

Supplementary material for

Intrauterine and early postnatal exposure to outdoor air pollution and lung function at preschool age

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Table S1. Data from each campaign and predictor variables of air pollution assessment in pregnancy and during the first year of life.

	Area of study	
	Sabadell	Gipuzkoa
Region	Catalonia	Basque Country
Extension (km²) of the area	38	519
Number of municipalities	1	26
Reference population	200000	90000
Description	Composed of a mainly urban area	The area is divided into three narrow valleys that have a high grade of unevenness. Metallurgy is the principal industrial activity
Recruited pregnant women (early pregnancy)	657	638
Study population (at delivery)	563	573
NO₂		
No. Passive samplers	57	85
Date campaigns	April 05 June 05 October 05 March 06	February 07 June 07
Predictor variables	Altitude Urban or industrial land cover (500 m-buffer) Road type (minor, major, secondary road)	Altitude (3 cat) Valley factor Distance to nearest road a (MDI ^b >20000) Urban land cover (100 m-buffer) Industrial land cover (300 m-buffer)
R ² model	0.75	0.51
Number of fixed stations (prenatal period)	1	2
Number of fixed stations (postnatal period)	1	2
Pollutant used to correct for seasonality	NO ₂	NO ₂
Benzene		
No. Passive samplers	57	85
Date campaigns	April 05 October 05 March 06	February 07 June 07
Predictor variables	Road type (High/medium/low traffic) Inhabitants (50 m-buffer) Urban land cover (300 m-buffer) Number of buildings (500 m-buffer)	Valley factor Distance to nearest road a (MDI ^b >20000) Urban land cover (100 m-buffer) Distance to industry
R ² model	0.72	0.44
Number of fixed stations (prenatal period)	1	2
Number of fixed stations (postnatal period)	1	2
Pollutant used to correct for seasonality ^a	NO ₂	NO ₂

^aDue to the lack of benzene measurements in many stations and high missing data in those stations measuring benzene, we used the pollutant that exhibited the highest correlation with benzene for temporal adjustment.

^bMDI: Mean daily traffic count

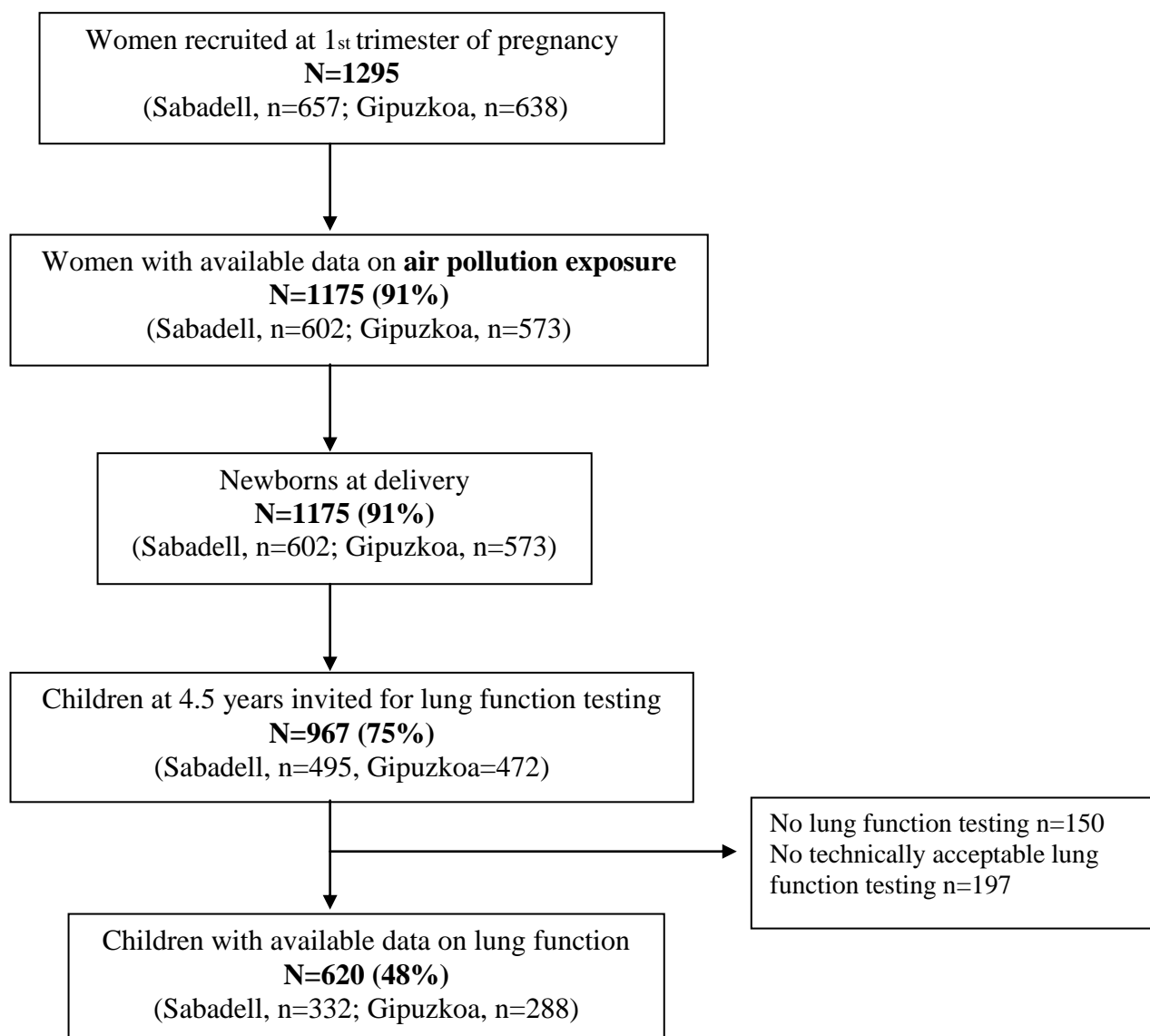
Figure S1. Flow chart of study population.

Table S2. Comparison of included with excluded participants.

