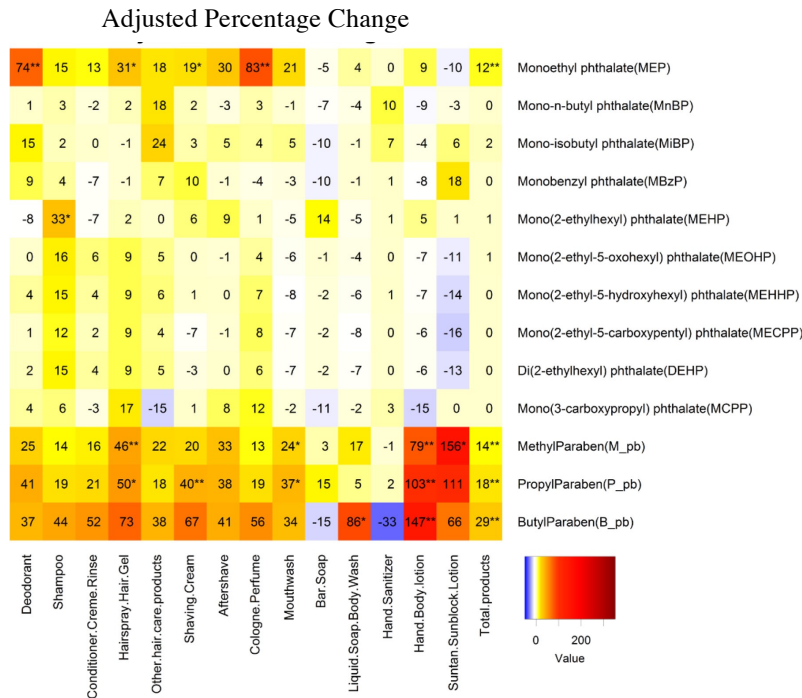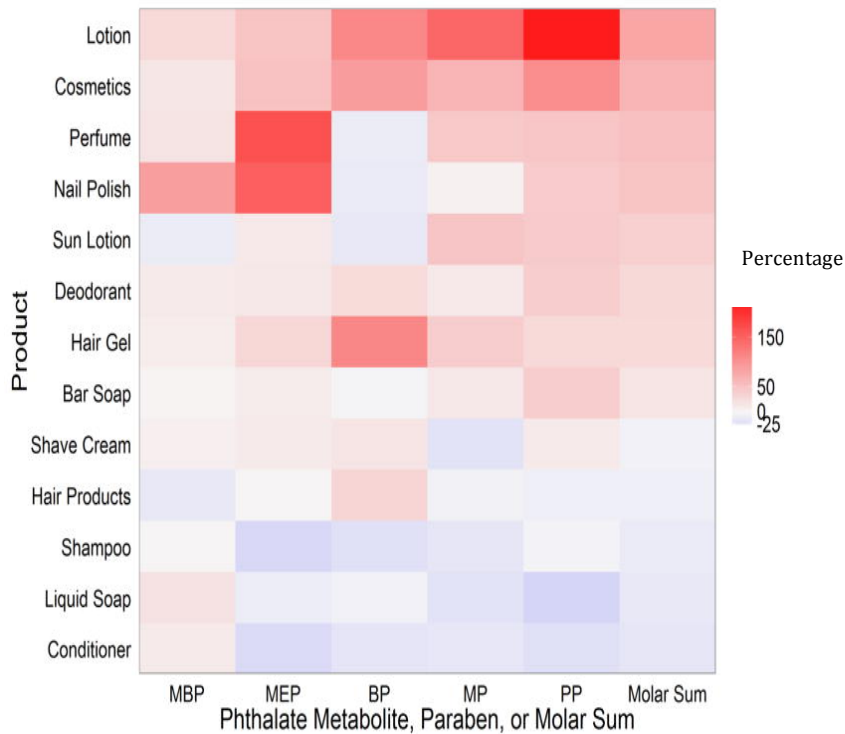# Supplementary Data

Figure S1. Heatmap for adjusted percent change in urinary phthalate metabolite and paraben concentrations associated with self-reported use of personal care products (PCPs) within 24 hours of urine sample collection among 400 men who contributed 1037 urine samples in the EARTH Study.

