0.30, 0.37)	-0.84 (-1.19, -0.49)	0.23 (-0.26, 0.73)	0.25 (-0.16, 0.66)	-0.06 (-0.49, 0.37)
Maternal education (ref: \leqhigh school)							
Bachelor's	-0.69 (-1.22, -0.16)	-0.59 (-1.08, -0.10)	-0.01 (-0.27, 0.25)	-0.45 (-0.90, -0.01)	0.05 (-0.41, 0.51)	0.17 (-0.25, 0.59)	0.03 (-0.41, 0.48)
Master's or higher	-0.93 (-1.42, -0.43)	-0.60 (-1.04, -0.16)	0.09 (-0.21, 0.39)	0.21 (-0.18, 0.61)	0.13 (-0.32, 0.58)	0.19 (-0.23, 0.60)	-0.07 (-0.48, 0.33)
Child opportunity (ref: high)							
Medium	-0.09 (-0.68, 0.50)	0.15 (-0.31, 0.62)	-0.14 (-0.64, 0.36)	-0.11 (-0.58, 0.35)	0.47 (-0.32, 1.25)	-0.10 (-0.62, 0.42)	0.22 (-0.35, 0.80)
Low	0.50 (-0.01, 1.01)	0.63 (0.21, 1.06)	-0.15 (-0.52, 0.22)	-0.14 (-0.57, 0.29)	0.25 (-0.23, 0.73)	-0.33 (-0.79, 0.13)	0.27 (-0.21, 0.75)
Child sex (ref: male)							
Female	-0.24 (-0.62, 0.14)	-0.10 (-0.42, 0.22)	0.05 (-0.19, 0.29)	0.03 (-0.28, 0.35)	0.17 (-0.17, 0.52)	0.15 (-0.17, 0.47)	0.19 (-0.13, 0.52)

	Σ DEHP	Σ DPhP	Σ DnOP/DiNP	MBzP	MCiNP	MEP	MMP
	β (95% CI)						
Sampling year (ref: 2010–13)							
2014–17	-0.64 (-0.88, -0.39)	-0.51 (-0.81, -0.20)	-0.80 (-1.08, -0.52)	-1.02 (-1.50, -0.54)	-0.67 (-0.93, -0.41)	-0.94 (-1.31, -0.57)	-0.35 (-0.80, 0.11)
2018–21	-0.89 (-1.16, -0.61)	-0.24 (-0.58, 0.10)	-0.66 (-1.05, -0.26)	-1.53 (-2.03, -1.04)	-0.57 (-0.85, -0.28)	-0.84 (-1.28, -0.41)	-0.63 (-1.06, -0.20)
Sampling season (ref: winter)							
Spring	0.37 (0.01, 0.74)	0.14 (-0.17, 0.45)	0.40 (-0.07, 0.86)	-0.14 (-0.76, 0.49)	0.07 (-0.24, 0.38)	0.38 (-0.15, 0.92)	0.11 (-0.46, 0.67)
Summer	0.24 (-0.07, 0.54)	0.08 (-0.21, 0.38)	0.10 (-0.30, 0.49)	-0.16 (-0.65, 0.32)	0.10 (-0.17, 0.36)	-0.03 (-0.42, 0.37)	-0.22 (-0.75, 0.30)
Fall	0.17 (-0.12, 0.46)	0.10 (-0.29, 0.49)	-0.05 (-0.46, 0.37)	0.31 (-0.27, 0.88)	-0.06 (-0.41, 0.28)	-0.02 (-0.52, 0.47)	-0.01 (-0.55, 0.54)
Child race/eth (ref: NH-White)							
Hispanic	0.10 (-0.22, 0.42)	-0.17 (-0.44, 0.10)	-0.11 (-0.44, 0.22)	0.43 (-0.16, 1.02)	-0.28 (-0.54, -0.02)	1.27 (0.91, 1.62)	-0.17 (-0.72, 0.38)
NH-Other	0.00 (-0.34, 0.34)	0.18 (-0.12, 0.49)	0.21 (-0.14, 0.57)	0.38 (-0.26, 1.01)	0.06 (-0.20, 0.31)	1.14 (0.72, 1.56)	-0.12 (-0.68, 0.45)
Child age (ref: 2 years)							
3	-0.28 (-0.58, 0.03)	-0.39 (-0.75, -0.02)	-0.41 (-0.73, -0.09)	-0.09 (-0.64, 0.46)	-0.42 (-0.71, -0.13)	-0.16 (-0.55, 0.22)	-0.45 (-0.95, 0.05)
4	-0.54 (-0.90, -0.18)	-0.48 (-0.90, -0.05)	-0.64 (-1.02, -0.25)	-0.58 (-1.16, -0.01)	-0.70 (-1.01, -0.38)	-1.32 (-1.70, -0.93)	-0.50 (-1.10, 0.11)
Maternal age (ref: <30 years)							
30-35	-0.40 (-0.66, -0.15)	-0.22 (-0.51, 0.07)	-0.14 (-0.49, 0.21)	-0.30 (-0.77, 0.17)	-0.07 (-0.34, 0.19)	-0.77 (-1.17, -0.37)	-0.49 (-0.94, -0.05)
35+	-0.37 (-0.69, -0.04)	-0.47 (-0.80, -0.15)	-0.28 (-0.66, 0.09)	-0.71 (-1.26, -0.16)	-0.42 (-0.69, -0.15)	-1.05 (-1.39, -0.70)	-0.13 (-0.63, 0.37)
Parity (ref: 0)							
1	0.81 (0.52, 1.09)	0.30 (-0.03, 0.63)	0.55 (0.12, 0.98)	1.30 (0.83, 1.77)	0.32 (0.00, 0.64)	1.07 (0.69, 1.45)	0.73 (0.24, 1.23)
2+	0.63 (0.40, 0.87)	0.23 (-0.10, 0.56)	0.38 (0.00, 0.77)	1.46 (0.98, 1.94)	0.33 (0.04, 0.63)	1.22 (0.87, 1.57)	0.56 (0.10, 1.02)
Maternal education (ref: \leqhigh school)							
Bachelor's	-0.04 (-0.30, 0.21)	-0.09 (-0.38, 0.19)	-0.15 (-0.50, 0.19)	-0.15 (-0.72, 0.43)	0.01 (-0.25, 0.27)	-0.36 (-0.76, 0.03)	-0.12 (-0.56, 0.31)
Master's or higher	-0.39 (-0.67, -0.11)	-0.26 (-0.54, 0.02)	-0.25 (-0.66, 0.16)	-1.00 (-1.53, -0.47)	-0.10 (-0.37, 0.17)	-1.36 (-1.71, -1.01)	-0.23 (-0.71, 0.25)
Child opportunity (ref: high)							
Medium	0.13 (-0.28, 0.55)	0.22 (-0.21, 0.65)	0.27 (-0.11, 0.65)	-0.04 (-0.60, 0.52)	0.15 (-0.19, 0.49)	0.31 (-0.06, 0.68)	0.34 (-0.28, 0.96)
Low	0.40 (0.09, 0.72)	0.32 (0.01, 0.63)	0.60 (0.22, 0.98)	0.96 (0.46, 1.45)	0.09 (-0.17, 0.35)	1.54 (1.19, 1.90)	0.37 (-0.18, 0.91)
Child sex (ref: male)							
Female	-0.10 (-0.31, 0.10)	-0.03 (-0.26, 0.21)	-0.12 (-0.43, 0.18)	0.00 (-0.42, 0.42)	-0.14 (-0.36, 0.08)	0.14 (-0.17, 0.45)	-0.19 (-0.55, 0.18)