Variables	Included n=620	Excluded n=555	p value
Male sex, (%)	52.1	48.6	0.226
Birth weight, mean (sd)	3266.4 (426.9)	3278.7 (470.2)	0.641
Preterm (<37 weeks), yes (%)	2.8	4.2	0.188
Siblings at birth, yes (%)	41.0	46.3	0.065
Day care attendance, yes (%)	41.6	34.5	0.020
Maternal age at birth, mean (sd)	31.1 (3.7)	30.5 (4.3)	0.014
Parity			
0	57.9	52.3	0.051
1+	42.1	47.7	
Maternal education level (%)			
Primary or less	19.0	23.5	0.007
Secondary	36.6	40.9	
University	44.4	35.6	
Maternal social class (%)			
I+II	28.5	21.3	<0.001
III	31.3	25.6	
IV+V	40.2	53.1	
Maternal pre-pregnancy BMI, (kg/m ²)			
<18.5	5.0	4.3	0.445
18.5-25	73.4	70.4	
25-30	15.2	18.6	
>30	6.4	6.7	
Maternal smoking in pregnancy, yes (%)	14.1	14.3	0.898
Father smoking in pregnancy, yes (%)	33.7	36.3	0.360
ETS			
0-14 mo., yes (%)	15.2	14.5	0.730
36-48 mo., yes (%)	47.4	46.7	0.856
Maternal allergic history ^a , yes (%)	28.8	27.9	0.753
Father allergic history ^a , yes (%)	25.9	21.4	0.077
Predominant breastfeeding (wks.) (%)			
0	17.8	21.3	0.306
>0-16	33.8	30.3	
16-24	36.1	38.0	
>24	12.2	10.3	
Type of cooker in the home at 14 mo. (%)			
Gas (natural gas or butane)	36.9	37.2	0.825
Electric	61.8	61.9	
Others	1.3	0.9	
Pets at home at 14mo., yes (%)	25.9	23.5	0.368
Dampness at home at 14mo., yes (%)	7.1	10.4	0.064
LRTI from birth to 14 mo., yes (%)	40.3	32.5	0.007
Wheezing from birth to 14 mo., yes (%)	36.3	30.7	0.049
Current ^b wheezing at 4y, yes (%)	19.7	13.2	0.021
Medication use for wheezing at 4y, yes (%)	13.3	8.6	0.057
Current ^c asthma at 4 years*, yes (%)	15.5	9.8	0.030
Allergic status at age 4 years ^a , yes n (%)	25.8	23.5	0.523

ETS: environmental tobacco smoke; LRTI: lower respiratory tract infections

^a Suffering from allergic asthma, atopic dermatitis, eczema or allergic rhinitis. ^b During the last 12 months.

^c Doctor-diagnosis of asthma or medication use for wheezing at 4 years of age.

Table S3. Distribution of estimated residential outdoor air pollutants by area of study.

	Sabadell		Gipuzkoa		p value
	N	Median (IQR)	N	Median (IQR)	
Benzene ($\mu\text{g}/\text{m}^3$)					
Entire pregnancy	332	0.77 (0.64, 0.94)	286	0.78 (0.66, 0.98)	0.100
First trimester	332	0.80 (0.63, 0.98)	286	0.82 (0.61, 0.99)	0.582
Second trimester	332	0.78 (0.60, 0.95)	286	0.81 (0.65, 0.98)	0.042
Third trimester	332	0.80 (0.64, 0.99)	286	0.81 (0.67, 1.00)	0.157
First year of life	326	0.84 (0.68, 0.98)	286	0.84 (0.70, 1.04)	0.099
NO₂ ($\mu\text{g}/\text{m}^3$)					
Entire pregnancy	332	30.7 (26.7, 35.7)	288	16.9 (13.6, 21.7)	<0.001
First trimester	332	32.0 (25.7, 37.9)	288	17.0 (13.1, 21.5)	<0.001
Second trimester	332	31.6 (25.0, 37.9)	288	17.3 (13.5, 21.7)	<0.001
Third trimester	332	32.0 (24.7, 36.9)	288	16.9 (13.6, 22.1)	<0.001
First year of life	326	32.4 (28.6, 37.0)	288	19.6 (15.3, 25.6)	<0.001
Recent exposure ^a	361	41.1 (33.7, 46.3)	288	16.1 (13.4, 17.7)	<0.001
Current exposure ^b	361	39.2 (30.4, 52.7)	238	16.0 (12.3, 20.7)	<0.001
NO_x ($\mu\text{g}/\text{m}^3$)					
Recent exposure ^a	361	66.8 (55.0, 77.4)	288	31.6 (27.1, 35.2)	<0.001
Current exposure ^b	361	57.1 (40.3, 88.2)	238	31.3 (22.4, 47.2)	<0.001

^aOne-year average before lung function testing. ^bOne-week average before lung function testing.
IQR: interquartile range (P25-P75).

Table S4. Correlation* between air pollutants, all subjects.

	Benzene entire pregnancy	Benzene first trimester	Benzene second trimester	Benzene third trimester	Benzene first year of life	NO ₂ entire pregnancy	NO ₂ first trimester	NO ₂ second trimester	NO ₂ third trimester	NO ₂ first year of life	NO ₂ recent	NO ₂ current	NO _x recent	NO _x current
Benzene entire pregnancy	1.00													
Benzene first trimester	0.82	1.00												
Benzene second trimester	0.87	0.81	1.00											
Benzene third trimester	0.93	0.73	0.77	1.00										
Benzene first year of life	0.84	0.69	0.72	0.73	1.00									
NO ₂ entire pregnancy	0.43	0.36	0.36	0.40	0.30	1.00								
NO ₂ first trimester	0.37	0.55	0.35	0.30	0.27	0.90	1.00							
NO ₂ second trimester	0.40	0.36	0.52	0.32	0.28	0.91	0.82	1.00						
NO ₂ third trimester	0.42	0.30	0.30	0.52	0.25	0.93	0.78	0.79	1.00					
NO ₂ first year of life	0.38	0.33	0.31	0.31	0.42	0.93	0.85	0.85	0.82	1.00				
NO ₂ recent ^a	0.16	0.12	0.09	0.12	0.18	0.77	0.70	0.69	0.70	0.76	1.00			
NO ₂ current ^b	0.17	0.12	0.14	0.17	0.14	0.67	0.58	0.63	0.64	0.62	0.85	1.00		
NO _x recent ^a	0.22	0.18	0.16	0.18	0.23	0.75	0.68	0.68	0.68	0.74	0.97	0.84	1.00	
NO _x current ^b	0.20	0.14	0.18	0.23	0.17	0.51	0.43	0.47	0.52	0.48	0.66	0.89	0.71	1.00

*Pearson correlation coefficients. ^aOne-year average before lung function testing. ^bOne-week average before lung function testing.

Table S5. Correlation* between air pollutants by area of study.

