

Maternal ambient exposure to atmospheric pollutants during pregnancy and offspring term birth weight in the nation-wide ELFE cohort

SUPPLEMENTAL MATERIAL

Equation 1: Propensity score of exposure used in the main analysis

$$\begin{aligned} PS_1 &= E(Exposure) \\ &= \beta_1 education + \beta_2 relationship + \beta_3 parity + \beta_4 sex + \beta_5 smoking + \beta_6 deprivation \\ &\quad + \beta_7 citizenship + \beta_8 height + \beta_9 age + \beta_{10} weight + \varepsilon \end{aligned}$$

Equation 2: Stabilized inverse probability weights

$$SW_i = \frac{Exposure}{PS_i}$$

Equation 3: Generalized additive model (outcome regression)

$$Y(TBW) = \{\beta_1 Exposure + \beta_2 urbanization + \beta_3 season + \beta_4 s(x, y)\}, SW$$

Equation 4: Propensity score of exposure used in the sensitivity analysis 1

$$\begin{aligned} PS_2 &= E(Exposure) \\ &= \beta_1 education + \beta_2 relationship + \beta_3 parity + \beta_4 sex + \beta_5 smoking + \beta_6 deprivation \\ &\quad + \beta_7 citizenship + \beta_8 height + \beta_9 age + \beta_{10} weight + \beta_{11} gestational duration + \varepsilon \end{aligned}$$

Equation 5: Propensity score of exposure used in the sensitivity analysis 2

$$PS_3 = E(Exposure) = \beta_1 education + \beta_2 deprivation + \beta_3 citizenship + \beta_4 parity + \varepsilon$$

Equation 6: Doubly robust GAM (outcome regression)

$$\begin{aligned} Y(TBW) &= \{\beta_1 Exposure + \beta_2 education + \beta_3 relationship + \beta_4 parity + \beta_5 sex + \beta_6 smoking + \beta_7 deprivation \\ &\quad + \beta_8 citizenship + \beta_9 height + \beta_{10} age + \beta_{11} weight + \beta_{12} urbanization + \beta_{13} season \\ &\quad + \beta_{14} s(x, y)\}, SW \end{aligned}$$

Table S1: Distribution of the weights used for the weighted generalized additive models (n = 13,334 pregnant women from ELFE cohort).

	PM _{2.5}				PM ₁₀				NO ₂			
	Mean	Min	Max	Sum	Mean	Min	Max	Sum	Mean	Min	Max	Sum
Weights^a												
Whole pregnancy	1.00	0.20	5.04	13,334.3	1.00	0.19	7.88	13,360.0	1.00	0.10	29.37	13,328.8
Whole pregnancy truncated ^b	1.00	0.20	4.21	13,334.5	1.00	0.19	5.92	13,340.5	1.00	0.09	31.03	13,340.8
1 st trimester	1.00	0.36	2.14	13,337.4	1.00	0.33	3.16	13,336.8	1.00	0.12	15.05	13,314.5
2 nd trimester	1.00	0.32	2.00	13,334.7	1.00	0.27	2.45	13,329.5	1.00	0.09	11.70	13,284.5
3 rd trimester	1.00	0.28	2.08	13,332.0	1.00	0.15	3.05	13,331.7	1.00	0.08	18.16	13,303.5
3 rd trimester truncated ^b	1.00	0.25	2.16	13,332.3	1.00	0.15	2.95	13,333.1	1.00	0.08	16.66	13,307.0
30 days before delivery	1.00	0.46	2.24	13,334.3	1.00	0.34	2.34	13,334.3	1.00	0.13	9.73	13,309.9
60 days before delivery	1.00	0.40	1.93	13,332.7	1.00	0.18	2.56	13,330.6	1.00	0.09	16.90	13,301.0
90 days before delivery	1.00	0.35	2.21	13,331.6	1.00	0.17	3.14	13,331.2	1.00	0.09	21.40	13,307.7
Weights^c with gestational duration												
Whole pregnancy	1.00	0.21	5.68	13,332.6	1.00	0.20	7.70	13,363.5	1.00	0.10	28.65	13,329.9
Whole pregnancy truncated ^b	1.00	0.21	5.21	13,331.7	1.00	0.19	6.23	13,340.8	1.00	0.09	31.46	13,338.1
1 st trimester	1.00	0.29	2.90	13,342.3	1.00	0.22	3.86	13,346.5	1.00	0.12	14.77	13,315.7
2 nd trimester	1.00	0.35	2.12	13,333.7	1.00	0.29	2.58	13,328.5	1.00	0.09	12.82	13,279.0
3 rd trimester	1.00	0.24	2.39	13,333.5	1.00	0.12	3.28	13,328.4	1.00	0.08	24.40	13,302.9
3 rd trimester truncated ^b	1.00	0.21	2.67	13,334.2	1.00	0.13	3.38	13,326.4	1.00	0.08	23.09	13,307.0
30 days before delivery	1.00	0.48	2.25	13,334.9	1.00	0.33	2.36	13,334.8	1.00	0.13	11.28	13,309.8
60 days before delivery	1.00	0.40	1.98	13,333.1	1.00	0.18	2.65	13,330.6	1.00	0.09	20.48	13,302.3
90 days before delivery	1.00	0.34	2.28	13,331.9	1.00	0.17	3.22	13,330.7	1.00	0.09	26.51	13,310.4
Weights^d with the minimal set of covariates												
Whole pregnancy	1.00	0.34	3.95	13,335.1	1.00	0.25	7.22	13,368.4	1.00	0.16	24.29	13,306.9
Whole pregnancy truncated ^b	1.00	0.35	3.16	13,334.2	1.00	0.25	5.40	13,347.9	1.00	0.15	25.19	13,320.7
1 st trimester	1.00	0.46	2.15	13,336.9	1.00	0.38	3.37	13,337.8	1.00	0.17	13.71	13,315.2
2 nd trimester	1.00	0.60	1.68	13,333.7	1.00	0.42	2.05	13,330.3	1.00	0.20	10.49	13,292.7
3 rd trimester	1.00	0.45	2.01	13,333.4	1.00	0.22	2.77	13,333.5	1.00	0.15	16.84	13,282.7
3 rd trimester truncated ^b	1.00	0.47	1.94	13,333.4	1.00	0.21	2.56	13,333.9	1.00	0.14	13.73	13,287.2
30 days before delivery	1.00	0.54	1.94	13,334.2	1.00	0.44	1.97	13,334.6	1.00	0.20	9.89	13,297.0
60 days before delivery	1.00	0.51	1.85	13,333.8	1.00	0.27	2.49	13,332.5	1.00	0.16	12.17	13,284.2
90 days before delivery	1.00	0.49	1.97	13,333.4	1.00	0.24	2.73	13,332.9	1.00	0.15	12.25	13,281.5