Adjusted Percentage Change

	Deodorant	Shampoo	Conditioner.Creme.Rinse	Hairspray.Hair.Gel	Other.hair.care.products	Shaving.Cream	Aftershave	Cologne.Perfume	Mouthwash	Bar.Soap	Liquid.Soap.Body.Wash	Hand.Sanitizer	Hand.Body.lotion	Suntan.Sunblock.Lotion	Total.products	
74**	15	13	31*	18	19*	30	83**	21	-5	4	0	9	-10	12**	Monoethyl phthalate(MEP)
1	3	-2	2	18	2	-3	3	-1	-7	-4	10	-9	-3	0	Mono-n-butyl phthalate(MnBP)
15	2	0	-1	24	3	5	4	5	-10	-1	7	-4	6	2	Mono-isobutyl phthalate(MiBP)
9	4	-7	-1	7	10	-1	-4	-3	-10	-1	1	-8	18	0	Monobenzyl phthalate(MBzP)
-8	33*	-7	2	0	6	9	1	-5	14	-5	1	5	1	1	Mono(2-ethylhexyl) phthalate(MEHP)
0	16	6	9	5	0	-1	4	-6	-1	-4	0	-7	-11	1	Mono(2-ethyl-5-oxohexyl) phthalate(MEOHP)
4	15	4	9	6	1	0	7	-8	-2	-6	1	-7	-14	0	Mono(2-ethyl-5-hydroxyhexyl) phthalate(MEHHP)
1	12	2	9	4	-7	-1	8	-7	-2	-8	0	-6	-16	0	Mono(2-ethyl-5-carboxypentyl) phthalate(MECPP)
2	15	4	9	5	-3	0	6	-7	-2	-7	0	-6	-13	0	Di(2-ethylhexyl) phthalate(DEHP)
4	6	-3	17	-15	1	8	12	-2	-11	-2	3	-15	0	0	Mono(3-carboxypropyl) phthalate(MCPP)
25	14	16	46**	22	20	33	13	24*	3	17	-1	79**	156*	14**	MethylParaben(M_pb)
41	19	21	50*	18	40**	38	19	37*	15	5	2	103**	111	18**	PropylParaben(P_pb)
37	44	52	73	38	67	41	56	34	-15	86*	-33	147**	66	29**	ButylParaben(B_pb)

Value: 0 — 200

Notes:
- Statistical significance indicated as *: if p-value < 0.05, **: if p-value < 0.01.
- DEHP means: $\sum$DEHP metabolites (μmol/L)= sum of μmol/L of MEHP+ MEOHP+ MEHHP+ MECPP.
- Analysis was based on 10 imputed datasets using chained equations method.
- Multiple imputed missing model based on concordance of product use within persons. For any given PCP at any time point, the imputation model included PCP-use at other time points, urine specific gravity (continuous), race (Caucasian or not), age (continuous), BMI (continuous), calendar year (continuous), time of sample collection (early morning (5am< and <=9am), late morning (9am< and <=12pm) or afternoon(>12pm)), current smoking (yes/no) and warm season (April through September) (yes/no).
- Analysis adjusted for urine specific gravity (continuous), race (Caucasian or not), age (continuous), BMI (continuous), calendar year (continuous), time of sample collection (early morning (5am< and <=9am), late morning (9am< and <=12pm) or afternoon (>12pm)), current smoking (yes/no), warm season (April through September) (yes/no) and the product use within 24 hours (yes/no).
- Total products: the crude sum of PCPs used within 24 hours.
- The last column for the total products represents percent changes associated with each additional type of PCP used, regardless of which PCP.
- Urinary concentrations were ordered according to the molecular weights within phthalates and within parabens.
- Combined other hair care products included mousse, hair bleach, relaxer, perm and straightener.

Figure S2. Heatmap of adjusted percent change in specific gravity standardized urinary phthalate metabolite and paraben concentrations with personal care product use in the last 24 hours among pregnant women with a live birth from the EARTH Study.

Notes:
- MBP: monobutyl phthalate, MEP: monoethyl phthalate, BP: butyl paraben, MP: methyl paraben, PP: propyl paraben.
- Separate models for each predictor and outcome. Models adjusted for maternal race (white vs. non-white), education (graduate school vs. no graduate school), age (years), body mass index (continuous, time-varying), weeks gestation (time varying), and number of other personal care products used (continuous, time-varying).
- Products are sorted in order of the largest (top) to smallest (bottom) change in the phthalate and paraben molar sum concentrations.