SABADELL AREA														
	Benzene entire pregnancy	Benzene first trimester	Benzene second trimester	Benzene third trimester	Benzene first year of life	NO ₂ entire pregnancy	NO ₂ first trimester	NO ₂ second trimester	NO ₂ third trimester	NO ₂ first year of life	NO ₂ recent	NO ₂ current	NO _x recent	NO _x current
Benzene entire pregnancy	1.00													
Benzene first trimester	0.87	1.00												
Benzene second trimester	0.87	0.67	1.00											
Benzene third trimester	0.88	0.64	0.63	1.00										
Benzene first year of life	0.89	0.82	0.80	0.72	1.00									
NO ₂ entire pregnancy	0.74	0.62	0.65	0.66	0.61	1.00								
NO ₂ first trimester	0.62	0.79	0.46	0.42	0.56	0.83	1.00							
NO ₂ second trimester	0.60	0.42	0.80	0.40	0.53	0.84	0.60	1.00						
NO ₂ third trimester	0.63	0.39	0.41	0.80	0.46	0.86	0.56	0.56	1.00					
NO ₂ first year of life	0.63	0.58	0.59	0.49	0.73	0.87	0.78	0.77	0.66	1.00				
NO ₂ recent	0.48	0.41	0.44	0.41	0.49	0.60	0.50	0.52	0.50	0.62	1.00			
NO ₂ current	0.37	0.24	0.36	0.36	0.35	0.43	0.27	0.40	0.40	0.41	0.71	1.00		
NO _x recent	0.48	0.42	0.44	0.41	0.49	0.59	0.50	0.51	0.49	0.62	0.97	0.70	1.00	
NO _x current	0.31	0.18	0.27	0.34	0.31	0.35	0.21	0.29	0.37	0.35	0.60	0.91	0.64	1.00
GIPUZKOA AREA														
	Benzene entire pregnancy	Benzene first trimester	Benzene second trimester	Benzene third trimester	Benzene first year of life	NO ₂ entire pregnancy	NO ₂ first trimester	NO ₂ second trimester	NO ₂ third trimester	NO ₂ first year of life	NO ₂ recent	NO ₂ current	NO _x recent	NO _x current
Benzene entire pregnancy	1.00													
Benzene first trimester	0.74	1.00												
Benzene second trimester	0.87	0.95	1.00											
Benzene third trimester	0.98	0.79	0.93	1.00										
Benzene first year of life	0.76	0.55	0.63	0.72	1.00									
NO ₂ entire pregnancy	0.66	0.46	0.54	0.64	0.42	1.00								
NO ₂ first trimester	0.50	0.75	0.69	0.55	0.31	0.78	1.00							
NO ₂ second trimester	0.59	0.69	0.71	0.64	0.35	0.88	0.95	1.00						
NO ₂ third trimester	0.66	0.52	0.61	0.68	0.40	0.98	0.82	0.93	1.00					
NO ₂ first year of life	0.52	0.37	0.41	0.48	0.57	0.88	0.70	0.76	0.84	1.00				
NO ₂ recent ^a	0.28	0.21	0.23	0.26	0.25	0.38	0.31	0.34	0.37	0.38	1.00			
NO ₂ current ^b	0.31	0.46	0.46	0.37	0.06	0.34	0.49	0.49	0.40	0.16	0.62	1.00		
NO _x recent ^a	0.30	0.25	0.26	0.28	0.21	0.40	0.34	0.37	0.39	0.36	0.99	0.67	1.00	
NO _x current ^b	0.26	0.39	0.44	0.34	0.03	0.26	0.40	0.45	0.34	0.08	0.44	0.88	0.47	1.00

^aOne-year average before lung function testing. ^bOne-week average before lung function testing.

Table S6. Associations of lung function parameters at age 4.5 years with temporally unadjusted levels of air pollutants in utero and during the first year of life.

Exposure	FVC (ml)			FEV ₁ (ml)			PEF (ml/s)			FEF ₂₅₋₇₅ (ml/s)		
	Coef	(95% CI)	p value	Coef	(95% CI)	p value	Coef	(95% CI)	p value	Coef	(95% CI)	p value
Benzene												
Entire pregnancy	-5.8	(-19.5, 8.0)	0.414	-9.4	(-21.4, 2.5)	0.122	-15.4	(-49.4, 18.6)	0.374	-27.0	(-53.9, -0.04)	0.050
First year of life	-3.9	(-22.2, 14.3)	0.670	-9.0	(-25.0, 6.9)	0.266	-8.7	(-53.9, 36.3)	0.702	-25.5	(-61.4, 10.4)	0.163
NO₂												
Entire pregnancy	-18.3	(-48.2, 11.7)	0.231	-21.6	(-47.7, 4.5)	0.104	-32.8	(-106.9, 41.1)	0.384	-59.1	(-117.7, -0.4)	0.048
First year of life	-16.4	(-47.0, 14.1)	0.290	-20.4	(-47.1, 6.3)	0.134	-22.2	(-97.7, 53.3)	0.564	-49.5	(-109.6, 10.6)	0.106

Coef (95% CI): Coefficient and 95% Confidence interval for an interquartile range (IQR) increase in exposure estimated by linear regression models.

All models adjusted for area of study, child's sex, and child's age, height and weight at assessment and ethnic background, birth weight, maternal social class, maternal education level, maternal smoking in pregnancy and paternal smoking in pregnancy, ETS 0-14 months, and LRTI 0-14 months.

Table S7. Associations of FEV₁ at age 4.5 years with air pollutants by area of study.

Exposure	Sabadell area				Gipuzkoa area			
	N	Coef	(95% CI)	p value	N	Coef	(95% CI)	p value
Benzene								
Entire pregnancy	313	-16.7	(-39.5, 6.1)	0.151	253	-17.2	(-41.2, 6.8)	0.159
First trimester		-11.8	(-34.6, 10.9)	0.306		-16.7	(-39.9, 6.5)	0.157
Second trimester		-19.9	(-43.6, 3.8)	0.099		-17.4	(-38.8, 3.9)	0.109
Third trimester		-11.6	(-35.0, 11.8)	0.331		-17.7	(-41.0, 5.6)	0.136
First year of life	307	-16.1	(-38.3, 6.1)	0.155		-1.2	(-24.9, 22.5)	0.922
NO₂								
Entire pregnancy	313	-13.0	(-34.2, 8.1)	0.226	254	-24.2	(-49.2, 0.8)	0.058
First trimester		-8.6	(-32.3, 15.0)	0.472		-22.3	(-44.6, 0.7)	0.051
Second trimester		-16.9	(-42.1, 8.3)	0.189		-25.2	(-47.5, -2.8)	0.027
Third trimester		-9.9	(-33.2, 13.4)	0.402		-25.6	(-50.6, -0.6)	0.045
First year of life	307	-9.9	(-29.2, 9.2)	0.307		-16.4	(-46.6, 13.8)	0.285
Recent exposure ^a	313	-15.1	(-37.8, 7.6)	0.191	254	-13.6	(-35.7, 8.4)	0.224
Current exposure ^b	313	-6.2	(-33.7, 21.2)	0.655	211	-9.2	(-40.9, 22.4)	0.565
NO_x								
Recent exposure ^a	313	-10.6	(-28.6, 7.5)	0.250	254	-14.3	(-36.2, 7.7)	0.202
Current exposure ^b	313	-0.1	(-21.0, 20.8)	0.990	211	-7.9	(-40.8, 24.9)	0.634

Coef (95% CI): Coefficient and 95% Confidence interval for an interquartile range (IQR) increase in exposure estimated by linear regression models.

^aOne-year average before lung function testing. ^bOne-week average before lung function testing.

All models adjusted for child's sex, and child's age, height and weight at assessment and ethnic background, birth weight, maternal social class, maternal education level, maternal smoking in pregnancy and paternal smoking in pregnancy, ETS 0-14 months, and LRTI 0-14 months.

Table S8. Associations of residential air pollutants for a given increase in exposure (1 $\mu\text{g}/\text{m}^3$ for benzene and 10 $\mu\text{g}/\text{m}^3$ for NO_2 and NO_x) with lung function parameters at age 4.5 years.