^a using the stabilized inverse probability to be exposed to air pollutants calculated using maternal education, in relationship status, parity, sex of the child, maternal active smoking during pregnancy, social deprivation, maternal French citizenship, maternal age, weight before pregnancy and maternal height.

^b exposure truncated at 37 gestational weeks.

^c using the stabilized inverse probability to be exposed to air pollutants calculated using maternal education, in relationship status, parity, sex of the child, maternal active smoking during pregnancy, social deprivation, maternal French citizenship, maternal age, weight before pregnancy, maternal height and gestational duration.

^d using the stabilized inverse probability to be exposed to air pollutants calculated using maternal education, parity, social deprivation and maternal French citizenship.

Table S2: Association between atmospheric pollutant exposure during pregnancy and term birth weight (n = 13,334 pregnant women from ELFE cohort). All effect estimates correspond to an increase of 5 µg/m³ for PM_{2.5} and PM₁₀ and 10 µg/m³ for NO₂. Regression coefficients are from weighted generalized additive models^a.

	Full weights		Trimmed weights	
	β	(95% CI)	β	(95% CI)
PM_{2.5}				
Whole pregnancy	6.53	(-15.01, 28.08)	7.55	(-14.05, 29.16)
Whole pregnancy	5.03	(-14.29, 24.34)	5.79	(-13.57, 25.15)
1 st trimester	40.96	(31.51, 50.41)	40.82	(31.38, 50.26)
2 nd trimester	-12.33	(-22.45, -2.22)	-12.48	(-22.59, -2.37)
3 rd trimester	-26.98	(-36.60, -17.37)	-26.87	(-36.47, -17.26)
3 rd trimester truncated ^b	-48.32	(-58.58, -38.05)	-48.38	(-58.63, -38.12)
30 days before delivery	-1.99	(-8.49, 4.51)	-1.69	(-8.19, 4.81)
60 days before delivery	-9.15	(-17.31, -0.98)	-8.92	(-17.08, -0.77)
90 days before delivery	-17.65	(-28.03, -7.28)	-17.63	(-27.99, -7.26)
PM₁₀				
Whole pregnancy	9.68	(-7.31, 26.67)	11.79	(-4.56, 28.76)
Whole pregnancy	9.08	(-6.01, 24.18)	38.37	(-3.29, 26.87)
1 st trimester	38.43	(29.87, 46.99)	-7.10	(29.81, 46.94)
2 nd trimester	-6.92	(-15.90, 2.05)	-26.91	(-16.08, 1.89)
3 rd trimester	-26.95	(-36.25, -17.65)	-42.38	(-36.20, -17.63)
3 rd trimester truncated ^b	-41.75	(-51.16, -32.34)	-0.07	(-51.80, -32.97)
30 days before delivery	-0.39	(-6.57, 5.80)	-8.08	(-6.26, 6.11)
60 days before delivery	-8.09	(-15.95, -0.24)	-13.98	(-15.93, -0.23)
90 days before delivery	-13.75	(-23.33, -4.18)	-0.21	(-23.54, -4.42)
NO₂				
Whole pregnancy	8.97	(-4.73, 22.67)	-0.35	(-14.09, 13.68)
Whole pregnancy	9.11	(-4.27, 22.49)	20.19	(-14.04, 13.34)
1 st trimester	20.93	(9.90, 31.95)	-12.86	(9.13, 31.25)
2 nd trimester	-8.93	(-21.29, 3.43)	-10.39	(-25.41, -0.32)
3 rd trimester	-10.21	(-22.20, 1.79)	-27.21	(-21.76, 0.98)
3 rd trimester truncated ^b	-24.33	(-36.61, -12.05)	4.91	(-39.60, -14.81)
30 days before delivery	6.21	(-3.93, 16.35)	-2.76	(-5.31, 15.31)
60 days before delivery	1.15	(-9.79, 12.10)	-5.23	(-13.81, 8.30)
90 days before delivery	-0.78	(-12.23, 10.67)	-0.35	(-16.76, 6.29)

