DOI: 10.1289/EHP2358

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Supplemental Material

Prenatal Phthalates, Maternal Thyroid Function, and Risk of Attention-Deficit Hyperactivity Disorder in the Norwegian Mother and Child Cohort

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Table S1. Associations between phthalates and ADHD with and without adjustment for year in a Nested Case-Control Study of Attention-deficit Hyperactivity Disorder in the Norwegian Mother and Child Cohort, 2003-2008

Phthalate OR 95% CI MEP 1.00 Q1 1.00 1.00 Q2 1.27 (0.67,2.20) 1.46 (0.83,2.42) Q3 1.06 (0.55,1.89) 1.11 (0.61,1.86) Q4 1.15 (0.61,1.97) 1.40 (0.78,2.33) Q5 1.10 (0.57,1.94) 1.27 (0.71,2.07) MiBP 1.00 1.00 1.00 Q2 0.92 (0.46,1.66) 0.88 (0.47,1.56) Q3 1.10 (0.52,1.99) 0.87 (0.45,1.57) Q4 1.21 (0.58,2.21) 0.81 (0.41,1.45) Q5 0.70 (0.32,1.32) 0.45 (0.22,0.84) MnBP 1.00 1.00 0.22,0.84) Q1 1.00 1.00 0.44,1.59) Q3 0.93 (0.43,1.81) 1.30 (0.64,2.30) Q4 0.92 (0.40,1.94) 1.32 (0.61,2.55) Q5 1.31 (0.5		With adj	ustment for year	Without adjustment for year			
Q1 1.00 1.00 (0.83,2.42) Q2 1.27 (0.67,2.20) 1.46 (0.83,2.42) Q3 1.06 (0.55,1.89) 1.11 (0.61,1.86) Q4 1.15 (0.61,1.97) 1.40 (0.78,2.33) Q5 1.10 (0.57,1.94) 1.27 (0.71,2.07) MiBP 1.00 1.00 0.22 (0.92 (0.46,1.66) 0.88 (0.47,1.56) Q3 1.10 (0.52,1.99) 0.87 (0.45,1.57) 0.44 1.21 (0.58,2.21) 0.81 (0.41,1.45) Q5 0.70 (0.32,1.32) 0.45 (0.22,0.84) MnBP 1.00 1.00 0.22,0.84 Q1 1.00 1.00 0.64,2.30) Q2 0.69 (0.34,1.81) 1.30 (0.64,2.30) Q4 0.92 (0.40,1.94) 1.32 (0.61,2.55) Q5 1.31 (0.55,2.75) 2.01 (0.90,3.96) MBzP 0.78 (0.39,1.34) 0.75	Phthalate						
Q2 1.27 (0.67,2.20) 1.46 (0.83,2.42) Q3 1.06 (0.55,1.89) 1.11 (0.61,1.86) Q4 1.15 (0.61,1.97) 1.40 (0.78,2.33) Q5 1.10 (0.57,1.94) 1.27 (0.71,2.07) MiBP 1.00 1.00 (0.71,2.07) Q2 0.92 (0.46,1.66) 0.88 (0.47,1.56) Q3 1.10 (0.52,1.99) 0.87 (0.45,1.57) Q4 1.21 (0.58,2.21) 0.81 (0.41,1.45) Q5 0.70 (0.32,1.32) 0.45 (0.22,0.84) MnBP 1.00 1.00 1.00 Q2 0.69 (0.34,1.30) 0.89 (0.44,1.59) Q3 0.93 (0.43,1.81) 1.30 (0.64,2.30) Q4 0.92 (0.40,1.94) 1.32 (0.61,2.55) Q5 1.31 (0.55,2.75) 2.01 (0.90,3.96) MBzP 1 1.00 1.00 (0.34,1.51) <td></td> <td></td> <td></td> <td></td> <td></td>							