Exposure	FVC (ml)			FEV ₁ (ml)			PEF (ml/s)			FEF ₂₅₋₇₅ (ml/s)		
	Coef	(95% CI)	p value	Coef	(95% CI)	p value	Coef	(95% CI)	p value	Coef	(95% CI)	p value
Benzene (per 1 $\mu\text{g}/\text{m}^3$ increase)												
Entire pregnancy (n=566)	-48.3	(-109.6, 13.0)	0.123	-52.7	(-106.2, 0.8)	0.054	-69.6	(-221.4, 82.2)	0.368	-105.3	(-225.8, 15.2)	0.087
First trimester	-28.1	(-79.1, 22.9)	0.280	-37.0	(-81.5, 7.5)	0.103	-73.2	(-199.3, 52.9)	0.254	-61.8	(-162.1, 38.5)	0.227
Second trimester	-50.6	(-103.4, 2.1)	0.060	-51.9	(-97.9, -5.9)	0.027	-127.5	(-257.9, 2.9)	0.055	-81.1	(-185.0, 22.7)	0.125
Third trimester	-40.6	(-95.5, 14.3)	0.147	-40.4	(-88.3, 7.5)	0.099	-46.9	(-182.8, 88.9)	0.497	-72.4	(-180.3, 35.6)	0.188
First year of life (n=560)	-10.0	(-67.5, 47.5)	0.733	-27.5	(-77.7, 22.8)	0.283	-26.9	(-169.0, 115.1)	0.710	-77.9	(-191.1, 35.1)	0.176
NO₂ (per 10 $\mu\text{g}/\text{m}^3$ increase)												
Entire pregnancy (n=567)	-20.3	(-41.0, 0.5)	0.055	-18.3	(-36.4, -0.2)	0.048	-18.9	(-70.3, 32.6)	0.471	-31.4	(-72.3, 9.5)	0.132
First trimester	-11.9	(-29.2, 5.4)	0.177	-12.2	(-27.3, 2.9)	0.113	-15.2	(-58.0, 27.6)	0.486	-18.7	(-52.8, 15.3)	0.280
Second trimester	-20.3	(-37.9, -2.7)	0.024	-17.4	(-32.8, -2.0)	0.027	-38.2	(-81.8, 5.4)	0.086	-22.5	(-57.3, 12.2)	0.203
Third trimester	-15.6	(-33.2, 2.1)	0.085	-13.3	(-28.8, 2.1)	0.090	-10.9	(-54.7, 32.9)	0.626	-21.4	(-56.2, 13.4)	0.228
First year of life (n=561)	-9.8	(-30.0, 10.4)	0.342	-13.1	(-30.8, 4.5)	0.145	-14.3	(-64.3, 35.7)	0.574	-32.4	(-72.2, 7.4)	0.111
Recent exposure ^a (n=567)	-14.0	(-31.7, 3.3)	0.113	-12.7	(-20.8, 2.6)	0.104	-1.0	(-44.5, 42.4)	0.963	-24.8	(-59.4, 9.7)	0.159
Current exposure ^b (n=524)	-7.9	(-19.6, 3.8)	0.186	-3.4	(-13.7, 6.7)	0.504	-8.6	(-37.2, 19.9)	0.553	-2.4	(-25.3, 20.4)	0.835
NO_x (per 10 $\mu\text{g}/\text{m}^3$ increase)												
Recent exposure ^a (n=567)	-6.4	(-14.4, 1.5)	0.113	-5.1	(-12.1, 1.8)	0.148	1.6	(-18.2, 21.4)	0.874	-9.7	(-25.4, 6.1)	0.228
Current exposure ^b (n=524)	-2.2	(-6.4, 1.9)	0.289	-0.5	(-4.1, 3.1)	0.790	-4.8	(-14.9, 5.3)	0.353	-0.8	(-8.8, 7.3)	0.849

Coef (95% CI): Coefficient and 95% Confidence interval estimated by linear regression models.

^aOne-year average before lung function testing. ^bOne-week average before lung function testing.

All models adjusted for area of study, child's sex, and child's age, height and weight at assessment and ethnic background, birth weight, maternal social class, maternal education level, maternal smoking in pregnancy and paternal smoking in pregnancy, ETS 0-14 months, and LRTI 0-14 months.

Table S9. Associations of % predicted lung function parameters at age 4.5 years with air pollutants.

Exposure	FVC (ml)			FEV ₁ (ml)			FEF ₂₅₋₇₅ (ml/s)		
	Coef	(95% CI)	p value	Coef	(95% CI)	p value	Coef	(95% CI)	P value
Benzene									
Entire pregnancy (n=565)	-1.1	(-2.9, 0.6)	0.199	-1.4	(-3.0, 0.2)	0.093	-2.1	(-4.6, 0.4)	0.100
First trimester	-0.7	(-2.4, 1.0)	0.432	-1.1	(-2.7, 0.5)	0.174	-1.5	(-3.9, 0.9)	0.241
Second trimester	-1.4	(-3.1, 0.3)	0.112	-1.6	(-3.2, 0.01)	0.050	-1.9	(-4.3, 0.6)	0.136
Third trimester	-1.1	(-2.8, 0.6)	0.200	-1.2	(-2.8, 0.4)	0.139	-1.6	(-4.0, 0.9)	0.213
First year of life (n=559)	0.01	(-1.7, 1.7)	0.986	-0.6	(-2.2, 0.9)	0.463	-1.5	(-3.9, 0.9)	0.216
NO₂									
Entire pregnancy (n=566)	-2.7	(-5.4, 0.0)	0.050	-2.6	(-5.1, -0.1)	0.042	-3.1	(-7.0, 0.8)	0.120
First trimester	-1.8	(-4.4, 0.8)	0.180	-2.0	(-4.4, 0.4)	0.109	-2.3	(-6.1, 1.6)	0.245
Second trimester	-2.9	(-5.5, -0.3)	0.028	-2.7	(-5.1, -0.3)	0.028	-2.5	(-6.3, 1.2)	0.189
Third trimester	-2.5	(-5.1, 0.2)	0.067	-2.2	(-4.7, 0.2)	0.071	-2.4	(-6.2, 1.4)	0.219
First year of life (n=560)	-1.2	(-3.7, 1.3)	0.357	-1.7	(-4.1, 0.6)	0.147	-3.0	(-6.7, 0.6)	0.105
Recent exposure ^a	-2.4	(-6.5, 1.6)	0.240	-2.4	(-6.2, 1.4)	0.214	-3.9	(-9.8, 1.9)	0.189
Current exposure ^b	-1.5	(-4.3, 1.3)	0.286	-0.5	(-3.1, 2.1)	0.684	-0.3	(-4.4, 3.7)	0.873
NO_x									
Recent exposure ^a	-1.5	(-4.2, 1.2)	0.280	-1.2	(-3.7, 1.3)	0.346	-2.1	(-6.0, 1.8)	0.292
Current exposure ^b	-0.6	(-2.0, 0.8)	0.381	-0.04	(-1.3, 1.3)	0.949	-0.2	(-2.2, 1.8)	0.868

Coef (95% CI): Coefficient and 95% Confidence interval for an interquartile range (IQR) increase in exposure estimated by linear regression models.

^aOne-year average before lung function testing. ^bOne-week average before lung function testing.