	MnBP/MiBP	MHPP	MiPP	PYR1	FLUOs
	β (95% CI)				
Sampling year (ref: 2010–3)					
2014–17	-0.52 (-0.78, -0.26)	-0.77 (-1.20, -0.33)	-0.46 (-0.81, -0.11)	-0.81 (-1.11, -0.50)	-0.53 (-0.75, -0.30)
2018–21	-0.10 (-0.40, 0.21)	-1.08 (-1.53, -0.63)	-0.30 (-0.71, 0.10)	-0.29 (-0.60, 0.01)	-0.54 (-0.80, -0.28)
Sampling season (ref: winter)					
Spring	0.11 (-0.23, 0.45)	0.21 (-0.33, 0.74)	0.34 (-0.08, 0.76)	0.21 (-0.18, 0.60)	0.03 (-0.31, 0.37)
Summer	-0.13 (-0.43, 0.16)	0.21 (-0.28, 0.70)	0.15 (-0.24, 0.55)	0.05 (-0.34, 0.43)	0.05 (-0.24, 0.34)
Fall	-0.01 (-0.33, 0.30)	0.11 (-0.41, 0.64)	0.25 (-0.13, 0.63)	0.00 (-0.39, 0.39)	-0.02 (-0.35, 0.30)
Child race/eth (ref: NH-White)					
Hispanic	0.27 (-0.09, 0.62)	-0.02 (-0.53, 0.48)	0.08 (-0.31, 0.47)	0.95 (0.59, 1.30)	0.38 (0.09, 0.68)
NH-Other	0.28 (-0.07, 0.63)	0.06 (-0.44, 0.56)	0.07 (-0.33, 0.48)	0.83 (0.45, 1.20)	0.35 (0.01, 0.69)
Child age (ref: 2 years)					
3	-0.31 (-0.60, -0.03)	-0.62 (-1.16, -0.07)	-0.21 (-0.65, 0.23)	-0.09 (-0.36, 0.17)	-0.07 (-0.33, 0.18)
4	-0.81 (-1.16, -0.46)	-0.74 (-1.29, -0.20)	-0.57 (-1.05, -0.08)	-1.15 (-1.52, -0.78)	-0.64 (-0.95, -0.33)
Maternal age (ref: <30 years)					
30-35	-0.36 (-0.61, -0.11)	-0.30 (-0.74, 0.14)	-0.14 (-0.48, 0.20)	-0.51 (-0.80, -0.23)	-0.57 (-0.80, -0.33)
35+	-0.06 (-0.36, 0.23)	-0.49 (-1.02, 0.03)	-0.14 (-0.52, 0.24)	-0.65 (-1.00, -0.30)	-0.36 (-0.62, -0.09)
Parity (ref: 0)					
1	0.36 (0.08, 0.63)	0.80 (0.29, 1.31)	0.48 (0.08, 0.89)	0.54 (0.16, 0.93)	0.57 (0.29, 0.85)
2+	0.20 (-0.08, 0.47)	0.78 (0.35, 1.21)	0.27 (-0.16, 0.70)	0.52 (0.13, 0.92)	0.70 (0.42, 0.97)
Maternal education (ref: ≤high school)					
Bachelor's	-0.21 (-0.50, 0.08)	0.06 (-0.47, 0.58)	-0.16 (-0.54, 0.23)	-0.45 (-0.74, -0.16)	-0.16 (-0.42, 0.10)
Master's or higher	-0.42 (-0.71, -0.14)	-0.27 (-0.73, 0.20)	-0.15 (-0.53, 0.23)	-1.00 (-1.30, -0.70)	-0.54 (-0.81, -0.27)
Child opportunity (ref: high)					
Medium	-0.17 (-0.59, 0.24)	0.22 (-0.41, 0.84)	0.21 (-0.31, 0.73)	0.26 (-0.17, 0.69)	-0.06 (-0.39, 0.28)
Low	0.26 (-0.11, 0.63)	0.42 (-0.15, 0.99)	0.08 (-0.36, 0.51)	0.88 (0.50, 1.26)	0.59 (0.30, 0.88)
Child sex (ref: male)					
Female	-0.03 (-0.25, 0.18)	-0.15 (-0.55, 0.24)	-0.10 (-0.41, 0.20)	0.19 (-0.06, 0.45)	0.14 (-0.07, 0.35)

Abbreviations: BDCIPP, bis(1,3-dichloro-2-propyl) phosphate; BP, benzophenone; BPS, bisphenol S; 2,4-D, 2,4-dichlorophenoxyacetic acid; DEHP, di-2-ethylhexyl phthalate; DINCH, di-iso-nonyl-cyclohexane-1,2-dicarboxylic acid; DnOP/DiNP, di-n-octyl phthalate/di-iso-nonyl phthalate; DPhP, di-(2-propylheptyl) phthalate; DPHP, diphenyl phosphate; ECHO, Environmental influences on Child Health Outcomes; FLUOs, composite of 2-, 3-, 9-hydroxyfluorene; MBzP; mono-benzyl phthalate; MCiNP, mono-carboxy isononyl phthalate; MEP, monoethyl phthalate; MHPP, mono-2-heptyl phthalate; MiPP, mono-isopropyl phthalate; MMP, mono-methyl phthalate; MnBP/MiBP, composite of mono-n-butyl phthalate and mono-isobutyl phthalate; NDMA, N-desmethyl-acetamidiprid; PB, paraben; NH, non-Hispanic; 3-PBA, 3-phenoxybenzoic acid; PCP,

pentachlorophenol; PYR1, 1-hydroxyoyrene; TCP, 3,5,6-trichloro-2-pyridinol; TCS, triclosan; TEP, triethyl phosphate; trans-DCCA, trans-3-(2,2-di-chlorovinyl)-2,2-dimethyl-cyclopropane-1-carboxylic acid.

Table S9. Multivariate associations between potential determinants and specific gravity (SG)-corrected, natural log-transformed urinary analyte concentrations in the 201 ECHO children.

