



Supplementary Materials

Table S1.

Table S1. Association of early-life NO₂ exposure* with childhood asthma risk, PSID-CDS, 1990-2014 (n=4535)

	Model 1		Model 2		Model 3	
	NO ₂		NO ₂ + Demo		NO ₂ + Demo + Hlt	
	OR	95% CI	OR	95% CI	OR	95% CI
Early-life NO ₂ exposure	1.18	(1.09-1.27)	1.21	(1.20-1.33)	1.19	(1.08-1.31)
Child-level:						
Age (years)			1.02	(0.99-1.04)	1.02	(0.99-1.04)
Sex						
Male (ref)			1.00		1.00	
Female			0.74	(0.63-0.88)	0.73	(0.62-0.87)
Cohort						
1997 (ref)			1.00		1.00	
2014			1.89	(1.44-2.49)	1.88	(1.42-2.48)
Parental asthma history						
No (ref)					1.00	
Yes					2.50	(2.03-3.07)
Household-level:						
HH age (years)			0.99	(0.99-1.00)	1.00	(0.99-1.01)
HH sex						
Male (ref)			1.00		1.00	
Female			1.33	(1.04-1.70)	1.33	(1.03-1.70)
HH race						
NL White (ref)			1.00		1.00	
NL Black			1.70	(1.36-2.11)	1.72	(1.38-2.13)
NL Asian			1.15	(0.34-3.95)	1.29	(0.34-4.90)
NL Other/Multi			0.70	(0.17-2.86)	0.71	(0.21-2.40)
Latino			0.97	(0.62-1.53)	1.15	(0.73-1.81)
HH employment						
Unemployed (ref)			1.00		1.00	
Employed			0.91	(0.69-1.20)	0.99	(0.74-1.32)
Income (year 2000 \$)			1.00	(1.00-1.00)	1.00	(1.00-1.00)
Persons per room			0.76	(0.58-0.99)	0.79	(0.60-1.04)
Current smoking						
No (ref)					1.00	
Yes					1.13	(0.91-1.39)
Health insurance						
Insured (ref)					1.00	
Uninsured					0.47	(0.27-0.81)

HH = Household head

NL = Non-Latino

*Note: effect estimates are for a one standard deviation (SD) increase in NO₂ (6.59 ppb); estimates in bold are statistically significant at p<0.05

Table S2.

Table S2. Association of early-life PM_{2.5} exposure* with childhood asthma risk, PSID-CDS, 1990-2014 (n=4535)

	Model 1		Model 2		Model 3	
	NO ₂		NO ₂ + Demo		NO ₂ + Demo + Hlt	
	OR	95% CI	OR	95% CI	OR	95% CI
Early-life PM _{2.5} exposure	1.15	(1.06-1.25)	1.20	(1.06-1.35)	1.18	(1.05-1.33)
Child-level:						
Age (years)			1.01	(0.99-1.04)	1.01	(0.98-1.04)
Sex						
Male (ref)			1.00		1.00	
Female			0.75	(0.63-0.88)	0.74	(0.62-0.88)
Cohort						
1997 (ref)			1.00		1.00	
2014			1.99	(1.46-2.71)	1.97	(1.44-2.69)
Parental asthma history						
No (ref)					1.00	
Yes					2.53	(2.06-3.10)
Household-level:						
HH age (years)			1.00	(0.98-1.01)	1.00	(0.99-1.01)
HH sex						
Male (ref)			1.00		1.00	
Female			1.32	(1.03-1.69)	1.31	(1.02-1.69)
HH race						
NL White (ref)			1.00		1.00	
NL Black			1.65	(1.32-2.06)	1.68	(1.34-2.09)
NL Asian			1.24	(0.33-4.62)	1.37	(0.34-5.55)
NL Other/Multi			0.75	(0.18-3.15)	0.77	(0.22-2.67)
Latino			1.01	(0.64-1.59)	1.19	(0.76-1.87)
HH employment						
Unemployed (ref)			1.00		1.00	
Employed			0.90	(0.69-1.19)	0.99	(0.74-1.31)
Income (year 2000 \$)			1.00	(1.00-1.00)	1.00	(1.00-1.00)
Persons per room			0.77	(0.59-1.00)	0.80	(0.61-1.05)
Current smoking						
No (ref)					1.00	
Yes					1.11	(0.90-1.37)
Health insurance						
Insured (ref)					1.00	
Uninsured					0.47	(0.27-0.82)

HH = Household head

NL = Non-Latino

*Note: effect estimates are for a one standard deviation (SD) increase in PM_{2.5} (3.31 µ/m³); estimates in bold are statistically significant at p<0.05

Table S3.**Table S3. Association of early-life pollution exposure* with childhood asthma risk by neighborhood (NH) poverty, PSID-CDS, 1990-2014**

	<10% NH Poverty		10%-20% NH Poverty		> 20% NH Poverty	
	(n=1634)		(n=1391)		(n=1465)	
	OR	95% CI	OR	95% CI	OR	95% CI
Early-life NO ₂ exposure	1.16	(0.94-1.42)	1.20	(1.02-1.42)	1.24	(1.06-1.44)
Early-life PM _{2.5} exposure	1.15	(0.92-1.43)	1.18	(0.94-1.47)	1.25	(1.02-1.54)

*Note: effect estimates are for the standard deviation (SD) increase in each pollutant (6.59 ppb for NO₂ and 3.31 µ/m³ for PM_{2.5}); estimates in bold are statistically significant at p<0.05



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