Q3 1.06 (0.55,1.89) 1.11 (0.61,1.86) Q4 1.15 (0.61,1.97) 1.40 (0.78,2.33) Q5 1.10 (0.57,1.94) 1.27 (0.71,2.07) MiBP (0.47,1.56) (0.70) (0.47,1.56) Q1 1.00 0.88 (0.47,1.56) Q3 1.10 (0.52,1.99) 0.87 (0.45,1.57) Q4 1.21 (0.58,2.21) 0.81 (0.41,1.45) Q5 0.70 (0.32,1.32) 0.45 (0.22,0.84) MnBP 0.45 0.022,0.84 (0.22,0.84) MnBP 0.0 0.00 0.00 0.00 Q2 0.69 (0.34,1.30) 0.89 (0.44,1.59) Q3 0.93 (0.43,1.81) 1.30 (0.64,2.30) Q4 0.92 (0.40,1.94) 1.32 (0.61,2.55) Q5 1.31 (0.55,2.75) 2.01 (0.90,3.96) MBzP 0.00 1.00 0.00 0.00	Q1	1.00		1.00			
Q3 1.06 (0.55,1.89) 1.11 (0.61,1.86) Q4 1.15 (0.61,1.97) 1.40 (0.78,2.33) Q5 1.10 (0.57,1.94) 1.27 (0.71,2.07) MiBP (0.47,1.56) (0.70) (0.47,1.56) Q1 1.00 1.00 (0.45,1.57) Q2 0.92 (0.46,1.66) 0.88 (0.47,1.56) Q3 1.10 (0.52,1.99) 0.87 (0.45,1.57) Q4 1.21 (0.58,2.21) 0.81 (0.41,1.45) Q5 0.70 (0.32,1.32) 0.45 (0.22,0.84) MnBP 0.45 (0.22,0.84) (0.22,0.84) MnBP 0.69 (0.34,1.30) 0.89 (0.44,1.59) Q3 0.93 (0.43,1.81) 1.30 (0.64,2.30) Q4 0.92 (0.40,1.94) 1.32 (0.61,2.55) Q5 1.31 (0.55,2.75) 2.01 (0.90,3.96) MBzP 0.00 1.00 0.00 0.00 <	Q2	1.27	(0.67,2.20)	1.46	(0.83,2.42)		
Q5 1.10 (0.57,1.94) 1.27 (0.71,2.07) MiBP 1.00 1.00 1.00 Q2 0.92 (0.46,1.66) 0.88 (0.47,1.56) Q3 1.10 (0.52,1.99) 0.87 (0.45,1.57) Q4 1.21 (0.58,2.21) 0.81 (0.41,1.45) Q5 0.70 (0.32,1.32) 0.45 (0.22,0.84) MnBP 1.00 0.89 (0.44,1.59) Q1 1.00 0.89 (0.44,1.59) Q3 0.93 (0.43,1.81) 1.30 (0.64,2.30) Q4 0.92 (0.40,1.94) 1.32 (0.61,2.55) Q5 1.31 (0.55,2.75) 2.01 (0.90,3.96) MBzP 0 1.00 0.00 0.00 Q2 0.78 (0.39,1.34) 0.75 (0.38,1.30) Q3 0.72 (0.35,1.29) 0.85 (0.43,1.51) Q4 1.00 0.88 (0.37,1.71) 1.06 (0.47,2.00)	Q3	1.06		1.11			
MiBP Q1 1.00 1.00 Q2 0.92 (0.46,1.66) 0.88 (0.47,1.56) Q3 1.10 (0.52,1.99) 0.87 (0.45,1.57) Q4 1.21 (0.58,2.21) 0.81 (0.41,1.45) Q5 0.70 (0.32,1.32) 0.45 (0.22,0.84) MnBP 0.22 0.69 (0.34,1.30) 0.89 (0.44,1.59) Q3 0.93 (0.43,1.81) 1.30 (0.64,2.30) Q4 0.92 (0.40,1.94) 1.32 (0.61,2.55) Q5 1.31 (0.55,2.75) 2.01 (0.90,3.96) MBzP 0.78 (0.39,1.34) 0.75 (0.38,1.30) Q3 0.72 (0.35,1.29) 0.85 (0.43,1.51) Q4 1.00 (0.46,1.88) 1.09 (0.52,2.02) Q5 0.88 (0.37,1.71) 1.06 (0.47,2.00) ΣDEHP 0 1.00 0 0 Q2 1.58 (0.80,2.77) 1.70 (Q4	1.15	(0.61,1.97)	1.40	(0.78,2.33)		
Q1 1.00 1.00 (0.46,1.66) 0.88 (0.47,1.56) Q3 1.10 (0.52,1.99) 0.87 (0.45,1.57) Q4 1.21 (0.58,2.21) 0.81 (0.41,1.45) Q5 0.70 (0.32,1.32) 0.45 (0.22,0.84) MnBP (0.22,0.84) (0.22,0.84) (0.22,0.84) MnBP (0.22,0.84) (0.22,0.84) (0.22,0.84) MnBP (0.22,0.84) (0.22,0.84) Q1 1.00 (0.22,0.84) Q2 0.69 (0.34,1.30) 0.89 (0.44,1.59) Q3 0.93 (0.43,1.81) 1.30 (0.64,2.30) Q4 0.92 (0.40,1.94) 1.32 (0.61,2.55) Q5 1.31 (0.55,2.75) 2.01 (0.90,3.96) MBzP (0.1 1.00 (0.38,1.30) Q3 0.72 (0.35,1.29) 0.85 (0.43,1.51) Q4 1.00 (0.46,1.88) 1.09 (0.52,2.02) Q5 0.88	Q5	1.10	(0.57, 1.94)	1.27	(0.71,2.07)		