^a using the stabilized inverse probability to be exposed to air pollutants calculated using maternal education, in relationship status, parity, sex of the child, maternal active smoking during pregnancy, social deprivation, maternal French citizenship, maternal age, weight before pregnancy, maternal height and further adjusted for urbanization level and season of conception.

^b exposure truncated at 37 gestational weeks.

Table S3: Association between atmospheric pollutant exposure during pregnancy and term birth weight (n = 13,334 pregnant women from ELFE cohort). All effect estimates correspond to an increase of 5 µg/m³ for PM_{2.5} and PM₁₀ and 10 µg/m³ for NO₂. Regression coefficients are from weighted doubly robust generalized additive models^a.

	Full weights		Trimmed weights	
	β	(95% CI)	β	(95% CI)
PM_{2.5}				
Whole pregnancy	14.66	(-5.64, 34.96)	14.59	(-5.72, 34.91)
Whole pregnancy	12.86	(-5.30, 31.01)	12.68	(-5.49, 30.86)
1 st trimester	44.04	(35.13, 52.95)	43.83	(34.94, 52.72)
2 nd trimester	-10.35	(-19.83, -0.87)	-10.64	(-20.11, -1.17)
3 rd trimester	-25.56	(-34.58, -16.55)	-25.58	(-34.58, -16.57)
3 rd trimester truncated ^b	-46.11	(-55.72, -36.50)	-46.19	(-55.79, -36.58)
30 days before delivery	-1.01	(-7.10, 5.09)	-0.97	(-7.07, 5.13)
60 days before delivery	-8.47	(-16.12, -0.81)	-8.42	(-16.07, -0.77)
90 days before delivery	-16.41	(-26.13, -6.68)	-16.53	(-26.24, -6.81)
PM₁₀				
Whole pregnancy	13.46	(-3.46, 30.38)	14.39	(-2.14, 30.92)
Whole pregnancy	11.27	(-3.67, 26.21)	13.09	(-1.71, 27.88)
1 st trimester	40.46	(32.14, 48.79)	40.27	(31.94, 48.59)
2 nd trimester	-6.27	(-14.64, 2.10)	-6.43	(-14.80, 1.95)
3 rd trimester	-22.31	(-30.63, -13.99)	-22.46	(-30.77, -14.14)
3 rd trimester truncated ^b	-39.02	(-47.85, -30.18)	-39.67	(-48.50, -30.83)
30 days before delivery	0.05	(-5.74, 5.84)	-0.01	(-5.80, 5.78)
60 days before delivery	-8.10	(-15.44, -0.76)	-8.21	(-15.54, -0.88)
90 days before delivery	-12.90	(-21.76, -4.05)	-13.31	(-22.17, -4.46)
NO₂				
Whole pregnancy	8.82	(-4.13, 21.78)	0.54	(-12.55, 13.64)
Whole pregnancy	10.08	(-2.64, 22.80)	0.66	(-12.25, 13.57)
1 st trimester	22.60	(11.90, 33.31)	21.63	(10.89, 32.36)
2 nd trimester	-7.49	(-18.92, 3.94)	-11.76	(-23.38, -0.15)
3 rd trimester	-6.62	(-16.98, 3.75)	-9.51	(-20.00, 0.98)
3 rd trimester truncated ^b	-15.94	(-26.41, -5.48)	-18.59	(-29.17, -8.01)
30 days before delivery	5.83	(-3.65, 15.32)	4.62	(-4.95, 14.19)
60 days before delivery	0.55	(-9.64, 10.74)	-2.55	(-12.85, 7.75)
90 days before delivery	-1.28	(-11.85, 9.29)	-4.75	(-15.45, 5.94)

^a using the stabilized inverse probability to be exposed to air pollutants calculated using maternal education, in relationship status, parity, sex of the child, maternal active smoking during pregnancy, social deprivation, maternal French citizenship, maternal age, weight before pregnancy, maternal height and further adjusted for the aforementioned covariates plus urbanization level and season of conception.

