Supplementary materials

Table S1. Descriptive information of MAPSS women's age frequencies among the total study population, Malmö and Lund.

	Total Study Population (*n*= 48,777)	Malmö (n= 20,226)	Lund (n= 8,554)
	% (*N*)	% (*N*)	% (*N*)
Age			
20 and younger	3.2% (1,584)	5.0% (1,005)	1.2% (102)
21- 25 years old	16.1% (7,833)	21.7% (4,386)	10.1% (864)
26- 30 years old	33.0% (16,083)	34.2% (6,916)	31.8% (2,719)
31- 35 years old	30.2% (14,723)	26.7% (5,406)	37.7% (3,226)
36- 40 years old	11.9% (5,822)	10.7% (2,167)	16.8% (1,435)
41 and older	1.8% (860)	1.7% (346)	2.4% (208)
Missing	3.8% (1,872)	-	-

- = No missing values to report.

Table S2. Annual average NO_x to NO_2 concentration ($\mu g/m^3$) conversions for pollutant summaries of main analysis by study area.

	NO_x	NO_2
Study area		
Total catchment area	17.8	16.9
Malmö	23.6	21.1
Lund	14.5	14.2

NO_x = Nitrogen oxides. NO_2 = Nitrogen dioxide. Swedish EPA's Clean Air objectives NO_2: 20 $\mu g/m^3$ [1]. Formula used: $NO_2 = NO_x (0.75 + (18 / (NO_x + 60)))$ [2].

Table S3. Annual average NO_x to NO_2 concentration ($\mu g/m^3$) conversions for pollutant summaries of Change over time sensitivity analysis by study setting.

	1999–2005		2006- 2009	
Study Area	NO_x	NO_2	NO_x	NO_2
Total catchment area	18.6	17.5	16.2	15.6
Malmö	25.5	22.4	20.5	18.9
Lund	15.3	14.8	12.2	12.2

NO_x = Nitrogen oxides. NO_2 = Nitrogen dioxide. Swedish EPA's Clean Air objectives NO_2: 20 $\mu g/m^3$ [1]. Formula used: $NO_2 = NO_x^{(0.75 + (18/(NO_x + 60)))}$ [2].

Table S4. Descriptive table of a dichotomized version of *Birth country*: Swedish-born mothers and those born in Other countries for women in the MAPSS birth cohort living in Lund.

	Frequency
	% (*N*)
Maternal country of birth	
Sweden	80% (6,813)

Other country	20% (1,722)
Missing	0.20% (19)
Total	8,554

Table S5. Associations between levels of NOx above Clean Air objective [a] and *Birth country* for women in the MAPSS birth cohort living in Lund.

	OR (95% CI)
	NOx
Maternal country of birth	
Sweden	REF
Other countries	1.11 (0.94–1.31)

[a] Swedish EPA's Clean Air objectives NO$_2$: 20 µg/m^3 [1]. OR = Odds ratio. CI = Confidence interval. NOx = Nitrogen oxides. REF = Reference category.

Table S6. Sensitivity analysis on parity: Associations between exposure to levels of NOx and PM$_{2.5}$ (µg/m^3) above Clean Air objectives [a] and Household disposable income [b] for the 48,777 pregnant women of MAPSS living in Scania.

	OR (95% CI)			
	NOx		PM$_{2.5}$	
	1 child	>1 child	1 child	>1 child
Household disposable income				
30,000–200,000	2.87 **	4.76 **	1.65 **	2.66 **
	(2.65–3.10)	(4.38–5.17)	(1.44–1.89)	(2.30–3.07)
200,000–300,000	1.78 **	2.70 **	1.17 *	1.52 **
	(1.64–1.93)	(2.50–2.92)	(1.03–1.34)	(1.36–1.71)
300,000–400,000	REF	REF	REF	REF
>400,000	0.71 **	0.50 **	1.21 **	1.16 **
	(0.64–0.77)	(0.46–0.56)	(1.07–1.38)	(1.05–1.29)

[a] Swedish EPA's Clean Air objectives NO$_2$: 20 µg/m^3 and PM$_{2.5}$: 10 µg/m^3 [1]. [b] Measured in Swedish kronor (SEK), annually. OR = Odds ratio. CI = Confidence interval. NOx = Nitrogen oxides. PM$_{2.5}$ = Particulate matter with diameter ≤2.5 µm. REF = Reference category. * $p \le 0.05$. ** $p \le 0.01$.

Table S7. Sensitivity analysis on parity: Associations between exposure to levels of NOx and PM$_{2.5}$ (µg/m^3) above Clean Air objectives [a] and Household disposable income [b] for the 20,226 pregnant women of MAPSS living in Malmö.

	OR (95% CI)			
	NOx		PM$_{2.5}$	
	1 child	>1 child	1 child	>1 child
Household disposable income				
30,000–200,000	1.57 **	2.28 **	0.99	1.56 **
	(1.38–1.78)	(2.01–2.59)	(0.72–1.37)	(1.16–2.10)
200,000–300,000	1.65 **	2.15 **	0.98	1.19
	(1.43–1.90)	(1.89–2.44)	(0.69–1.40)	(0.90–1.58)
300,000–400,000	REF	REF	REF	REF
>400,000	0.63 **	0.44 **	1.16	1.03
	(0.54–0.73)	(0.38–0.51)	(0.78–1.72)	(0.74–1.44)

Table S8. Sensitivity analysis on parity: Associations between exposure to levels of NO$_X$ and PM$_{2.5}$ (µg/m^3) above Clean Air objectives [a] and Household disposable income [b] for the 8,554 pregnant women of MAPSS living in Lund.

	OR (95% CI)			
	NO$_X$		PM$_{2.5}$	
	1 child	>1 child	1 child	>1 child
Household disposable income				
30,000- 200,000	1.71**	2.14**	0.83	1.92**
	(1.32–2.21)	(1.52–3.02)	(0.60–1.15)	(1.29–2.86)
200,000- 300,000	1.54**	1.99**	1.02	1.29
	(1.20–1.97)	(1.50–2.63)	(0.74–1.40)	(0.97–1.71)
300,000- 400,000	REF	REF	REF	REF
> 400,000	0.74*	0.97	1.34	1.30*
	(0.56–0.97)	(0.72–1.30)	(0.99–1.83)	(1.03–1.63)

Table S9. Pearson R correlations for all indices of socioeconomic status considered in the analysis.

	Education level	Household disposable income [a]	Birth country
Scania			
Education level	-	0.360 **	0.245 **
Household disposable income [a]	0.360 **	-	0.363 **
Birth country	0.245 **	0.363**	-
Malmö			
Education level	-	0.346 **	0.268 **
Household disposable income [a]	0.346 **	-	0.341 **
Birth country	0.268 **	0.341 **	-
Lund			
Education level	-	0.299**	0.169 **
Household disposable income [a]	0.299 **	-	0.246 **
Birth country	0.169 **	0.246**	-

References

1. EPA, S. Specifications for Clean Air.; Available online: http://www.swedishepa.se/Environmental-objectives-and-cooperation/Swedens-environmental-objectives/The-national-environmental-objectives/Clean-Air/Specifications-for-Clean-Air/. (assessed on: 16 April 2019)

2. Gustafsson, S., *Uppbyggnad Och Validering Av Emissionsdatabas Avseende Luftföroreningar för Skåne Med Basår 2001*. Institutionen för Naturgeografi och Ekosystemanalys: Lund, Sweden, 2007.