Q2 0.92 (0.46,1.66) 0.88 (0.47,1.56) Q3 1.10 (0.52,1.99) 0.87 (0.45,1.57) Q4 1.21 (0.58,2.21) 0.81 (0.41,1.45) Q5 0.70 (0.32,1.32) 0.45 (0.22,0.84) MnBP 01 1.00 0.45 (0.22,0.84) MnBP 01 1.00 0.44 0.92 (0.34,1.30) 0.89 (0.44,1.59) Q3 0.93 (0.43,1.81) 1.30 (0.64,2.30) (0.64,2.30) Q4 0.92 (0.40,1.94) 1.32 (0.61,2.55) (0.61,2.55) Q5 1.31 (0.55,2.75) 2.01 (0.90,3.96) (0.90,3.96) MBzP	MiBP						
Q3 1.10 (0.52,1.99) 0.87 (0.45,1.57) Q4 1.21 (0.58,2.21) 0.81 (0.41,1.45) Q5 0.70 (0.32,1.32) 0.45 (0.22,0.84) MnBP	Q1	1.00		1.00			
Q3 1.10 (0.52,1.99) 0.87 (0.45,1.57) Q4 1.21 (0.58,2.21) 0.81 (0.41,1.45) Q5 0.70 (0.32,1.32) 0.45 (0.22,0.84) MnBP	Q2	0.92	(0.46, 1.66)	0.88	(0.47,1.56)		
Q4 1.21 (0.58,2.21) 0.81 (0.41,1.45) Q5 0.70 (0.32,1.32) 0.45 (0.22,0.84) MnBP	Q3	1.10	(0.52, 1.99)	0.87			
Q5 0.70 (0.32,1.32) 0.45 (0.22,0.84) MnBP Q1 1.00 1.00 Q2 0.69 (0.34,1.30) 0.89 (0.44,1.59) Q3 0.93 (0.43,1.81) 1.30 (0.64,2.30) Q4 0.92 (0.40,1.94) 1.32 (0.61,2.55) Q5 1.31 (0.55,2.75) 2.01 (0.90,3.96) MBzP 01 1.00 (0.90,3.96) Q2 0.78 (0.39,1.34) 0.75 (0.38,1.30) Q3 0.72 (0.35,1.29) 0.85 (0.43,1.51) Q4 1.00 (0.46,1.88) 1.09 (0.52,2.02) Q5 0.88 (0.37,1.71) 1.06 (0.47,2.00) ∑DEHP 01 1.00 (0.87,2.92) Q3 2.26 (1.12,4.02) 2.54 (1.32,4.42) Q4 2.65 (1.34,4.70) 2.86 (1.45,5.00) Q5 2.99 (1.47,5.49) 4.08 (2.07,7.10)	Q4	1.21		0.81			
Q1 1.00 1.00 Q2 0.69 (0.34,1.30) 0.89 (0.44,1.59) Q3 0.93 (0.43,1.81) 1.30 (0.64,2.30) Q4 0.92 (0.40,1.94) 1.32 (0.61,2.55) Q5 1.31 (0.55,2.75) 2.01 (0.90,3.96) MBzP 0.75 (0.38,1.30) Q1 1.00 1.00 Q2 0.78 (0.39,1.34) 0.75 (0.38,1.30) Q3 0.72 (0.35,1.29) 0.85 (0.43,1.51) Q4 1.00 (0.46,1.88) 1.09 (0.52,2.02) Q5 0.88 (0.37,1.71) 1.06 (0.47,2.00) ΣDEHP 20 1.00 1.00 (0.87,2.92) Q3 2.26 (1.12,4.02) 2.54 (1.32,4.42) Q4 2.65 (1.34,4.70) 2.86 (1.45,5.00) Q5 2.99 (1.47,5.49) 4.08 (2.07,7.10) ΣDINP 21 1.00 1.00 (0.56,1.88) 0.88 (0.50,1.45) Q3 1.22 <t< td=""><td>Q5</td><td>0.70</td><td>(0.32,1.32)</td><td>0.45</td><td>(0.22,0.84)</td></t<>	Q5	0.70	(0.32,1.32)	0.45	(0.22,0.84)		