^b exposure truncated at 37 gestational weeks.

Table S4: Adjusted difference in mean term birth weight (g) associated with atmospheric pollutant exposures during pregnancy (n = 13,334 pregnant women from ELFE cohort) accounting for the correlation among trimesters of pregnancy. All effect estimates correspond to an increase of 5 $\mu\text{g}/\text{m}^3$ for $\text{PM}_{2.5}$ and PM_{10} and 10 $\mu\text{g}/\text{m}^3$ for NO_2 . Regression coefficients are from weighted doubly robust generalized additive models^a.

	Full weights		Trimmed weights	
	β	(95% CI)	β	(95% CI)
$\text{PM}_{2.5}$				
1 st trimester	45.92	(36.92, 54.92)	45.71	(36.72, 54.69)
2 nd trimester	-17.06	(-26.78, -7.34)	-17.33	(-27.04, -7.61)
3 rd trimester	-25.44	(-34.77, -16.11)	-25.47	(-34.79, -16.15)
3 rd trimester truncated ^b	-48.08	(-58.14, -38.01)	-48.17	(-58.23, -38.11)
PM_{10}				
1 st trimester	42.32	(34.03, 50.61)	42.15	(33.85, 50.45)
2 nd trimester	-18	(-26.61, -9.39)	-18.14	(-26.75, -9.52)
3 rd trimester	-24.31	(-32.52, -16.09)	-24.37	(-32.59, -16.16)
3 rd trimester truncated ^b	-38.13	(-46.65, -29.61)	-38.6	(-47.14, -30.06)
NO_2				
1 st trimester	18.36	(7.60, 29.13)	17.14	(6.37, 27.91)
2 nd trimester	-15.92	(-27.63, -4.22)	-20.04	(-31.93, -8.16)
3 rd trimester	-4.09	(-14.69, 6.50)	-7.26	(-18.01, 3.48)
3 rd trimester truncated ^b	-14.65	(-25.33, -3.97)	-17.66	(-28.50, -6.82)

^a using the stabilized inverse probability to be exposed to air pollutants calculated using maternal education, in relationship status, parity, sex of the child, maternal active smoking during pregnancy, social deprivation, maternal French citizenship, maternal age, weight before pregnancy, maternal height and further adjusted for the aforementioned covariates plus urbanization level, season of conception and residuals of the regression between trimesters.

^b exposure truncated at 37 gestational weeks.

Table S5: Association between atmospheric pollutant exposure during pregnancy and term birth weight according to the deprivation index (EDI). All effect estimates correspond to an increase of 5 µg/m³ for PM_{2.5} and PM₁₀ and 10 µg/m³ for NO₂. Regression coefficients are from weighted doubly robust generalized additive models^a trimmed at the 1st and 99th percentiles (n = 13,334 pregnant women from ELFE cohort).