All models adjusted for area of study, child's sex, and child's age, height and weight at assessment and ethnic background, birth weight, maternal social class, maternal education level, maternal smoking in pregnancy and paternal smoking in pregnancy, ETS 0-14 months, and LRTI 0-14 months.

Table S10. Associations of lung function parameters at age 4.5 years with exposure to benzene and NO₂ among children with reproducible testing.

Exposure	FVC (ml)			FEV ₁ (ml)			PEF (ml/s)			FEF ₂₅₋₇₅ (ml/s)		
	Coef	(95% CI)	p value	Coef	(95% CI)	p value	Coef	(95% CI)	p value	Coef	(95% CI)	p value
BASE MODEL*												
Benzene												
Entire pregnancy (n=370)	-6.4	(-27.1, 14.3)	0.544	-11.7	(-30.0, 6.6)	0.210	-6.5	(-61.4, 48.4)	0.816	-28.4	(-69.2, 12.4)	0.172
First trimester	-2.1	(-22.0, 17.9)	0.839	-7.7	(-25.4, 9.9)	0.389	-19.9	(-72.7, 33.0)	0.460	-21.8	(-61.1, 17.5)	0.276
Second trimester	-15.4	(-35.8, 4.9)	0.137	-16.3	(-34.3, 1.7)	0.075	-35.1	(-89.0, 18.9)	0.202	-27.2	(-67.4, 12.9)	0.184
Third trimester	-5.6	(-26.0, 14.9)	0.404	-8.9	(-27.0, 9.2)	0.334	-0.3	(-54.4, 53.9)	0.993	-17.0	(-57.3, 23.3)	0.408
First year of life (n=366)	1.5	(-18.5, 21.5)	0.880	-4.3	(-22.0, 13.4)	0.632	-0.6	(-53.6, 52.3)	0.981	-14.7	(-53.9, 24.5)	0.461
NO₂												
Entire pregnancy (n=370)	-22.9	(-54.5, 8.7)	0.155	-23.9	(-51.9, 4.0)	0.093	-26.0	(-109.9, 57.9)	0.543	-52.7	(-115.0, 9.6)	0.097
First trimester	-12.5	(-43.7, 18.8)	0.433	-16.5	(-44.1, 11.2)	0.242	-33.1	(-115.9, 49.7)	0.433	-46.1	(-107.7, 15.4)	0.141
Second trimester	-33.6	(-63.8, -3.3)	0.030	-28.5	(-55.3, -1.7)	0.037	-55.6	(-136.0, 24.9)	0.175	-45.5	(-105.3, 14.4)	0.136
Third trimester	-19.8	(-51.3, 11.6)	0.215	-19.6	(-47.4, 8.2)	0.167	-15.2	(-98.7, 68.3)	0.721	-35.0	(-97.1, 27.0)	0.268
First year of life (n=366)	-13.4	(-43.3, 16.4)	0.377	-15.9	(-42.4, 10.6)	0.238	-10.6	(-89.9, 68.6)	0.792	-38.1	(-96.7, 20.5)	0.201
ADJUSTED MODEL**												
Benzene												
Entire pregnancy (n=349)	-10.8	(-32.4, 10.8)	0.326	-15.7	(-34.7, 3.2)	0.104	-14.7	(-71.3, 41.8)	0.609	-38.1	(-80.6, 4.3)	0.078
First trimester	-4.9	(-25.6, 15.8)	0.640	-9.9	(-28.1, 8.2)	0.283	-17.2	(-71.4, 36.9)	0.532	-25.4	(-66.1, 15.4)	0.222
Second trimester	-16.8	(-37.9, 4.3)	0.119	-17.0	(-35.6, 1.5)	0.072	-32.3	(-87.6, 23.0)	0.252	-29.5	(-71.1, 12.2)	0.165
Third trimester	-10.1	(-31.3, 11.0)	0.347	-12.9	(-31.5, 5.7)	0.174	-7.4	(-62.9, 48.0)	0.792	-24.9	(-66.6, 16.9)	0.242
First year of life (n=345)	-0.5	(-21.1, 20.0)	0.960	-6.4	(-24.5, 11.7)	0.485	-3.3	(-57.0, 50.4)	0.904	-20.4	(-60.6, 19.8)	0.319
NO₂												
Entire pregnancy (n=349)	-29.4	(-63.3, 4.5)	0.089	-31.1	(-60.9, -1.3)	0.041	-33.9	(-122.9, 55.1)	0.454	-74.8	(-141.5, -8.1)	0.028
First trimester	-16.6	(-49.7, 16.5)	0.325	-20.6	(-49.7, 8.4)	0.164	-30.0	(-116.7, 56.7)	0.496	-59.1	(-124.1, 6.0)	0.075
Second trimester	-34.8	(-67.2, -2.5)	0.035	-29.8	(-58.3, -1.3)	0.040	-51.9	(-136.9, 33.1)	0.231	-54.8	(-118.8, 9.2)	0.093
Third trimester	-26.9	(-60.1, 6.2)	0.111	-26.7	(-55.9, 2.4)	0.072	-23.1	(-110.2, 63.9)	0.601	-52.2	(-117.6, 13.2)	0.118
First year of life (n=345)	-17.4	(-49.7, 14.9)	0.289	-21.1	(-49.5, 7.3)	0.145	-11.6	(-96.2, 72.9)	0.787	-56.5	(-119.6, 6.6)	0.079
Recent exposure ^a (n=349)	-17.1	(-69.0, 34.8)	0.517	-14.8	(-60.5, 30.9)	0.524	15.8	(-120.1, 151.7)	0.820	-80.5	(-182.6, 21.6)	0.122
Current exposure ^b (n=325)	-7.7	(-42.0, 26.7)	0.661	-1.9	(-31.9, 28.1)	0.902	1.2	(-85.8, 88.2)	0.978	-25.4	(-91.5, 40.8)	0.451
NO_x												
Recent exposure ^a (n=349)	-8.2	(-43.1, 26.7)	0.644	-6.5	(-37.2, 24.1)	0.675	32.1	(-59.1, 123.3)	0.490	-41.9	(-110.6, 26.8)	0.231
Current exposure ^b (n=325)	-1.9	(-20.5, 16.6)	0.837	1.6	(-14.6, 17.8)	0.846	5.9	(-41.0, 52.7)	0.806	-6.7	(-42.4, 29.0)	0.713

Coef (95% CI): Coefficient and 95% Confidence interval for an interquartile range (IQR) increase in exposure estimated by linear regression models.

^aOne-year average before lung function testing. ^bOne-week average before lung function testing.

*Base model adjusted for area of study, child's sex, and child's age, height and weight at assessment and ethnic background.

**Base model further adjusted for birth weight, maternal social class, maternal education level, maternal smoking in pregnancy and paternal smoking in pregnancy, ETS 0-14 months, and LRTI 0-14 months.

Table S11. Associations of FEV₁ at age 4.5 years with air pollutants accordingly to child's sex.