	TCS	Σ BP	BPS	Σ PB	PCP	2,4-D	NDMA
	β (95% CI)	β (95% CI)					
Sampling year (ref: 2010–13)							
2014–17	-0.84 (-1.59, -0.08)	-0.11 (-0.90, 0.69)	0.85 (0.39, 1.30)	-0.70 (-1.30, -0.09)	-0.09 (-0.41, 0.22)	0.27 (-0.10, 0.63)	0.43 (-0.22, 1.08)
2018–21	-2.13 (-2.86, -1.39)	-0.40 (-1.38, 0.57)	0.94 (0.43, 1.46)	-1.15 (-1.82, -0.49)	0.23 (-0.17, 0.63)	0.73 (0.38, 1.08)	1.03 (0.43, 1.64)
Sampling season (ref: winter)							
Spring	-0.27 (-0.94, 0.39)	0.55 (-0.15, 1.26)	0.17 (-0.32, 0.65)	-0.04 (-0.71, 0.63)	-0.18 (-0.54, 0.18)	-0.02 (-0.41, 0.37)	0.25 (-0.42, 0.91)
Summer	-0.21 (-0.82, 0.40)	-0.12 (-0.67, 0.42)	-0.08 (-0.51, 0.35)	-0.19 (-0.81, 0.43)	-0.16 (-0.46, 0.14)	0.00 (-0.39, 0.38)	0.14 (-0.39, 0.68)
Fall	-0.11 (-0.83, 0.61)	0.50 (-0.07, 1.07)	0.20 (-0.24, 0.63)	-0.02 (-0.71, 0.67)	-0.01 (-0.32, 0.30)	0.11 (-0.26, 0.47)	0.51 (-0.06, 1.07)
Child race/eth (ref: NH-White)							
Hispanic	0.55 (-0.30, 1.40)	-0.61 (-1.25, 0.02)	-0.57 (-1.20, 0.06)	0.52 (-0.30, 1.34)	-0.48 (-0.83, -0.13)	-0.59 (-0.99, -0.20)	-0.04 (-0.65, 0.57)
NH-Other	0.07 (-0.76, 0.91)	-0.94 (-1.66, -0.22)	-0.75 (-1.41, -0.09)	0.85 (0.00, 1.70)	-0.38 (-0.73, -0.04)	-0.55 (-0.92, -0.18)	-0.16 (-0.70, 0.38)
Child age (ref: 2 years)							
3	-0.06 (-0.69, 0.57)	-0.25 (-1.02, 0.52)	-0.17 (-0.63, 0.28)	0.36 (-0.17, 0.89)	-0.19 (-0.51, 0.13)	-0.58 (-0.93, -0.24)	-0.58 (-1.23, 0.06)
4	-0.58 (-1.63, 0.47)	-0.10 (-0.97, 0.76)	-1.02 (-1.63, -0.41)	-0.81 (-1.59, -0.03)	-0.05 (-0.47, 0.36)	-0.58 (-1.00, -0.15)	0.04 (-0.65, 0.74)
Maternal age (ref: <30 years)							
30-35	0.44 (-0.10, 0.98)	-0.38 (-1.01, 0.24)	-0.23 (-0.69, 0.23)	-0.20 (-0.81, 0.41)	-0.20 (-0.49, 0.10)	-0.21 (-0.50, 0.08)	0.42 (-0.11, 0.95)
35+	0.25 (-0.51, 1.01)	0.06 (-0.56, 0.68)	-0.68 (-1.14, -0.22)	-0.34 (-1.06, 0.38)	-0.09 (-0.45, 0.27)	-0.24 (-0.65, 0.17)	0.23 (-0.34, 0.79)
Parity (ref: 0)							
1	0.74 (0.05, 1.44)	-0.46 (-1.13, 0.20)	0.66 (0.16, 1.16)	0.44 (-0.36, 1.25)	0.13 (-0.23, 0.49)	0.47 (0.10, 0.84)	0.02 (-0.52, 0.57)
2+	1.20 (0.44, 1.95)	0.08 (-0.60, 0.76)	0.48 (-0.05, 1.01)	0.40 (-0.41, 1.21)	0.23 (-0.16, 0.63)	0.38 (-0.05, 0.81)	-0.26 (-0.84, 0.33)
Maternal education (ref: \leqhigh school)							
Bachelor's	-0.32 (-0.90, 0.27)	0.70 (0.04, 1.36)	0.14 (-0.33, 0.61)	0.08 (-0.50, 0.66)	0.07 (-0.23, 0.37)	0.12 (-0.21, 0.44)	0.04 (-0.49, 0.57)
Master's or higher	0.19 (-0.72, 1.10)	0.85 (-0.08, 1.78)	-0.41 (-1.02, 0.20)	-0.45 (-1.16, 0.27)	-0.27 (-0.67, 0.14)	0.01 (-0.36, 0.38)	-0.26 (-0.82, 0.30)
Child sex (ref: male)							
Female	0.54 (0.00, 1.09)	0.33 (-0.15, 0.81)	0.01 (-0.32, 0.34)	-0.12 (-0.56, 0.32)	-0.16 (-0.38, 0.06)	-0.11 (-0.36, 0.14)	-0.11 (-0.47, 0.24)

