

**Birth Outcomes and Prenatal Exposure to Ozone, Carbon Monoxide, and
Particulate Matter: Results from the Children's Health Study**

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Supplemental Material

Table S1: Effects of air pollutants on birth weight from single pollutant models further adjusted for temperature, elevation, and season of birth^a.

	Interquartile range	Birth weight ^b	(95% CI)	<i>p</i> -value
Entire Pregnancy				
O ₃ [10-6]	26 ppb	-38.4	(-68.9, -8.0)	0.01
O ₃ [24hour]	12 ppb	-43.0	(-71.1, -14.8)	0.003
PM ₁₀	18 µg/m ³	-11.7	(-38.1, 14.7)	0.39
NO ₂	25 ppb	-6.7	(-37.7, 24.3)	0.67
CO	1.2 ppm	-8.4	(-35.3, 18.4)	0.54
First Trimester				
O ₃ [10-6]	33 ppb	-19.1	(-48.5, 10.4)	0.20
O ₃ [24hour]	17 ppb	-32.4	(-63.9, -1.0)	0.04
PM ₁₀	20 µg/m ³	-1.4	(-24.3, 21.5)	0.90
NO ₂	25 ppb	0.4	(-27.6, 28.3)	0.98
CO	1.4 ppm	-15.5	(-43.7, 12.7)	0.28
Second Trimester				
O ₃ [10-6]	29 ppb	-32.5	(-60.6, -4.5)	0.02
O ₃ [24hour]	16 ppb	-37.9	(-69.4, -6.4)	0.02
PM ₁₀	19 µg/m ³	-23.8	(-47.7, 0.0)	0.05
NO ₂	25 ppb	-9.2	(-37.3, 18.9)	0.52
CO	1.4 ppm	-5.8	(-33.7, 22.0)	0.68
Third Trimester				
O ₃ [10-6]	33 ppb	-35.5	(-66.4, -4.6)	0.02
O ₃ [24hour]	17 ppb	-28.3	(-63.6, 7.0)	0.12
PM ₁₀	20 µg/m ³	-17.9	(-42.2, 6.4)	0.15
NO ₂	25 ppb	-18.9	(-47.4, 9.6)	0.20
CO	1.3 ppm	-8.4	(-35.4, 18.7)	0.55

^aFixed covariates included maternal age, months since last live birth, parity, maternal smoking during pregnancy, socioeconomic status, marital status at childbirth, maternal diabetes, gestational age with quadratic and cubic terms, child's sex, race/ethnicity, school grade, temperature, elevation, and season of birth. Study community of subject at study entry was included as a random effect. The adjusted analyses also included 6 terms for the basis matrix of a

b-spline on Julian day of birth. The b-spline included 3 knots at days 91, 183, and 274. First trimester was defined as gestational age 0-12 weeks, second trimester was 13-27 weeks, and third trimester was 28-delivery.

^bMinus sign denotes reduction in mean birth weight.

Table S2. Distance from Maternal Birth Residence to Nearest Monitoring Station.

	(percent of exposure data)		
	<5km	5-25km	>25km ^a
O ₃ [10-6]	39.9	52.6	7.6
O ₃ [24hour]	40.6	52.0	7.4
PM ₁₀	41.0	56.1	2.8
NO ₂	29.2	61.3	9.6
CO	41.1	51.2	7.7

^aThe maximum distance from a maternal birth residence to a monitoring station was 50 km for all exposure components except ozone, which was 100 km.