Exposure	Girls				Boys				P for interaction
	N	Coef	(95% CI)	p value	N	Coef	(95% CI)	p value	
Benzene									
Entire pregnancy	271	-15.6	(-38.1, 6.9)	0.174	295	-20.8	(-46.0, 4.4)	0.105	0.848
First trimester	271	-14.7	(-37.3, 7.9)	0.203	295	-13.7	(-37.5, 10.2)	0.260	0.849
Second trimester	271	-18.5	(-40.6, 3.5)	0.100	295	-17.9	(-42.8, 7.0)	0.159	0.939
Third trimester	271	-9.6	(-31.9, 12.7)	0.398	295	-20.3	(-45.1, 4.5)	0.108	0.467
First year of life	270	-9.3	(-30.6, 11.9)	0.389	290	-9.0	(-34.3, 16.3)	0.485	0.853
NO₂									
Entire pregnancy	272	-45.7	(-82.7, -8.8)	0.015	295	-12.6	(-49.8, 24.6)	0.506	0.451
First trimester	272	-43.3	(-79.3, -7.4)	0.018	295	-2.9	(-40.0, 34.3)	0.880	0.253
Second trimester	272	-44.3	(-78.7, -9.8)	0.012	295	-11.3	(-48.0, 25.4)	0.544	0.389
Third trimester	272	-31.3	(-68.6, 5.9)	0.099	295	-15.4	(-50.8, 20.0)	0.393	0.862
First year of life	271	-40.6	(-75.0, -6.1)	0.021	290	3.1	(-32.0, 38.3)	0.860	0.177
Recent exposure ^a	272	-54.9	(-116.8, 7.0)	0.082	295	-8.7	(-60.7, 43.2)	0.741	0.523
Current exposure ^b	248	-9.4	(-51.9, 33.1)	0.663	276	-5.9	(-43.2, 31.4)	0.756	0.984
NO_x									
Recent exposure ^a	272	-38.9	(-81.2, 3.5)	0.072	295	-3.3	(-37.4, 30.8)	0.848	0.315
Current exposure ^b	248	-4.5	(-24.7, 15.8)	0.664	276	2.4	(-16.9, 21.9)	0.802	0.614

Coef (95% CI): Coefficient and 95% Confidence interval for an interquartile range (IQR) increase in exposure estimated by linear regression models.

^aOne-year average before lung function testing. ^bOne-week average before lung function testing.

All models adjusted for area of study, child's age, height and weight at assessment and ethnic background, birth weight, maternal social class, maternal education level, maternal smoking in pregnancy and paternal smoking in pregnancy, ETS 0-14 months, and LRTI 0-14 months.

Table S12. Associations of FEV₁ at age 4.5 years with air pollutants stratified by parental allergic status.

Exposure	Allergic parents*				Non-allergic parents				P for interaction
	N	Coef	(95% CI)	p value	N	Coef	(95% CI)	p value	
Benzene	271				295				
Entire pregnancy		-7.2	(-32.0, 17.6)	0.567		-18.8	(-42.0, 4.3)	0.111	0.509
First trimester		-5.9	(-29.3, 17.4)	0.616		-15.0	(-38.1, 8.0)	0.200	0.589
Second trimester		-9.9	(-34.3, 14.4)	0.423		-19.3	(-42.1, 3.5)	0.096	0.553
Third trimester		-8.7	(-32.2, 14.9)	0.470		-14.3	(-37.8, 9.2)	0.232	0.689
First year of life		-5.3	(-30.1, 19.5)	0.673		-5.3	(-27.6, 16.8)	0.635	0.928
NO₂	271				296				
Entire pregnancy		-37.7	(-74.6, -0.7)	0.046		-11.1	(-48.3, 26.1)	0.556	0.132
First trimester		-31.2	(-67.8, 3.4)	0.094		-6.3	(-42.4, 29.7)	0.729	0.138
Second trimester		-37.3	(-73.4, -1.1)	0.043		-13.9	(-49.1, 21.2)	0.435	0.166
Third trimester		-33.2	(-67.7, 1.4)	0.060		-6.7	(-44.4, 30.9)	0.726	0.139
First year of life		-26.7	(-60.8, 7.4)	0.124		-2.9	(-38.5, 35.6)	0.870	0.117
Recent exposure ^a	271	-24.8	(-75.4, 25.8)	0.336	296	-30.2	(-91.9, 31.5)	0.875	0.360
Current exposure ^b	255	-8.6	(-44.6, 27.4)	0.639	269	-4.9	(-46.1, 36.2)	0.573	0.289
NO_x									
Recent exposure ^a	271	-11.4	(-44.2, 21.4)	0.493	296	-22.5	(-64.7, 19.8)	0.769	0.513
Current exposure ^b	255	-0.4	(-17.7, 17.0)	0.968	269	-3.2	(-24.5, 18.1)	0.810	0.661

Coef (95% CI): Coefficient and 95% Confidence interval for an interquartile range (IQR) increase in exposure estimated by linear regression models.

^aOne-year average before lung function testing. ^bOne-week average before lung function testing.

*Any parent reported of suffering from allergic asthma, atopic dermatitis, eczema or allergic rhinitis.

All models adjusted for area of study, child's sex, child's age, height and weight at assessment and ethnic background, birth weight, maternal social class, maternal education level, maternal smoking in pregnancy and paternal smoking in pregnancy, ETS 0-14 months, and LRTI 0-14 months.

Table S13. Associations of FEV₁ at age 4.5 years with air pollutants stratified by asthmatic and non-asthmatic* preschoolers.

Exposure	Asthmatics				Non-asthmatics				P for interaction
	N	Coef	(95% CI)	p value	N	Coef	(95% CI)	p value	
Benzene									
Entire pregnancy	87	-24.5	(-78.3, 29.4)	0.368	456	-17.9	(-36.4, 0.5)	0.057	0.716
First trimester	87	-15.1	(-65.3, 35.0)	0.549	456	-14.0	(-32.4, 4.2)	0.132	0.679
Second trimester	87	-36.9	(-87.1, 13.4)	0.148	456	-16.3	(-34.7, 2.1)	0.083	0.640
Third trimester	87	-22.2	(-73.4, 28.8)	0.388	456	-14.6	(-32.7, 3.6)	0.116	0.816
First year of life	87	-3.9	(-51.1, 43.3)	0.870	450	-11.2	(-29.4, 6.6)	0.213	0.673
NO₂									
Entire pregnancy	87	2.7	(-91.5, 96.9)	0.955	457	-34.6	(-63.2, -6.0)	0.018	0.231
First trimester	87	17.6	(-70.9, 106.2)	0.692	457	-27.4	(-55.6, 0.8)	0.057	0.197
Second trimester	87	-26.7	(-108.6, 55.2)	0.518	457	-30.6	(-58.6, -2.6)	0.032	0.620
Third trimester	87	-2.1	(-85.6, 81.4)	0.960	457	-28.9	(-56.9, -0.9)	0.043	0.252
First year of life	87	21.5	(-58.5, 101.6)	0.593	451	-27.0	(-54.2, 0.1)	0.051	0.244
Recent exposure ^a	87	-38.0	(-176.9, 100.8)	0.587	457	-35.3	(-77.8, 7.1)	0.103	0.514
Current exposure ^b	81	-25.8	(-104.8, 53.3)	0.517	425	-6.7	(-37.2, 23.7)	0.663	0.785
NO_x									
Recent exposure ^a	87	-30.3	(-134.9, 74.2)	0.565	457	-20.8	(-48.7, 7.1)	0.144	0.545
Current exposure ^b	81	-5.4	(-43.0, 32.1)	0.773	425	-1.3	(-16.5, 13.8)	0.863	0.849

Coef (95% CI): Coefficient and 95% Confidence interval for an interquartile range (IQR) increase in exposure estimated by linear regression models.