	trans-DCCA	3-PBA	TCP	TEP	BDCIPP	DPHP	ΣDINCH
	β (95% CI)	β (95% CI)	β (95% CI)	β (95% CI)	β (95% CI)	β (95% CI)	β (95% CI)
Sampling year (ref: 2010–13)							
2014–17	0.51 (-0.02, 1.05)	2.35 (-9.67, 14.36)	-0.10 (-0.34, 0.14)	0.41 (-0.17, 0.99)	-0.17 (-0.59, 0.25)	-0.41 (-0.86, 0.03)	0.69 (0.26, 1.12)
2018–21	1.06 (0.43, 1.69)	2.30 (-6.41, 11.02)	0.42 (0.08, 0.75)	1.15 (0.64, 1.66)	0.10 (-0.49, 0.69)	0.24 (-0.25, 0.73)	1.21 (0.67, 1.75)
Sampling season (ref: winter)							
Spring	0.06 (-0.54, 0.65)	-0.13 (-2.35, 2.09)	0.31 (0.00, 0.61)	0.28 (-0.15, 0.71)	-0.15 (-0.71, 0.41)	-0.08 (-0.58, 0.42)	-0.20 (-0.64, 0.24)
Summer	-0.05 (-0.56, 0.46)	-0.22 (-2.40, 1.95)	0.02 (-0.21, 0.25)	0.00 (-0.42, 0.43)	-0.34 (-0.81, 0.13)	-0.23 (-0.60, 0.15)	0.10 (-0.37, 0.57)
Fall	-0.16 (-0.69, 0.37)	0.59 (-4.72, 5.89)	0.29 (-0.06, 0.65)	0.16 (-0.29, 0.61)	0.00 (-0.47, 0.47)	0.15 (-0.27, 0.56)	-0.13 (-0.57, 0.30)
Child race/eth (ref: NH-White)							
Hispanic	-0.84 (-1.40, -0.27)	-1.86 (-12.03, 8.32)	-0.25 (-0.69, 0.20)	-0.28 (-0.73, 0.18)	-0.64 (-1.27, -0.01)	-0.68 (-1.09, -0.26)	-0.58 (-1.08, -0.07)
NH-Other	-0.42 (-0.98, 0.13)	-1.79 (-11.68, 8.09)	-0.52 (-0.82, -0.22)	-0.02 (-0.45, 0.40)	-0.69 (-1.42, 0.04)	-0.36 (-0.84, 0.13)	-0.42 (-0.93, 0.10)
Child age (ref: 2 years)							
3	-0.25 (-0.78, 0.28)	-0.15 (-1.50, 1.20)	-0.40 (-0.69, -0.12)	0.03 (-0.45, 0.51)	-0.35 (-0.76, 0.06)	-0.26 (-0.66, 0.15)	-0.22 (-0.69, 0.24)
4	-0.75 (-1.37, -0.12)	-2.75 (-19.53, 14.02)	-0.19 (-0.52, 0.15)	-0.21 (-0.86, 0.43)	-0.96 (-1.62, -0.31)	-0.60 (-1.18, -0.02)	-0.63 (-1.21, -0.05)
Maternal age (ref: <30 years)							
30-35	-0.52 (-0.89, -0.15)	-0.40 (-2.31, 1.50)	0.04 (-0.19, 0.27)	0.13 (-0.24, 0.51)	-0.28 (-0.74, 0.18)	0.00 (-0.38, 0.38)	-0.21 (-0.59, 0.16)
35+	-0.18 (-0.67, 0.32)	-0.41 (-4.99, 4.17)	-0.15 (-0.46, 0.16)	-0.06 (-0.45, 0.33)	-0.52 (-1.06, 0.03)	-0.11 (-0.57, 0.36)	-0.33 (-0.78, 0.11)
Parity (ref: 0)							
1	0.45 (-0.13, 1.02)	1.64 (-7.97, 11.25)	0.33 (-0.07, 0.73)	0.10 (-0.35, 0.55)	0.62 (0.05, 1.18)	0.19 (-0.18, 0.57)	0.70 (0.21, 1.20)
2+	0.33 (-0.27, 0.93)	2.04 (-10.99, 15.07)	0.34 (-0.08, 0.75)	0.00 (-0.42, 0.42)	0.39 (-0.28, 1.05)	0.45 (-0.01, 0.90)	0.47 (-0.01, 0.94)
Maternal education (ref: ≤high school)							
Bachelor's	-0.41 (-0.91, 0.08)	0.09 (-3.27, 3.46)	0.01 (-0.24, 0.27)	-0.18 (-0.61, 0.24)	0.10 (-0.32, 0.53)	0.28 (-0.12, 0.67)	0.22 (-0.22, 0.66)
Master's or higher	-0.97 (-1.55, -0.39)	0.40 (-8.57, 9.37)	0.10 (-0.28, 0.49)	0.15 (-0.34, 0.63)	0.33 (-0.22, 0.89)	0.32 (-0.13, 0.77)	-0.06 (-0.56, 0.43)
Child sex (ref: male)							
Female	-0.23 (-0.58, 0.13)	-0.50 (-3.86, 2.86)	0.01 (-0.22, 0.24)	0.04 (-0.26, 0.35)	0.14 (-0.21, 0.48)	0.16 (-0.14, 0.46)	0.16 (-0.17, 0.49)

	Σ DEHP	Σ DPhP	Σ DnOP/DiNP	MBzP	MCiNP	MEP	MMP
	β (95% CI)	β (95% CI)	β (95% CI)				
Sampling year (ref: 2010–13)							
2014–17	-0.44 (-0.69, -0.19)	-0.31 (-0.61, 0.00)	-0.71 (-1.06, -0.36)	-0.82 (-1.39, -0.24)	-0.43 (-0.70, -0.16)	0.00 (-3.46, 3.45)	-0.09 (-0.58, 0.41)
2018–21	-0.64 (-0.92, -0.36)	-0.10 (-0.48, 0.28)	-0.68 (-1.12, -0.23)	-1.05 (-1.63, -0.47)	-0.49 (-0.81, -0.18)	-0.35 (-2.67, 1.97)	-0.28 (-0.76, 0.20)
Sampling season (ref: winter)							
Spring	0.24 (-0.07, 0.55)	0.07 (-0.24, 0.37)	0.20 (-0.21, 0.60)	-0.40 (-1.01, 0.21)	-0.05 (-0.33, 0.24)	0.56 (-0.82, 1.95)	-0.05 (-0.58, 0.48)
Summer	0.15 (-0.11, 0.42)	0.07 (-0.23, 0.36)	0.02 (-0.38, 0.41)	-0.35 (-0.80, 0.09)	-0.01 (-0.24, 0.23)	0.04 (-0.59, 0.67)	-0.37 (-0.89, 0.16)
Fall	0.11 (-0.15, 0.36)	0.14 (-0.21, 0.50)	-0.09 (-0.44, 0.27)	0.17 (-0.34, 0.69)	-0.06 (-0.34, 0.21)	-0.13 (-1.68, 1.42)	-0.06 (-0.53, 0.40)
Child race/eth (ref: NH-White)							
Hispanic	-0.32 (-0.66, 0.02)	-0.42 (-0.80, -0.04)	-0.38 (-0.89, 0.12)	-0.35 (-1.07, 0.38)	-0.63 (-0.95, -0.30)	0.59 (-2.52, 3.69)	-0.55 (-1.13, 0.04)
NH-Other	-0.29 (-0.61, 0.02)	-0.11 (-0.43, 0.22)	0.00 (-0.43, 0.43)	-0.27 (-0.96, 0.43)	-0.27 (-0.53, 0.00)	0.26 (-2.75, 3.28)	-0.44 (-1.10, 0.21)
Child age (ref: 2 years)							
3	-0.02 (-0.30, 0.27)	-0.18 (-0.50, 0.14)	-0.04 (-0.32, 0.24)	0.27 (-0.20, 0.74)	-0.14 (-0.41, 0.12)	-0.16 (-1.46, 1.14)	-0.39 (-0.93, 0.16)
4	-0.25 (-0.65, 0.15)	-0.30 (-0.76, 0.15)	-0.15 (-0.65, 0.35)	-0.07 (-0.80, 0.65)	-0.57 (-0.89, -0.25)	-1.19 (-6.45, 4.08)	-0.60 (-1.30, 0.11)
Maternal age (ref: <30 years)							
30-35	-0.26 (-0.52, 0.00)	-0.18 (-0.48, 0.13)	0.01 (-0.31, 0.33)	0.08 (-0.37, 0.53)	-0.03 (-0.28, 0.21)	-0.22 (-1.21, 0.76)	-0.44 (-0.88, 0.01)
35+	-0.21 (-0.52, 0.10)	-0.41 (-0.74, -0.08)	-0.09 (-0.47, 0.28)	-0.22 (-0.72, 0.29)	-0.39 (-0.66, -0.12)	-0.46 (-1.76, 0.84)	0.00 (-0.53, 0.53)
Parity (ref: 0)							
1	0.46 (0.19, 0.74)	0.26 (-0.11, 0.63)	0.38 (-0.07, 0.82)	0.86 (0.24, 1.48)	0.20 (-0.11, 0.52)	0.77 (-2.21, 3.74)	0.59 (0.10, 1.09)
2+	0.20 (-0.06, 0.47)	0.13 (-0.27, 0.54)	0.04 (-0.42, 0.50)	0.75 (0.12, 1.38)	0.08 (-0.24, 0.40)	0.61 (-2.34, 3.57)	0.49 (0.00, 0.98)
Maternal education (ref: \leqhigh school)							
Bachelor's	-0.14 (-0.36, 0.09)	-0.09 (-0.38, 0.21)	-0.25 (-0.58, 0.09)	-0.21 (-0.77, 0.34)	0.01 (-0.23, 0.25)	-0.51 (-1.78, 0.77)	-0.13 (-0.56, 0.30)
Master's or higher	-0.19 (-0.52, 0.15)	-0.09 (-0.47, 0.29)	-0.13 (-0.63, 0.37)	-0.65 (-1.29, -0.01)	0.07 (-0.25, 0.38)	-0.90 (-3.50, 1.70)	-0.03 (-0.60, 0.54)
Child sex (ref: male)							
Female	-0.10 (-0.30, 0.09)	-0.01 (-0.23, 0.21)	-0.09 (-0.38, 0.21)	0.10 (-0.28, 0.48)	-0.11 (-0.30, 0.08)	0.18 (-0.78, 1.13)	-0.20 (-0.59, 0.18)