Q2 0.69 (0.34,1.30) 0.89 (0.44,1.59) Q3 0.93 (0.43,1.81) 1.30 (0.64,2.30) Q4 0.92 (0.40,1.94) 1.32 (0.61,2.55) Q5 1.31 (0.55,2.75) 2.01 (0.90,3.96) MBzP 01 1.00 1.00 Q2 0.78 (0.39,1.34) 0.75 (0.38,1.30) Q3 0.72 (0.35,1.29) 0.85 (0.43,1.51) Q4 1.00 (0.46,1.88) 1.09 (0.52,2.02) Q5 0.88 (0.37,1.71) 1.06 (0.47,2.00) ΣDEHP 20 1.00 1.00 (0.87,2.92) Q3 2.26 (1.12,4.02) 2.54 (1.32,4.42) Q4 2.65 (1.34,4.70) 2.86 (1.45,5.00) Q5 2.99 (1.47,5.49) 4.08 (2.07,7.10) ΣDINP 01 1.00 0.00 Q2 1.07 (0.56,1.88) 0.88 (0.50,1.45) <	MnBP						
Q3 0.93 (0.43,1.81) 1.30 (0.64,2.30) Q4 0.92 (0.40,1.94) 1.32 (0.61,2.55) Q5 1.31 (0.55,2.75) 2.01 (0.90,3.96) MBzP (0.39,1.34) 0.75 (0.38,1.30) Q2 0.78 (0.35,1.29) 0.85 (0.43,1.51) Q4 1.00 (0.46,1.88) 1.09 (0.52,2.02) Q5 0.88 (0.37,1.71) 1.06 (0.47,2.00) ∑DEHP 201 1.00 (0.87,2.92) Q3 2.26 (1.12,4.02) 2.54 (1.32,4.42) Q4 2.65 (1.34,4.70) 2.86 (1.45,5.00) Q5 2.99 (1.47,5.49) 4.08 (2.07,7.10) ∑DINP 2 1.00 1.00 Q2 1.07 (0.56,1.88) 0.88 (0.50,1.45) Q3 1.22 (0.63,2.12) 0.75 (0.41,1.25) Q4 1.03 (0.54,1.82) 0.57 (0.31,0.97)	Q1	1.00		1.00			
Q4 0.92 (0.40,1.94) 1.32 (0.61,2.55) Q5 1.31 (0.55,2.75) 2.01 (0.90,3.96) MBzP (0.90,3.96) Q1 1.00 (0.90,3.96) Q2 0.78 (0.39,1.34) 0.75 (0.38,1.30) Q3 0.72 (0.35,1.29) 0.85 (0.43,1.51) Q4 1.00 (0.46,1.88) 1.09 (0.52,2.02) Q5 0.88 (0.37,1.71) 1.06 (0.47,2.00) ∑DEHP (0.47,2.00) Q2 1.58 (0.80,2.77) 1.70 (0.87,2.92) Q3 2.26 (1.12,4.02) 2.54 (1.32,4.42) Q4 2.65 (1.34,4.70) 2.86 (1.45,5.00) Q5 2.99 (1.47,5.49) 4.08 (2.07,7.10) ∑DINP Q1 1.00 1.00	Q2	0.69	(0.34,1.30)	0.89	(0.44,1.59)		
Q5 1.31 (0.55,2.75) 2.01 (0.90,3.96) MBzP 01 1.00 1.00 Q2 0.78 (0.39,1.34) 0.75 (0.38,1.30) Q3 0.72 (0.35,1.29) 0.85 (0.43,1.51) Q4 1.00 (0.46,1.88) 1.09 (0.52,2.02) Q5 0.88 (0.37,1.71) 1.06 (0.47,2.00) ∑DEHP 1.00 1.00 (0.87,2.92) Q3 2.26 (1.12,4.02) 2.54 (1.32,4.42) Q4 2.65 (1.34,4.70) 2.86 (1.45,5.00) Q5 2.99 (1.47,5.49) 4.08 (2.07,7.10) ∑DINP 1.00 1.00 Q2 1.07 (0.56,1.88) 0.88 (0.50,1.45) Q3 1.22 (0.63,2.12) 0.75 (0.41,1.25) Q4 1.03 (0.54,1.82) 0.57 (0.31,0.97)	Q3	0.93	(0.43,1.81)	1.30	(0.64,2.30)		
MBzP Q1 1.00 1.00 Q2 0.78 (0.39,1.34) 0.75 (0.38,1.30) Q3 0.72 (0.35,1.29) 0.85 (0.43,1.51) Q4 1.00 (0.46,1.88) 1.09 (0.52,2.02) Q5 0.88 (0.37,1.71) 1.06 (0.47,2.00) ∑DEHP 1.00 1.00 (0.87,2.92) Q3 2.26 (1.12,4.02) 2.54 (1.32,4.42) Q4 2.65 (1.34,4.70) 2.86 (1.45,5.00) Q5 2.99 (1.47,5.49) 4.08 (2.07,7.10) ∑DINP 1.00 1.00 Q2 1.07 (0.56,1.88) 0.88 (0.50,1.45) Q3 1.22 (0.63,2.12) 0.75 (0.41,1.25) Q4 1.03 (0.54,1.82) 0.57 (0.31,0.97)	Q4	0.92	(0.40,1.94)	1.32	(0.61,2.55)		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Q5	1.31	(0.55,2.75)	2.01	(0.90,3.96)		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MBzP						