^aOne-year average before lung function testing. ^bOne-week average before lung function testing.

*Doctor-diagnosis of asthma or medication use for wheezing at 4y.

All models adjusted for area of study, child's sex, child's age, height and weight at assessment and ethnic background, birth weight, maternal social class, maternal education level, maternal smoking in pregnancy and paternal smoking in pregnancy, ETS 0-14 months, and LRTI 0-14 months.

Table S14. Associations of FEV₁ at age 4.5 years with air pollutants stratified by child allergic status.

Exposure	Allergic children*				Non-allergic children				P for interaction
	N	Coef	(95% CI)	p value	N	Coef	(95% CI)	p value	
Benzene									
Entire pregnancy	137	-57.0	(-93.9, -20.1)	0.003	366	4.2	(-16.9, 25.3)	0.698	0.003
First trimester		-43.7	(-78.8, -8.6)	0.015		0.7	(-19.4, 20.8)	0.946	0.015
Second trimester		-52.8	(-88.0, -17.6)	0.004		-2.8	(-23.4, 17.7)	0.786	0.011
Third trimester		-53.0	(-90.8, -15.2)	0.006		1.5	(-18.7, 21.7)	0.884	0.014
First year of life	135	-30.8	(-67.4, 5.8)	0.098	362	4.1	(-15.7, 23.9)	0.682	0.039
NO₂									
Entire pregnancy	137	-59.7	(-121.3, 1.8)	0.057	367	-6.1	(-38.3, 26.1)	0.710	0.344
First trimester		-43.6	(-102.2, 15.0)	0.144		-5.6	(-36.3, 25.0)	0.717	0.395
Second trimester		-51.7	(-106.9, 3.5)	0.066		-13.0	(-43.9, 18.0)	0.411	0.406
Third trimester		-52.6	(-114.2, 9.1)	0.094		-9.6	(-40.0, 20.9)	0.537	0.495
First year of life	135	-34.4	(-91.6, 22.8)	0.237	363	-2.7	(-33.2, 27.8)	0.862	0.424
Recent exposure ^a	137	-159.0	(-243.5, -74.5)	0.001	367	5.5	(-40.6, 51.6)	0.815	0.069
Current exposure ^b	128	-89.8	(-149.4, -30.3)	0.003	334	12.0	(-20.1, 44.0)	0.462	0.028
NO_x									
Recent exposure ^a	137	-112.9	(-171.3, -54.6)	0.001	367	5.9	(-24.3, 36.1)	0.702	0.012
Current exposure ^b	128	-29.7	(-56.7, -2.7)	0.031	334	8.6	(-8.2, 25.4)	0.315	0.026

Coef (95% CI): Coefficient and 95% Confidence interval for an interquartile range (IQR) increase in exposure estimated by linear regression models.

^aOne-year average before lung function testing. ^bOne-week average before lung function testing.

*Children reported of suffering from allergic asthma, atopic dermatitis, eczema or allergic rhinitis.

All models adjusted for area of study, child's sex, child's age, height and weight at assessment and ethnic background, birth weight, maternal social class, maternal education level, maternal smoking in pregnancy and paternal smoking in pregnancy, ETS 0-14 months, and LRTI 0-14 months.

Table S15. Associations of FEV₁ at age 4.5 years with air pollutants after excluding preschoolers of mothers who smoked during pregnancy, preterm deliveries and low birth weight newborns.

Exposure	Non-smokers in pregnancy ¹ (n=484)			Excluding preterms ² (n=553)			Excluding low birth weight ² (=543)		
	Coef	(95% CI)	p value	Coef	(95% CI)	p value	Coef	(95% CI)	p value
Benzene									
Entire pregnancy	-12.9	(-30.6, 4.7)	0.150	-16.7	(-33.5, 0.0)	0.050	-17.1	(-34.1, -0.1)	0.048
First trimester	-13.5	(-30.4, 3.3)	0.115	-14.2	(-30.5, 2.0)	0.086	-14.5	(-31.1, 2.0)	0.085
Second trimester	-16.3	(-33.9, 1.3)	0.070	-18.6	(-35.2, 2.1)	0.027	-19.1	(-35.9, -2.4)	0.025
Third trimester	-10.6	(-28.1, 6.8)	0.230	-14.0	(-30.5, 2.5)	0.097	-14.5	(-31.3, 2.2)	0.089
First year of life	-7.1	(-24.3, 10.0)	0.413	-9.8	(-26.1, 6.5)	0.240	-9.6	(-26.1, 6.9)	0.255
NO₂									
Entire pregnancy	-23.4	(-51.1, 4.3)	0.098	-26.2	(-52.3, -0.1)	0.049	-24.8	(-51.2, 1.6)	0.066
First trimester	-22.2	(-48.7, 4.2)	0.100	-21.5	(-47.0, 4.0)	0.098	-19.5	(-45.2, 6.2)	0.137
Second trimester	-25.9	(-53.1, 1.2)	0.062	-28.0	(-53.2, -2.8)	0.029	-27.3	(-52.8, -1.8)	0.036
Third trimester	-19.2	(-46.1, 7.7)	0.162	-21.6	(-47.1, 4.0)	0.098	-21.2	(-47.2, 4.7)	0.109
First year of life	-20.5	(-46.8, 5.8)	0.127	-19.0	(-43.7, 5.6)	0.130	-17.3	(-42.3, 7.6)	0.173
Recent exposure ^a	-19.4	(-71.8, 33.0)	0.467	-25.5	(-76.1, 25.1)	0.332	-22.6	(-74.0, 28.8)	0.388
Current exposure ^b	-17.6	(-48.0, 12.9)	0.257	-9.7	(-36.9, 17.4)	0.481	-8.3	(-35.9, 19.3)	0.554
NO_x									
Recent exposure ^a	-27.2	(-55.5, 1.2)	0.060	-19.6	(-45.7, 6.6)	0.142	-19.1	(-45.7, 7.6)	0.160
Current exposure ^b	-7.4	(-22.6, 7.7)	0.336	-1.8	(-15.3, 11.8)	0.795	-1.6	(-15.4, 12.1)	0.813

Coef (95% CI): Coefficient and 95% Confidence interval for an interquartile range (IQR) increase in exposure estimated by linear regression models.

^aOne-year average before lung function testing. ^bOne-week average before lung function testing.