	MnBP/MiBP	MHPP	MiPP	PYR1	FLUOs
	β (95% CI)	β (95% CI)	β (95% CI)	β (95% CI)	β (95% CI)
Sampling year (ref: 2010–13)					
2014–17	-0.21 (-0.46, 0.05)	-0.57 (-1.10, -0.03)	-0.25 (-0.62, 0.12)	-0.31 (-0.58, -0.04)	-0.19 (-0.43, 0.05)
2018-21	0.15 (-0.17, 0.47)	-0.87 (-1.49, -0.26)	-0.09 (-0.53, 0.35)	0.12 (-0.23, 0.46)	-0.16 (-0.46, 0.14)
Sampling season (ref: winter)					
Spring	-0.04 (-0.33, 0.25)	0.05 (-0.48, 0.57)	0.23 (-0.20, 0.66)	0.12 (-0.17, 0.41)	-0.02 (-0.30, 0.26)
Summer	-0.17 (-0.44, 0.10)	0.06 (-0.42, 0.54)	0.13 (-0.27, 0.53)	0.11 (-0.21, 0.42)	0.05 (-0.21, 0.30)
Fall	0.03 (-0.25, 0.31)	0.08 (-0.41, 0.58)	0.25 (-0.12, 0.62)	0.15 (-0.18, 0.48)	0.03 (-0.22, 0.28)
Child race/eth (ref: NH-White)					
Hispanic	-0.17 (-0.58, 0.23)	-0.43 (-1.02, 0.15)	-0.16 (-0.65, 0.33)	0.26 (-0.16, 0.67)	-0.15 (-0.53, 0.23)
NH-Other	-0.20 (-0.61, 0.20)	-0.23 (-0.78, 0.33)	-0.17 (-0.64, 0.30)	0.15 (-0.24, 0.54)	-0.07 (-0.46, 0.33)
Child age (ref: 2 years)					
3	-0.29 (-0.56, -0.01)	-0.25 (-0.76, 0.27)	-0.09 (-0.56, 0.38)	0.10 (-0.15, 0.34)	0.07 (-0.16, 0.31)
4	-0.65 (-1.02, -0.27)	-0.40 (-1.02, 0.22)	-0.47 (-1.07, 0.13)	-0.62 (-1.01, -0.22)	-0.40 (-0.74, -0.06)
Maternal age (ref: <30 years)					
30-35	-0.19 (-0.44, 0.07)	-0.20 (-0.65, 0.26)	-0.06 (-0.41, 0.30)	-0.22 (-0.49, 0.05)	-0.45 (-0.67, -0.22)
35+	0.13 (-0.17, 0.43)	-0.32 (-0.86, 0.23)	-0.14 (-0.57, 0.29)	-0.39 (-0.71, -0.08)	-0.23 (-0.51, 0.04)
Parity (ref: 0)					
1	0.32 (-0.01, 0.64)	0.35 (-0.24, 0.95)	0.48 (0.01, 0.95)	0.42 (0.06, 0.79)	0.46 (0.15, 0.77)
2+	0.08 (-0.25, 0.41)	0.20 (-0.38, 0.78)	0.24 (-0.26, 0.74)	0.26 (-0.13, 0.65)	0.55 (0.24, 0.87)
Maternal education (ref: ≤high school)					
Bachelor's	-0.13 (-0.40, 0.13)	-0.05 (-0.57, 0.47)	-0.15 (-0.53, 0.22)	-0.38 (-0.63, -0.13)	-0.12 (-0.37, 0.12)
Master's or higher	-0.37 (-0.69, -0.05)	-0.01 (-0.59, 0.56)	0.05 (-0.42, 0.52)	-0.48 (-0.81, -0.16)	-0.13 (-0.44, 0.19)
Child sex (ref: male)					
Female	-0.02 (-0.22, 0.18)	-0.14 (-0.51, 0.23)	-0.08 (-0.37, 0.21)	0.25 (0.05, 0.46)	0.15 (-0.04, 0.34)

Abbreviations: BDCIPP, bis(1,3-dichloro-2-propyl) phosphate; BP, benzophenone; BPS, bisphenol S; 2,4-D, 2,4-dichlorophenoxyacetic acid; DEHP, di-2-ethylhexyl phthalate; DINCH, di-iso-nonyl-cyclohexane-1,2-dicarboxylic acid; DnOP/DiNP, di-n-octyl phthalate/di-iso-nonyl phthalate; DPhP, di-(2-propylheptyl) phthalate; DPHP, diphenyl phosphate; ECHO, Environmental influences on Child Health Outcomes; FLUOs, composite of 2-, 3-, 9-hydroxyfluorene; MBzP; mono-benzyl phthalate; MCiNP, mono-carboxy isononyl phthalate; MEP, monoethyl phthalate; MHPP, mono-2-heptyl phthalate; MiPP, mono-isopropyl phthalate; MMP, mono-methyl phthalate; MnBP/MiBP, composite of mono-n-butyl phthalate and mono-isobutyl phthalate; NDMA, N-desmethyl-acetamiprid; PB, paraben; NH, non-Hispanic; 3-PBA, 3-phenoxybenzoic acid; PCP, pentachlorophenol; PYR1, 1-hydroxyoyrene; TCP, 3,5,6-trichloro-2-pyridinol; TCS, triclosan; TEP, triethyl phosphate; trans-DCCA, trans-3-(2,2-di-chlorovinyl)-2,2-dimethyl-cyclopropane-1-carboxylic acid.