	EDI Q1 (least deprived) (n=2,287)		EDI Q2 (n=2,383)		EDI Q3 (n=2,166)		EDI Q4 (n=2,499)		EDI Q5 (most deprived) (n=3,999)		p-value ^b
	β	(95% CI)	β	(95% CI)	β	(95% CI)	β	(95% CI)	β	(95% CI)	
PM_{2.5}											
Whole pregnancy	18.61	(-17.77, 55.00)	22.57	(-12.31, 57.46)	0.17	(-33.90, 34.23)	2.89	(-29.41, 35.20)	23.56	(-3.87, 50.99)	0.652
Whole pregnancy truncated ^d	23.06	(-9.38, 55.50)	26.96	(-4.56, 58.48)	3.16	(-27.73, 34.05)	-0.90	(-30.30, 28.49)	14.37	(-10.38, 39.11)	0.545
1 st trimester	51.31	(33.86, 68.77)	54.33	(37.49, 71.18)	44.88	(27.59, 62.17)	38.70	(22.92, 54.48)	37.16	(24.07, 50.25)	0.371
2 nd trimester	-7.35	(-23.08, 8.39)	-9.59	(-25.42, 6.24)	-13.04	(-28.94, 2.85)	-20.37	(-35.21, -5.54)	-5.99	(-18.35, 6.37)	0.484
3 rd trimester	-37.60	(-54.39, -20.80)	-30.73	(-47.36, -14.09)	-40.02	(-57.16, -22.87)	-16.15	(-31.62, -0.68)	-16.70	(-29.55, -3.85)	0.042
3 rd trimester truncated ^d	-58.15	(-74.99, -41.31)	-50.84	(-67.41, -34.26)	-61.43	(-78.68, -44.18)	-38.55	(-54.14, -22.97)	-36.27	(-49.37, -23.16)	0.031
30 days before delivery	-5.93	(-18.32, 6.46)	-5.71	(-18.14, 6.72)	-6.68	(-19.34, 5.98)	8.34	(-2.95, 19.63)	0.61	(-8.50, 9.73)	0.261
60 days before delivery	-17.53	(-32.19, -2.87)	-11.44	(-26.08, 3.20)	-18.42	(-33.45, -3.39)	1.71	(-11.77, 15.19)	-4.42	(-15.46, 6.63)	0.135
90 days before delivery	-27.12	(-45.22, -9.02)	-20.21	(-38.07, -2.36)	-28.35	(-46.66, -10.05)	-8.26	(-24.95, 8.44)	-9.24	(-23.18, 4.69)	0.195
PM₁₀											
Whole pregnancy	36.39	(4.80, 67.98)	36.87	(7.13, 66.62)	16.97	(-12.26, 46.19)	-0.84	(-27.29, 25.61)	6.25	(-15.30, 27.80)	0.116
Whole pregnancy truncated ^d	33.25	(4.94, 61.56)	34.44	(7.24, 61.65)	16.93	(-10.05, 43.90)	-2.14	(-26.72, 22.43)	3.97	(-16.13, 24.06)	0.086
1 st trimester	47.47	(31.80, 63.14)	47.79	(32.57, 63.01)	41.29	(25.45, 57.14)	38.25	(23.92, 52.58)	33.16	(21.16, 45.16)	0.416
2 nd trimester	-2.12	(-16.58, 12.34)	-5.01	(-19.46, 9.43)	-6.58	(-21.19, 8.04)	-15.87	(-29.46, -2.28)	-3.49	(-14.91, 7.94)	0.516
3 rd trimester	-32.17	(-48.19, -16.14)	-22.95	(-37.99, -7.90)	-31.72	(-47.22, -16.21)	-18.61	(-32.73, -4.49)	-15.95	(-27.89, -4.00)	0.287
3 rd trimester truncated ^d	-49.58	(-65.07, -34.09)	-40.08	(-54.70, -25.45)	-48.19	(-63.46, -32.93)	-37.77	(-51.73, -23.80)	-32.12	(-44.11, -20.14)	0.224
30 days before delivery	-1.43	(-13.25, 10.39)	-1.73	(-13.14, 9.69)	-3.91	(-15.70, 7.88)	7.10	(-3.58, 17.78)	-0.95	(-9.74, 7.84)	0.625
60 days before delivery	-14.08	(-28.26, 0.10)	-7.46	(-21.07, 6.15)	-14.97	(-28.97, -0.97)	-1.98	(-14.78, 10.83)	-6.46	(-17.27, 4.35)	0.554
90 days before delivery	-18.98	(-36.22, -1.74)	-12.16	(-28.29, 3.97)	-19.31	(-35.81, -2.82)	-11.56	(-26.63, 3.50)	-9.79	(-22.50, 2.92)	0.821
NO₂											
Whole pregnancy	13.06	(-11.17, 37.29)	18.19	(-3.38, 39.76)	-6.14	(-27.25, 14.96)	0.52	(-19.55, 20.59)	-11.64	(-30.63, 7.34)	0.133
Whole pregnancy truncated ^d	14.54	(-9.09, 38.17)	19.19	(-1.95, 40.32)	-5.49	(-26.27, 15.29)	-0.97	(-20.85, 18.90)	-12.37	(-31.08, 6.34)	0.082
1 st trimester	34.22	(14.21, 54.23)	37.32	(19.27, 55.37)	21.98	(3.60, 40.37)	14.18	(-2.94, 31.29)	11.04	(-4.70, 26.78)	0.074
2 nd trimester	-4.70	(-24.78, 15.37)	-1.85	(-20.53, 16.82)	-21.75	(-40.25, -3.24)	-13.69	(-31.32, 3.94)	-13.60	(-29.69, 2.48)	0.439
3 rd trimester	-7.03	(-28.00, 13.95)	-8.67	(-27.50, 10.15)	-19.28	(-36.96, -1.59)	1.19	(-15.71, 18.09)	-12.71	(-28.66, 3.23)	0.443
3 rd trimester truncated ^d	-16.07	(-37.09, 4.95)	-19.13	(-37.98, -0.29)	-27.13	(-44.82, -9.45)	-9.85	(-26.87, 7.16)	-20.15	(-36.08, -4.22)	0.631
30 days before delivery	11.21	(-7.64, 30.05)	2.47	(-14.86, 19.80)	-2.37	(-18.98, 14.25)	18.18	(2.45, 33.91)	-2.94	(-17.45, 11.58)	0.176
60 days before delivery	3.34	(-17.17, 23.85)	-2.91	(-21.58, 15.75)	-12.08	(-29.70, 5.54)	10.62	(-6.15, 27.40)	-8.75	(-24.41, 6.90)	0.238
90 days before delivery	1.45	(-19.99, 22.89)	-2.03	(-21.24, 17.18)	-13.29	(-31.32, 4.73)	5.62	(-11.63, 22.88)	-11.27	(-27.57, 5.03)	0.396