¹Models adjusted for area of study, child's sex, and child's age, height and weight at assessment and ethnic background, birth weight, maternal education level, maternal social class, paternal smoking in pregnancy, ETS 0-14 months, and LRTI 0-14 months

²Models adjusted for area of study, child's sex, and child's age, height and weight at assessment and ethnic background, birth weight, maternal education level, maternal social class, maternal smoking in pregnancy, paternal smoking in pregnancy, ETS 0-14 months, and LRTI 0-14 months

Table S16. Associations of FEV₁ at age 4.5 years with air pollutants stratified by maternal social class.

Exposure	Maternal social class										
	I-II (high) (n=162)			III (mid) (n=179)				IV-V (low) (n=225)			
	Coef	(95% CI)	p value	Coef	(95% CI)	p value	p for interaction	Coef	(95% CI)	p value	p for interaction
Benzene											
Entire pregnancy	12.7	(-12.2, 37.5)	0.316	-36.7	(-70.5, -2.9)	0.033	0.033	-37.5	(-67.1, -7.9)	0.013	0.009
First trimester	2.6	(-23.9, 29.2)	0.844	-21.2	(-54.4, 11.9)	0.208	0.354	-25.3	(-52.6, 1.9)	0.069	0.162
Second trimester	-0.8	(-26.0, 24.4)	0.949	-23.1	(-57.7, 11.5)	0.190	0.416	-33.8	(-61.6, -6.0)	0.017	0.068
Third trimester	13.0	(-11.1, 37.2)	0.288	-38.1	(-72.6, -3.6)	0.030	0.024	-26.5	(-55.1, 2.2)	0.070	0.027
First year of life	18.9	(-4.2, 42.1)	0.109	-35.3	(-69.1, -1.4)	0.041	0.006	-21.9	(-50.9, 6.9)	0.136	0.027
NO₂											
Entire pregnancy	-6.2	(-47.9, 35.6)	0.770	-64.1	(-112.3, -15.9)	0.009	0.499	-16.9	(-63.5, 29.7)	0.476	0.315
First trimester	-19.4	(-65.7, 26.8)	0.407	-44.1	(-91.7, 3.5)	0.069	0.971	-11.0	(-54.2, 32.2)	0.616	0.751
Second trimester	-25.2	(-67.3, 16.9)	0.239	-41.7	(-91.2, 7.9)	0.099	0.790	-23.3	(-64.4, 17.9)	0.266	0.551
Third trimester	-0.2	(-39.6, 39.2)	0.992	-62.6	(-109.9, -15.3)	0.010	0.324	-5.9	(-52.4, 40.6)	0.802	0.336
First year of life	-1.5	(-43.5, 40.5)	0.943	-46.2	(-90.7, -1.6)	0.042	0.475	-5.4	(-47.2, 36.4)	0.798	0.526
Recent exposure ^a	12.3	(-54.9, 79.5)	0.718	-62.9	(-1132.7, 6.8)	0.077	0.448	-37.7	(-108.9, 33.4)	0.297	0.188
Current exposure ^b	4.3	(49.2, 57.8)	0.874	-11.3	(-58.5, 35.8)	0.636	0.689	-4.9	(-50.6, 40.8)	0.832	0.483
NO_x											
Recent exposure ^a	7.2	(-33.3, 47.7)	0.726	-36.0	(.83.1, 11.0)	0.133	0.370	-30.8	(-81.8, 20.1)	0.234	0.138
Current exposure ^b	4.9	(-21.2, 31.1)	0.708	-6.3	(-28.7, 16.2)	0.583	0.467	5.9	(-19.2, 31.0)	0.642	0.832

Coef (95% CI): Coefficient and 95% Confidence interval for an interquartile range (IQR) increase in exposure estimated by linear regression models.

^aOne-year average before lung function testing. ^bOne-week average before lung function testing.

All models adjusted for area of study, child's sex, and child's age, height and weight at assessment and ethnic background, birth weight, maternal education level, maternal smoking in pregnancy and paternal smoking in pregnancy, ETS 0-14 months, and LRTI 0-14 months

Table S17. Associations of FEV₁ at age 4.5 years with air pollutants stratified by maternal education level.

Exposure	Maternal education level								
	Primary or less (n=106)			Secondary (n=204)			Universitary (n=256)		
	Coef	(95% CI)	p value	Coef	(95% CI)	p value	Coef	(95% CI)	p value
Benzene									
Entire pregnancy	-62.1	(-107.7, -16.5)	0.008	-23.5	(-54.4, 7.4)	0.136	-2.4	(-24.7, 19.8)	0.829
First trimester	-67.2	(-116.4, -17.9)	0.008	-14.4	(-41.4, 12.6)	0.294	-3.3	(-25.8, 19.3)	0.775
Second trimester	-68.0	(-113.8, -22.2)	0.004	-20.5	(-49.6, 8.6)	0.167	-7.1	(-29.5, 15.3)	0.532
Third trimester	-39.1	(-83.2, 5.1)	0.082	-23.8	(-54.2, 6.7)	0.125	-2.3	(-24.4, 19.9)	0.840
First year of life	-45.8	(-91.9, 0.3)	0.051	-20.4	(-50.5, 9.7)	0.182	6.3	(-15.1, 27.8)	0.562
NO₂									
Entire pregnancy	-60.4	(-129.1, 8.3)	0.084	-38.6	(-83.6, 6.4)	0.093	-7.9	(-45.8, 29.9)	0.681
First trimester	-62.3	(-136.6, 12.0)	0.099	-24.8	(-64.9, 15.2)	0.223	-7.7	(-46.9, 31.5)	0.698
Second trimester	-67.9	(-132.6, -3.3)	0.039	-28.1	(-69.2, 13.1)	0.180	-17.0	(-55.5, 21.4)	0.384
Third trimester	-35.7	(-101.3, 29.8)	0.282	-36.0	(-81.1, 9.1)	0.117	-7.6	(-43.9, 28.6)	0.678
First year of life	-48.7	(-118.4, 21.1)	0.169	-30.6	(-70.3, 9.0)	0.129	3.4	(-32.7, 39.5)	0.853
Recent exposure ^a	-50.4	(-147.1, 46.3)	0.304	-44.0	(-113.5, 25.4)	0.213	-13.5	(-72.1, 45.1)	0.651
Current exposure ^b	-28.0	(-89.7, 33.7)	0.370	-15.9	(-62.2, 30.3)	0.497	11.8	(-33.3, 56.9)	0.607
NO_x									
Recent exposure ^a	-39.8	(-102.7, 23.1)	0.212	-31.8	(-80.9, 17.4)	0.204	-2.3	(-40.1, 35.5)	0.906
Current exposure ^b	-3.2	(-36.6, 30.2)	0.850	-10.1	(-31.7, 11.4)	0.356	12.0	(-11.3, 35.3)	0.310

Coef (95% CI): Coefficient and 95% Confidence interval for an interquartile range (IQR) increase in exposure estimated by linear regression models.

^aOne-year average before lung function testing. ^bOne-week average before lung function testing.

All models adjusted for area of study, child's sex, and child's age, height and weight at assessment and ethnic background, birth weight, maternal social class, maternal smoking in pregnancy and paternal smoking in pregnancy, ETS 0-14 months, and LRTI 0-14 months.