Note: Generalized estimating equations were mutually adjusted for all potential predictors, except for the child opportunity index.

Table S10. Distributions of specific gravity (SG)-corrected urinary analyte concentrations among the 201 ECHO children and those of creatinine-corrected urinary analyte concentrations in the National Health and Nutrition Examination Survey (NHANES) 2015–2016 and 2017–2018 cycles.

Analyte class/name	This study			NHANES 2015–2016			NHANES 2017–2018		
	LOD	GM	P50	N	GM	P50	N	GM	P50
Bactericide									
Triclocarban (TCC)	0.01	0.02	<LOD	140	-	6.00			
Triclosan (TCS)	0.01	1.96	1.48	140	-	<0.10			
Benzophenones									
Benzophenone-3 (BP3)	0.01	28.3	23.3	140	39.7	29.6			
Bisphenols									
Bisphenol A (BPA)	0.02	0.12	<LOD	140	2.86	2.73			
Bisphenol F (BPF)	0.02	0.03	<LOD	140	-	<0.20			
Bisphenol S (BPS)	0.004	0.46	0.43	140	0.94	0.73			
Parabens									
Butyl paraben (BuPB)	0.01	0.04	0.02	140	-	<0.10			
Ethyl paraben (EtPB)	0.01	1.46	0.81	140	-	<1.00			
Methyl paraben (MePB)	0.03	42.7	36.2	140	53.5	36.8			
Propyl paraben (PrPB)	0.02	5.95	4.29	140	7.50	4.06			
Fungicides and herbicides									
<i>Fungicides</i>									
4-nitrophenol (PNP)	0.07	0.29	0.34	504	1.45	1.33			
<i>Herbicides</i>									
2,4-dichlorophenoxyacetic acid (2,4-D)	0.005	0.27	0.28	502	0.89	0.82			
Insecticides									
<i>Neonicotinoid insecticides</i>									
Acetamiprid (ACE)	0.01	0.04	0.04	352	-	<0.30			
Clothianidin (CLO)	0.05	0.06	<LOD	353	-	<0.20			
Imidacloprid (IMI)	0.05	0.09	<LOD	349	-	<0.40			
Thiacloprid (THI)	0.01	0.01	<LOD	352	-	<0.03			
N-desmethyl-acetamiprid (NDMA)	0.02	0.29	0.23	502	-	0.64			
<i>Pyrethroid insecticides</i>									

Analyte class/name	This study			NHANES 2015–2016			NHANES 2017–2018		
	LOD	GM	P50	N	GM	P50	N	GM	P50
trans-3-(2,2-di-chlorovinyl)-2,2-dimethyl-cyclopropane-1-carboxylic acid (trans-DCCA)	0.02	0.30	0.27	503	-	<0.60			
3-phenoxybenzoic acid (3-PBA)	0.01	0.32	0.30	500	1.53	1.29			
4-fluoro-3-phenoxybenzoic acid (FBPA)	0.01	0.02	<LOD	503	-	<0.10			
<i>Other insecticides</i>									
3,5,6-trichloro-2-pyridinol (TCP)	0.02	1.11	1.04	504	2.69	2.57			
Organophosphate esters									
Bis(1,3-dichloro-2-propyl) phosphate (BDCIPP)	0.015	1.48	1.58	351	-	6.63	418	5.42	5.53
Composite of di-n-butyl phosphate and di-isobutyl phosphate (DnBP/DiBP)	0.14	0.22	<LOD	351	0.47	0.40	417	0.55	0.47
Diphenyl phosphate (DPHP)	0.02	0.85	0.92	351	4.14	3.46	418	3.46	2.93
Bis(2-methylphenyl) hydrogen phosphate (BMPP)	0.14	<LOD	<LOD	351	-	<0.50			
Phthalates and phthalate alternatives									
<i>Phthalate alternatives</i>									
Cyclohexane-1,2-dicarboxylic acid-monocarboxy isooctyl ester (MCOCH)	0.06	0.96	0.90	464	2.43	2.08	379	2.44	2.37
Cyclohexane-1,2-dicarboxylic acid-mono (hydroxy-isononyl) ester (MHNCH)	0.02	1.33	1.09	464	3.22	2.82	379	3.65	3.51
<i>Phthalates</i>									
Mono (2-ethyl-5-hydroxyhexyl) phthalate (MEHHP)	0.09	13.1	12.9	464	20.6	20.0	379	15.3	16.1
Mono (2-ethyl-5-oxohexyl) phthalate (MEOHP)	0.01	7.96	7.77	464	13.9	13.6	379	10.9	11.2
Mono (5-carboxy-2-ethylpentyl) phthalate (MECPP)	0.05	17.9	17.9	464	35.7	35.0	379	27.6	26.7
Mono-benzyl phthalate (MBzP)	0.09	11.8	9.80	464	19.7	17.6	379	11.5	10.0
Mono-carboxy isononyl phthalate (MCiNP)	0.04	2.07	1.88	464	4.94	4.70	379	3.66	3.33
Mono-carboxy isooctyl phthalate (MCiOP)	0.009	11.3	10.4	464	21.6	18.2	379	13.9	12.0
Mono ethyl hexyl phthalate (MEHP)	0.05	0.97	1.66	464	3.05	2.86	379	-	2.38
Monoethyl phthalate (MEP)	0.05	33.2	30.9	464	46.3	40.0	379	38.4	34.9
Composite of mono-n-butyl phthalate and mono-isobutyl phthalate (MnBP/MiBP)	0.25	31.3	31.8	464	48.4	48.5	379	44.2	44.3
Mono (3-carboxypropyl) phthalate (MCP)	0.04	2.06	1.98	464	4.11	4.09	379	3.20	3.04
Polycyclic aromatic hydrocarbons									

Analyte class/name	This study			NHANES 2015–2016			NHANES 2017–2018		
	LOD	GM	P50	N	GM	P50	N	GM	P50
1-hydroxyoyrene (PYR1)	10	117	131	474	275	255			
Composite of 2- and 3-hydroxyphenanthrene (PHEN2,3)	180	208	<LOD	473	193	185			

Abbreviations: ECHO, Environmental influences on Child Health Outcomes; GM, geometric mean; L, liter; LOD, limit of detection; mL, milliliter; ng, nanogram; NHANES, National Health and Nutrition Examination Survey; P50, median.

Note: Concentration units are ng/mL, except for polycyclic aromatic hydrocarbons (ng/L). Concentrations below the LOD were imputed with LOD/ $\sqrt{2}$ prior to computing descriptive statistics. This table includes analytes measured both in NHANES 2015–2016 or 2017–2018 and in this study.