^a using the stabilized inverse probability to be exposed to air pollutants calculated using maternal education, in relationship status, parity, sex of the child, maternal active smoking during pregnancy, social deprivation, maternal French citizenship, maternal age, weight before pregnancy, maternal height and further adjusted for the aforementioned covariates plus urbanization level, season of conception as well as an interaction term between European Deprivation Index and air pollutant.

^b p-value of the interaction test between European Deprivation Index and air pollutant.

^c exposure truncated at 37 gestational weeks.

Figure S1: Maternal exposure levels for each pollutant at each time windows considered in the study and Pearson's correlation (n = 13,334 pregnant women from ELFE cohort).

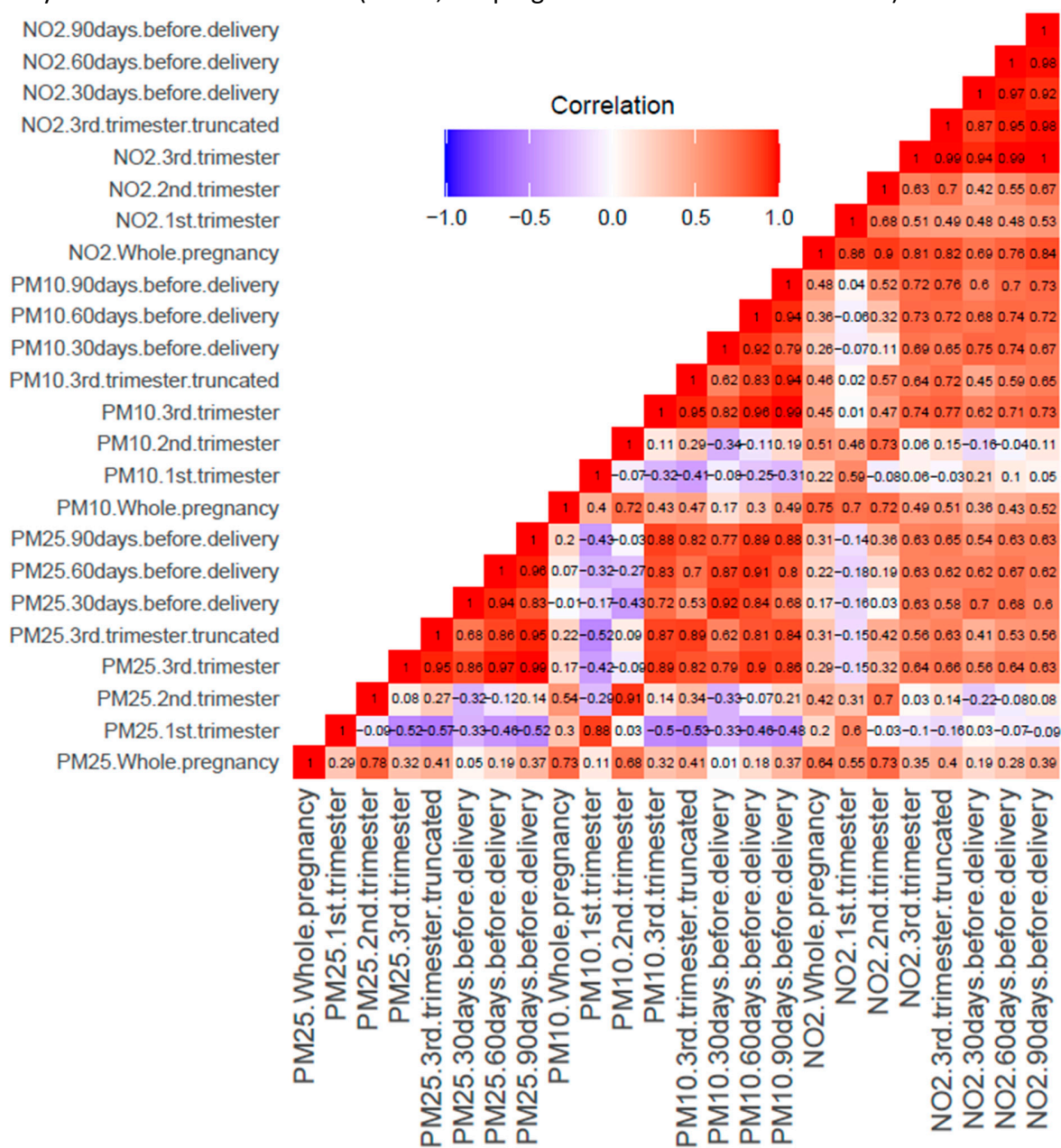
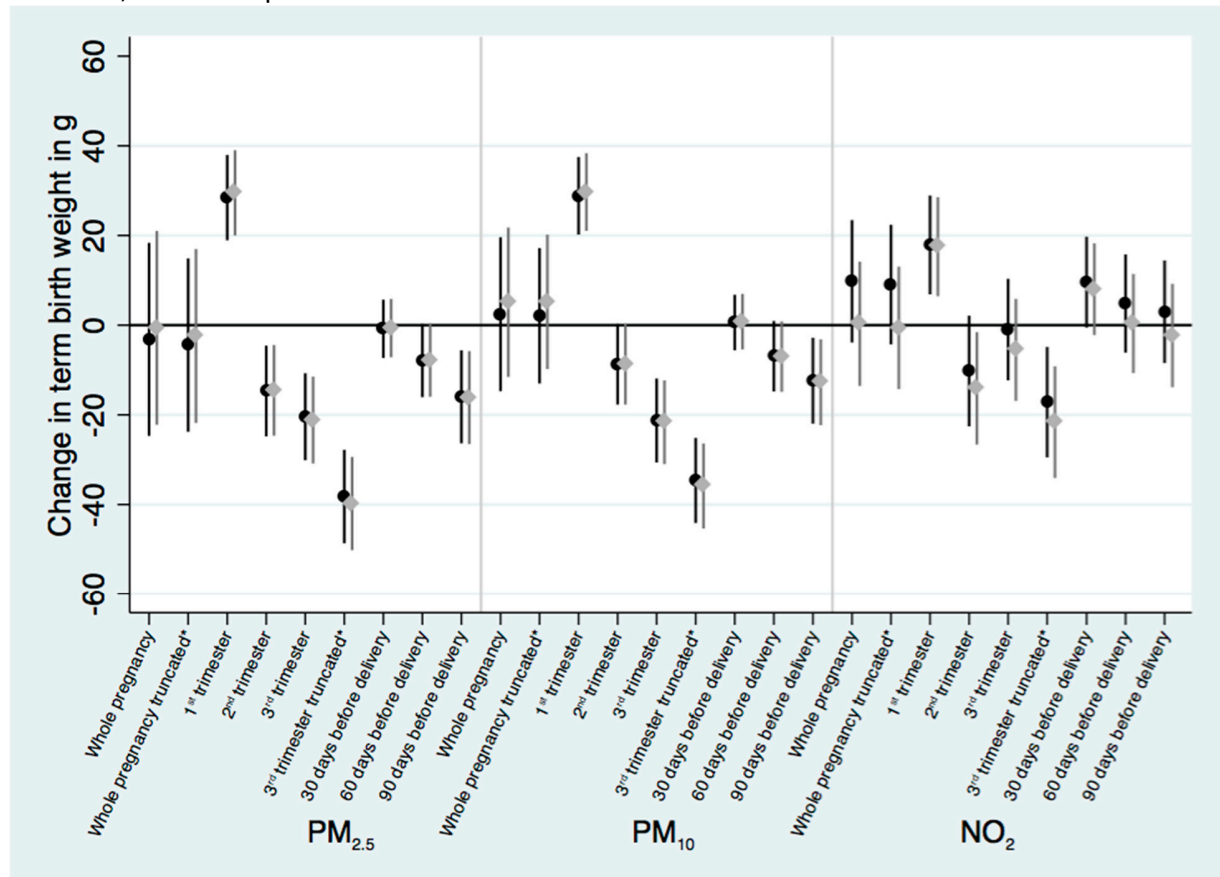