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Q1	1.00		1.00			
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Q2	0.78	(0.39, 1.34)	0.75	(0.38,1.30)		
Q5 0.88 (0.37,1.71) 1.06 (0.47,2.00) ∑DEHP 1.00 1.00 Q1 1.58 (0.80,2.77) 1.70 (0.87,2.92) Q3 2.26 (1.12,4.02) 2.54 (1.32,4.42) Q4 2.65 (1.34,4.70) 2.86 (1.45,5.00) Q5 2.99 (1.47,5.49) 4.08 (2.07,7.10) ∑DiNP 1.00 1.00 Q2 1.07 (0.56,1.88) 0.88 (0.50,1.45) Q3 1.22 (0.63,2.12) 0.75 (0.41,1.25) Q4 1.03 (0.54,1.82) 0.57 (0.31,0.97)	Q3	0.72		0.85	(0.43,1.51)		
ΣDEHP 1.00 Q1 1.00 Q2 1.58 (0.80,2.77) 1.70 (0.87,2.92) Q3 2.26 (1.12,4.02) 2.54 (1.32,4.42) Q4 2.65 (1.34,4.70) 2.86 (1.45,5.00) Q5 2.99 (1.47,5.49) 4.08 (2.07,7.10) ΣDINP 201 1.00 1.00 Q2 1.07 (0.56,1.88) 0.88 (0.50,1.45) Q3 1.22 (0.63,2.12) 0.75 (0.41,1.25) Q4 1.03 (0.54,1.82) 0.57 (0.31,0.97)	Q4	1.00	(0.46,1.88)	1.09	(0.52,2.02)		
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Q5	0.88	(0.37,1.71)	1.06	(0.47,2.00)		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	∑DEHP						
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Q1	1.00		1.00			
Q4 2.65 (1.34,4.70) 2.86 (1.45,5.00) Q5 2.99 (1.47,5.49) 4.08 (2.07,7.10) ∑DiNP 1.00 1.00 Q2 1.07 (0.56,1.88) 0.88 (0.50,1.45) Q3 1.22 (0.63,2.12) 0.75 (0.41,1.25) Q4 1.03 (0.54,1.82) 0.57 (0.31,0.97)	Q2	1.58	(0.80,2.77)	1.70	(0.87,2.92)		
Q5 2.99 (1.47,5.49) 4.08 (2.07,7.10) ΣDINP 1.00 1.00 Q2 1.07 (0.56,1.88) 0.88 (0.50,1.45) Q3 1.22 (0.63,2.12) 0.75 (0.41,1.25) Q4 1.03 (0.54,1.82) 0.57 (0.31,0.97)	Q3	2.26	(1.12,4.02)	2.54	(1.32,4.42)		
Q5 2.99 (1.47,5.49) 4.08 (2.07,7.10) ΣDINP 1.00 1.00 Q2 1.07 (0.56,1.88) 0.88 (0.50,1.45) Q3 1.22 (0.63,2.12) 0.75 (0.41,1.25) Q4 1.03 (0.54,1.82) 0.57 (0.31,0.97)	Q4	2.65	(1.34,4.70)	2.86	(1.45,5.00)		
Q1 1.00 1.00 Q2 1.07 (0.56,1.88) 0.88 (0.50,1.45) Q3 1.22 (0.63,2.12) 0.75 (0.41,1.25) Q4 1.03 (0.54,1.82) 0.57 (0.31,0.97)	Q5	2.99	(1.47,5.49)	4.08	(2.07,7.10)		
Q1 1.00 1.00 Q2 1.07 (0.56,1.88) 0.88 (0.50,1.45) Q3 1.22 (0.63,2.12) 0.75 (0.41,1.25) Q4 1.03 (0.54,1.82) 0.57 (0.31,0.97)	∑DiNP						
Q2 1.07 (0.56,1.88) 0.88 (0.50,1.45) Q3 1.22 (0.63,2.12) 0.75 (0.41,1.25) Q4 1.03 (0.54,1.82) 0.57 (0.31,0.97)		1.00		1.00			
Q3 1.22 (0.63,2.12) 0.75 (0.41,1.25) Q4 1.03 (0.54,1.82) 0.57 (0.31,0.97)		1.07	(0.56, 1.88)	0.88	(0.50,1.45)		
Q4 1.03 (0.54,1.82) 0.57 (0.31,0.97)	Q3				, , ,		
	Q5	0.88		0.45			