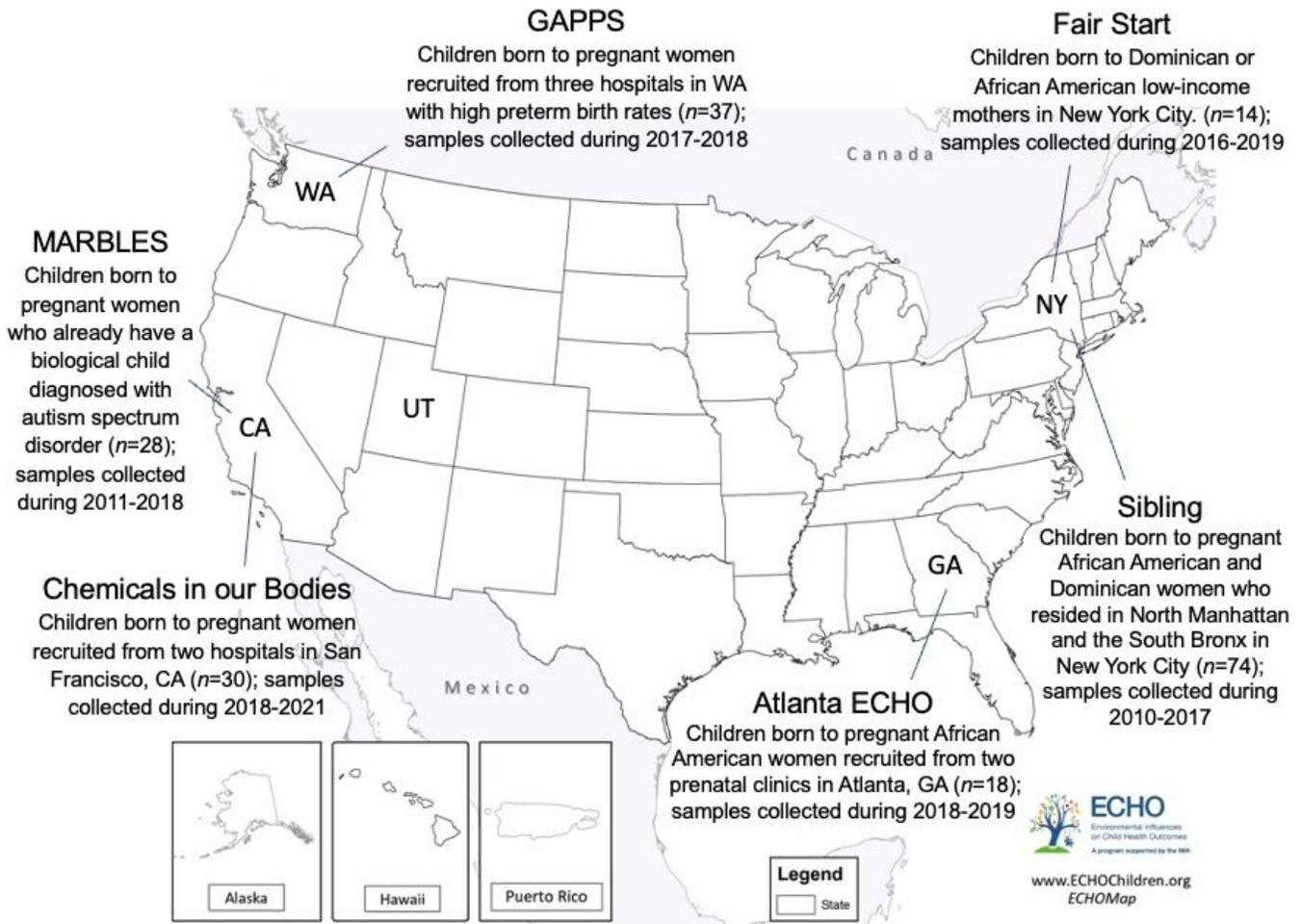


Figure S1. Information and geographic locations of the six cohorts contributing samples to this study.

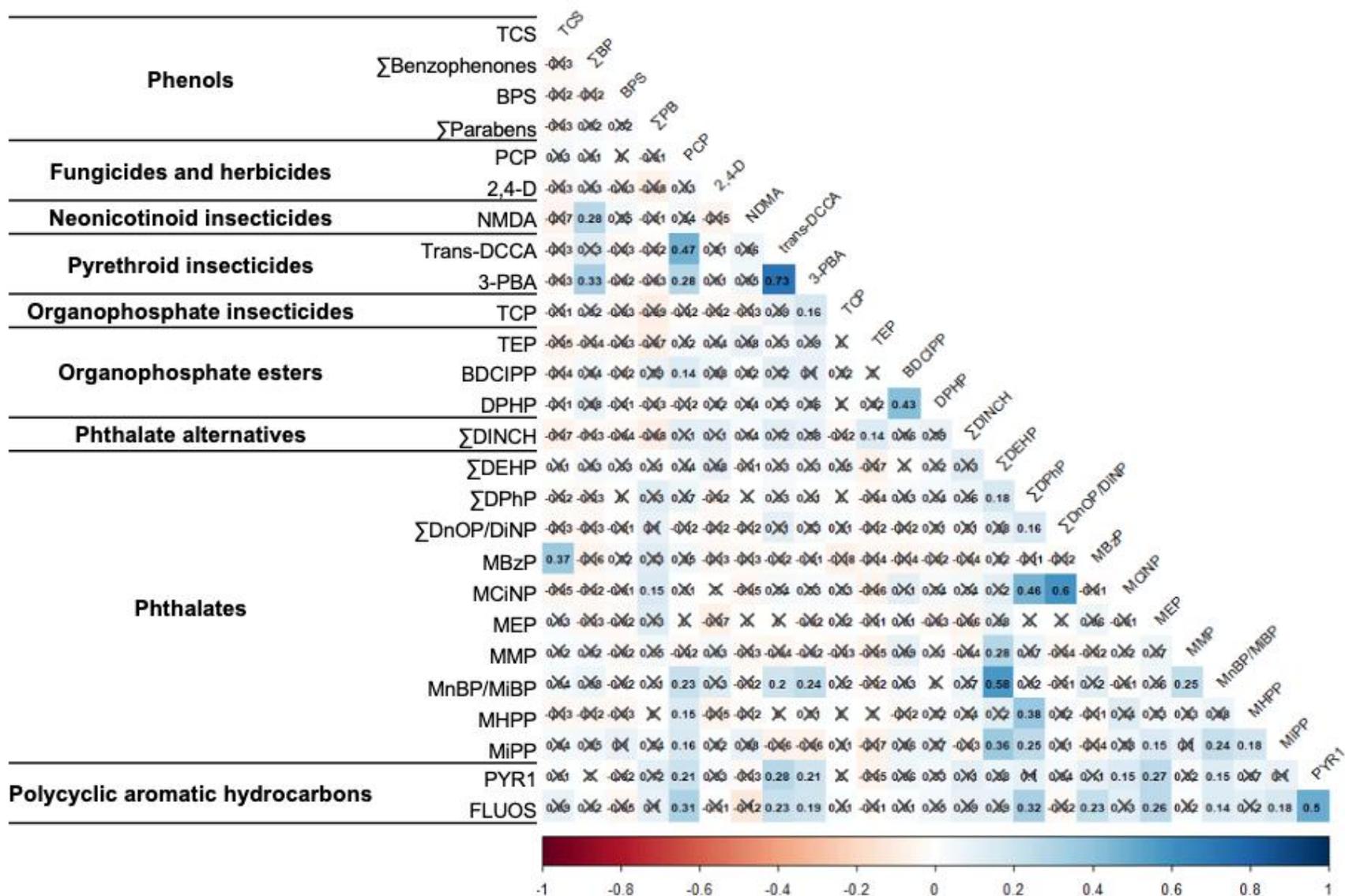


Figure S2. Spearman correlation heatmap of specific gravity (SG)-corrected urinary analyte concentrations in the 201 ECHO children.