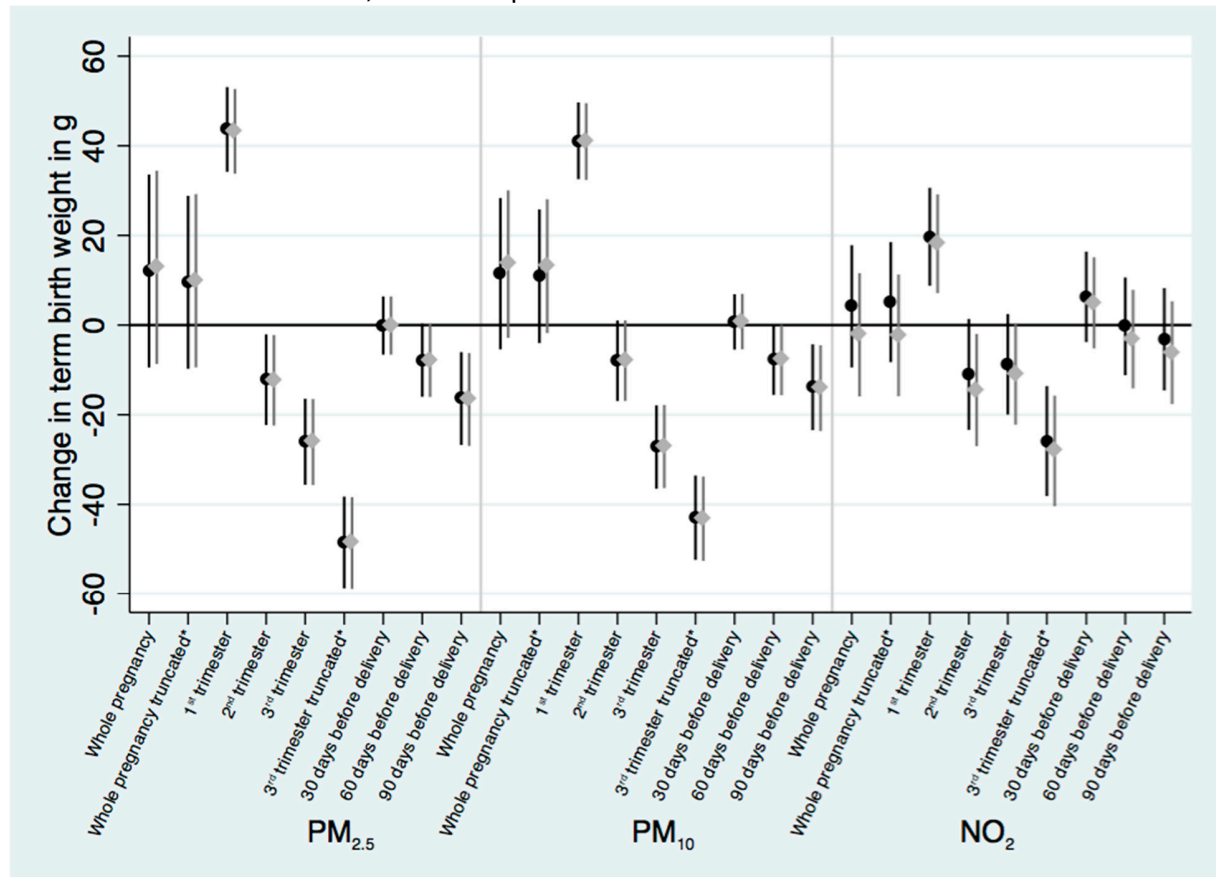
Figure S2: Association between atmospheric pollutant exposure during pregnancy and term birth weight accounting for gestational duration (n = 13,334 pregnant women from ELFE cohort). All effect estimates correspond to an increase of 5 $\mu\text{g}/\text{m}^3$ for $\text{PM}_{2.5}$ and PM_{10} and 10 $\mu\text{g}/\text{m}^3$ for NO_2 . Regression coefficients are from weighted generalized additive models^a. Full weights are represented in black, and trimmed weights in grey. The point reflects the central estimate, the line represents the 95% confidence interval.



^a using the stabilized inverse probability to be exposed to air pollutants calculated using maternal education, in relationship status, parity, sex of the child, maternal active smoking during pregnancy, social deprivation, maternal French citizenship, maternal age, weight before pregnancy, maternal height and gestational duration further adjusted for urbanization level and season of conception.

* exposure truncated at 37 gestational weeks.

Figure S3: Association between atmospheric pollutant exposures during pregnancy and term birth weight using the minimum set of covariates in the propensity score model (n = 13,334 pregnant women from ELFE cohort). All effect estimates correspond to an increase of 5 $\mu\text{g}/\text{m}^3$ for $\text{PM}_{2.5}$ and PM_{10} and 10 $\mu\text{g}/\text{m}^3$ for NO_2 . Regression coefficients are from weighted generalized additive models^a. Full weights are represented in black and trimmed weights in grey. The point reflects the central estimate, the line represents the 95% confidence interval.



^a using the stabilized inverse probability to be exposed to air pollutants calculated using maternal education, parity, social deprivation, maternal French citizenship and further adjusted for urbanization level and season of conception.

* exposure truncated at 37 gestational weeks.