Models adjusted for child sex, mother's age, mother's education level, mother's marital status, mother's smoking status, parity, maternal depression during pregnancy (with and without adjustment for year of birth)

Table S2. Sensitivity Analyses using alternate model specifications for associations between phthalates and ADHD in a Nested Case-Control Study of Attention-deficit Hyperactivity Disorder in the Norwegian Mother and Child Cohort, 2003-2008

	phthalate		Simultaneous Adjustment for all phthalates with specific gravity included as a covariate			
Phthalate	OR	95% CI	OR	95% CI		
MEP						
Q1	1.00		1.00			
Q2	1.27	(0.68,2.15)	0.66	(0.34,1.15)		
Q3	1.12	(0.60,1.91)	1.31	(0.69,2.39)		
Q4	1.27	(0.67,2.15)	0.70	(0.36,1.25)		
Q5	1.19	(0.62,2.03)	1.18	(0.60,2.12)		
MiBP						
Q1	1.00		1.00			
Q2	0.90	(0.46,1.57)	1.29	(0.63,2.40)		
Q3	1.23	(0.66,2.13)	1.03	(0.47,2.02)		
Q4	1.51	(0.79,2.57)	0.87	(0.36,1.69)		
Q5	1.08	(0.55, 1.86)	1.00	(0.41,2.14)		
MnBP						
Q1	1.00		1.00			
Q2	0.68	(0.35,1.16)	0.82	(0.38,1.52)		
Q3	1.07	(0.55, 1.86)	0.67	(0.27,1.45)		
Q4	1.09	(0.58,1.81)	1.57	(0.62,3.50)		
Q5	1.58	(0.83,2.74)	1.23	(0.41,2.74)		
MBzP						
Q1	1.00		1.00			
Q2	0.85	(0.44,1.48)	1.22	(0.61,2.23)		
Q3	0.86	(0.44,1.50)	0.73	(0.32,1.48)		
Q4	1.30	(0.68,2.22)	0.80	(0.32,1.69)		
Q5	1.31	(0.69,2.27)	1.04	(0.38,2.33)		
∑DEHP						
Q1	1.00		1.00			
Q2	1.44	(0.74,2.56)	1.97	(0.95,3.62)		
Q3	1.92	(1.01,3.37)	1.68	(0.77,3.26)		
Q4	2.40	(1.24,4.11)	3.80	(1.65,7.80)		
Q5	2.73	(1.43,4.78)	3.35	(1.38,6.96)		
∑DiNP						
Q1	1.00		1.00			
Q2	1.07	(0.60, 1.79)	0.86	(0.43,1.47)		
Q3	1.36	(0.73,2.03)	0.83	(0.42,1.48)		
Q4	1.20	(0.64,2.00)	0.80	(0.37,1.50)		
Q5	1.13	(0.60,1.97)	0.45	(0.20,0.89)		