Abbreviations: BDCIPP, bis(1,3-dichloro-2-propyl) phosphate; BP, benzophenone; BPS, bisphenol S; 2,4-D, 2,4-dichlorophenoxyacetic acid; DEHP, di-2-ethylhexyl phthalate; DINCH, di-iso-nonyl-cyclohexane-1,2-dicarboxylic acid; DnOP/DiNP, di-n-octyl phthalate/di-iso-nonyl phthalate; DPhP, di-(2-propylheptyl) phthalate; DPHP, diphenyl phosphate; FLUOs, composite of 2-, 3-, 9-hydroxyfluorene; MBzP; mono-benzyl phthalate; MCIiNP, mono-carboxy isononyl phthalate; MEP, monoethyl phthalate; MHPP, mono-2-heptyl phthalate; MiPP, mono-isopropyl phthalate; MMP, mono-methyl phthalate; MnBP/MiBP, composite of mono-n-butyl phthalate and mono-isobutyl phthalate; NDMA, N-desmethyl-acetamidrid; PB, paraben; 3-PBA, 3-phenoxybenzoic acid; PCP, pentachlorophenol; PYR1, 1-hydroxyoyrene; TCP, 3,5,6-trichloro-2-pyridinol; TCS, triclosan; TEP, triethyl phosphate; trans-DCCA, trans-3-(2,2-di-chlorovinyl)-2,2-dimethyl-cyclopropane-1-carboxylic acid.

Note: Analytes detected in >70% of children's samples and molar sums are presented. Insignificant correlation coefficients ($p>0.05$) are marked with a cross (×).

Child concentrations	Phenols				Fungicides		Herbicides		Neonicotinoids		Pyrethroids		OP insecticides		OPEs		Phthalate alternatives				Phthalates				PAHs	
	TCS	ΣBP	BPS	ΣPB	PCP	2,4-D	NDMA	trans-DCCA	3-PBA	TCP	TEP	BDCIPP	DPHP	ΣDINCH	ΣDEHP	ΣDPhP	ΣDnOP/DiNP	MBzP	MCINP	MEP	MMP	MnBP/MIBP	MHPP	MIPP	PYR1	FLUOs
Sampling year (ref: 2010-13)																										
2014-17	↓		↑	↓		↑	↑	↑		↑	↑	↓		↑	↓	↓	↓	↓	↓		↓	↓	↓	↓	↓	↓
2018-21	↓		↑	↓		↑	↑	↑		↑	↑			↑	↓	↓	↓	↓	↓		↓	↓	↓	↓	↓	↓
Sampling season (ref: winter)																										
Spring		↑								↑	↑				↑			↓				↓				
Summer												↓						↓				↓				
Fall		↑						↑		↑								↓						↑		
Child race/ethnic (ref: NHW)																										
Hispanic		↓	↓		↓	↓		↓				↓	↓	↓	↓	↓	↓	↑	↓		↓		↓			
NH-Other		↓	↓	↑	↓	↓		↓		↓		↓	↓	↓	↓	↓			↓		↓					
Child age (ref: 2 years)																										
3				↑		↓	↓			↓		↓									↓	↓				
4			↓	↓		↓	↓				↓	↓		↓		↓			↓		↓	↓		↓	↓	↓
Maternal age (ref: <30)																										
30-35	↑				↓	↓	↑	↓							↓	↓	↓				↓	↓		↓	↓	↓
35+		↑	↓									↓		↓	↓	↓			↓					↓	↓	↓
Parity (ref: 0)																										
1	↑	↓	↑			↑		↑		↑	↑		↑	↑	↑	↑	↑				↑	↑		↑	↑	↑
2+	↑		↑			↑				↑		↑		↑	↑	↑	↑	↑			↑	↑		↑	↑	↑
Maternal edu (ref: high sch)																										
Bachelors		↑					↓					↑				↓									↓	↓
Masters or higher		↑	↓		↓		↓					↑					↓					↓			↓	↓
Child sex (ref: male)																										
Female	↑	↑			↓																			↑	↑	↑

↑ = positive association, $p < 0.05$
↑ = positive association, $p < 0.2$
↓ = negative association, $p < 0.05$
↓ = negative association, $p < 0.2$

Figure S3. Multivariate associations between potential predictors and specific gravity (SG)-corrected, natural log-transformed urinary analyte concentrations in the 201 ECHO children.

Abbreviations: BDCIPP, bis(1,3-dichloro-2-propyl) phosphate; BP, benzophenone; BPS, bisphenol S; 2,4-D, 2,4-dichlorophenoxyacetic acid; DEHP, di-2-ethylhexyl phthalate; DINCH, di-iso-nonyl-cyclohexane-1,2-dicarboxylic acid; DnOP/DiNP, di-n-octyl phthalate/di-iso-nonyl phthalate; DPhP, di-(2-propylheptyl) phthalate; DPHP, diphenyl phosphate; ECHO, Environmental influences on Child Health Outcomes; FLUOs, composite of 2-, 3-, 9-hydroxyfluorene; MBzP; mono-benzyl phthalate; MCIiNP, mono-carboxy isononyl phthalate; MEP, monoethyl phthalate; MHPP, mono-2-heptyl phthalate; MiPP, mono-isopropyl phthalate; MMP, mono-methyl phthalate; MnBP/MiBP, composite of mono-n-butyl phthalate and mono-isobutyl phthalate; NDMA, N-desmethyl-acetamiprid; PB, paraben; NH, non-Hispanic; NHW, non-Hispanic White; OP, organophosphate; OPE, organophosphate ester; PAH, polycyclic aromatic hydrocarbon; 3-PBA, 3-phenoxybenzoic acid; PCP, pentachlorophenol; PYR1, 1-hydroxyoyrene; TCP, 3,5,6-trichloro-2-pyridinol; TCS, triclosan; TEP, triethyl phosphate; trans-DCCA, trans-3-(2,2-di-chlorovinyl)-2,2-dimethyl-cyclopropane-1-carboxylic acid.

Note: Numeric data regarding the beta coefficients and 95% confidence intervals are presented in Table S9.