Models adjusted for batch, specific gravity, child sex, mother's age, mother's education level, mother's marital status, mother's smoking status, parity, maternal depression during pregnancy, birth year

Table S3. Sensitivity Analyses using alternate model specifications for associations between phthalates and ADHD in a Nested Case-Control Study of Attention-deficit Hyperactivity Disorder in the Norwegian Mother and Child Cohort, 2003-2008

		eous adjustment for V phthalates	Simultaneous Adjustment for only LMW phthalates			
Phthalate	OR	95% CI	OR	95% CI		
MEP	_					
Q1			1.00			
Q2			1.27	(0.70,2.16)		
Q3			1.04	(0.56,1.79)		
Q4			1.15	(0.63,1.98)		
Q5			1.11	(0.60,1.92)		
MiBP						
Q1			1.00			
Q2			0.89	(0.46,1.54)		
Q3			1.13	(0.56,2.02)		
Q4			1.25	(0.60,2.32)		
Q5			0.79	(0.38,1.52)		
MnBP						
Q1			1.00			
Q2			0.70	(0.36,1.25)		
Q3			1.10	(0.55,2.01)		
Q4			1.10	(0.53,2.02)		
Q5			1.69	(0.80,3.16)		
MBzP						
Q1	1.00					
Q2	0.71	(0.38,1.23)				
Q3	0.67	(0.35,1.18)				
Q4	0.93	(0.49,1.62)				
Q5	0.87	(0.43,1.56)				
∑DEHP						
Q1	1.00					
Q2	1.55	(0.80,2.74)				
Q3	2.21	(1.12,3.98)				
Q4	2.64	(1.34,4.66)				
Q5	3.06	(1.51,5.57)				
∑DiNP						
Q1	1.00					
Q2	1.06	(0.57,1.80)				
Q3	1.20	(0.64,2.06)				
Q4	1.02	(0.54,1.72)				
Q5	0.87	(0.45,1.52)				

Models adjusted for batch, specific gravity, child sex, mother's age, mother's education level, mother's marital status, mother's smoking status, parity, maternal depression during pregnancy, birth year

Table S4. Sensitivity Analyses adjusting for urine collection month and year for associations between phthalates and ADHD in a Nested Case-Control Study of Attention-deficit Hyperactivity Disorder in the Norwegian Mother and Child Cohort, 2003-2008

Phthalate	OR	95% CI
MEP		
Q1	1.00	
Q2	1.28	(0.67,2.17)
Q3	1.03	(0.54,1.76)
Q4	1.18	(0.65,2.00)
Q5	1.19	(0.62,2.06)
MiBP		
Q1	1.00	
Q2	0.95	(0.49,1.70)
Q3	1.25	(0.64,2.21)
Q4	1.22	(0.60,2.20)
Q5	0.69	(0.31,1.30)
MnBP		
Q1	1.00	
Q2	0.71	(0.34,1.31)
Q3	0.97	(0.45,1.86)
Q4	1.05	(0.47,2.09)
Q5	1.45	(0.62,3.01)
MBzP		
Q1	1.00	
Q2	0.78	(0.38,1.36)
Q3	0.74	(0.36,1.36)
Q4	0.96	(0.44,1.81)
Q5	0.87	(0.38,1.77)
∑DEHP		
Q1	1.00	
Q2	1.73	(0.87,3.07)
Q3	2.37	(1.19,4.22)
Q4	2.57	(1.30,4.67)
Q5	3.38	(1.61,6.08)
∑DiNP		
Q1	1.00	
Q2	1.05	(0.55,1.84)
Q3	1.25	(0.66,2.17)
Q4	0.95	(0.50,1.65)
Q5	0.90	(0.47,1.61)

Models adjusted for batch, specific gravity, child sex, mother's age, mother's education level, mother's marital status, mother's smoking status, parity, maternal depression during pregnancy, birth year

Table S5. Natural Direct Effect (NDE) and Natural Indirect Effect (NIE) Odds Ratios and 95% Confidence Intervals for Mediation of ∑DEHP by Thyroid Hormones and Preterm Delivery

Model Parameter	No Interaction				Interaction			
	NDEb		NIE		NDE ^b		NIE	
	OR	95% CI	OR	95% CI	OR	95% CI	OR	95% CI
Low Thyroxine (T4) ^a	1.14	(0.78,1.66)	0.99	(0.93,1.04)	1.47	(0.87,2.50)	0.97	(0.85,1.10)
High Thyroxine (T4) ^a	2.15	(1.42, 3.26)	1.00	(0.99,1.01)	1.44	(1.11,1.87)	0.99	(0.96,1.03)

^aMediation models adjusted for iodine intake (dichotomized at 150), mother's age, mother's smoking status, parity, and year of birth and outcome models adjusted for child sex, mother's age, mother's education level, mother's marital status, mother's smoking status, parity, maternal depression during pregnancy, and year of birth.

^bThe NDE is conditional on values of the mediator model covariates. For the thyroid hormones, the NDEs are computed for the following covariate specifications: iodine deficient (less than or equal to 150), sample average maternal age, non-smoking mother, non-primiparous, and year of birth 2005. For preterm delivery, the NDEs are computed for the following covariate specifications: sample average maternal age, married mother, non-smoking mother, and year of birth 2005.