

Supplemental Table 1. Distribution of distance between each subjects and the nearest monitoring station.

	Mean (SD)	Median	IQR
CO	10.82 (5.82)	10.31	8.64
PM ₁₀	10.67 (5.79)	10.49	8.94
PM _{2.5}	12.18 (5.70)	12.23	8.65
NO ₂	13.20 (6.31)	13.24	10.13
O ₃	16.53 (8.09)	15.32	11.03
SO ₂	10.05 (5.50)	9.71	8.79

Supplemental Table 2. Adjusted OR^a with 95% CI for risk of HDP for per IQR increase in gestational exposure to pollutant in two-pollutant models among women who gave birth from 2004-2005 in Jacksonville, FL.

Pair	Pollutant	Trimester 1	Trimester 2	Entire pregnancy
1	PM _{2.5}	1.11(0.99-1.25)	1.40(1.21-1.63)*	1.25(1.08-1.44)*
	NO ₂	1.15(1.01-1.30)*	1.24(1.02-1.51)*	1.21(1.09-1.35)*
2	SO ₂	1.12(1.01-1.24)*	0.99(0.89-1.11)	1.13(1.02-1.26)*
	NO ₂	1.11(0.78-1.26)	0.98(0.83-1.15)	1.22(1.10-1.35)*
3	CO	1.17(1.05-1.30)*	1.06(0.95-1.18)	1.14(1.05-1.24)
	NO ₂	1.09(0.96-1.24)	1.00(0.85-1.19)	1.23(1.11-1.37)*
4	O ₃	0.97(0.81-1.16)	0.92(0.78-1.08)	0.91(0.70-0.94)*
	NO ₂	1.14(1.01-1.29)*	1.05(0.85-1.29)	1.34(1.18-1.51)*
5	SO ₂	1.12(1.01-1.24)*	0.96(0.86-1.07)	1.09(0.97-1.21)
	PM _{2.5}	1.06(0.94-1.19)	1.30(1.14-1.47)*	1.31(1.05-1.40)*
6	CO	1.17(1.05-1.30)*	1.04(0.93-1.16)	1.11(1.02-1.21)*
	PM _{2.5}	1.07(0.95-1.20)	1.28(1.13-1.45)*	1.23(1.07-1.42)*
7	O ₃	1.05(0.87-1.26)	1.03(0.89-1.18)	0.96(0.85-1.09)
	PM _{2.5}	1.11(0.99-1.25)	1.30(1.13-1.48)*	1.25(1.08-1.44)*
8	CO	1.17(1.05-1.30)*	1.06(0.95-1.18)	1.11(1.02-1.20)*
	SO ₂	1.11(1.01-1.23)*	0.99(0.89-1.10)	1.11(1.00-1.23)*
9	O ₃	1.09(0.90-1.31)	0.93(0.81-1.07)	1.01(0.89-1.14)
	SO ₂	1.16(1.04-1.29)*	0.98(0.88-1.09)	1.13(1.01-1.25)*
10	O ₃	1.14(0.94-1.38)	0.97(0.82-1.13)	1.07(0.93-1.22)
	CO	1.22(1.09-1.37)*	1.04(0.92-1.18)	1.14(1.04-1.25)*

^a Adjusted for maternal age, race, education, marital status, smoking during pregnancy, season of conception, year of conception, prenatal care began, and tract median household income.

* p<0.05

Supplemental Table 3. Stratified ORs for risk of HDP for an IQR increase in air pollution (NO₂, PM₁₀, PM_{2.5}, SO₂, CO, and O₃) exposure by air pollutants and pregnancy period of exposure among women who gave birth from 2004-2005 in Jacksonville, FL.

N (HDP) N (No HDP)	Non-Hispanic White		Non-Hispanic Black		Others	
	Unadjusted OR (95% CI)	Adjusted OR ^a (95% CI)	Unadjusted OR (95% CI)	Adjusted OR ^a (95% CI)	Unadjusted OR (95% CI)	Adjusted OR ^a (95% CI)
	536 10787		404 7233		97 2984	
<i>NO₂</i>						
Trimester 1	1.22(1.07-1.38)*	1.09(0.94-1.27)	1.32(1.14-1.53)*	1.19(0.98-1.44)	1.14(0.85-1.54)	1.24(0.87-1.78)
Trimester 2	1.04(0.90-1.21)	0.99(0.81-1.20)	1.07(0.90-1.27)	1.02(0.80-1.29)	0.85(0.59-1.21)	0.80(0.51-1.24)
Pregnancy	1.13(1.03-1.24)*	1.10(0.97-1.26)	1.31(1.19-1.44)*	1.33(1.15-1.54)*	1.26(1.03-1.54)*	1.47(1.14-1.89)*
<i>PM_{2.5}</i>						
Trimester 1	1.15(1.02-1.29)*	1.13(0.98-1.30)	0.99(0.87-1.13)	1.03(0.87-1.23)	1.27(0.96-1.68)	1.20(0.85-1.68)
Trimester 2	1.49(1.30-1.70)*	1.29(1.10-1.52)*	1.43(1.23-1.67)*	1.16(0.94-1.43)	2.05(1.48-2.83)*	1.80(1.20-2.71)*
Pregnancy	1.48(1.29-1.70)*	1.35(1.13-1.61)*	1.18(1.01-1.39)*	1.00(0.80-1.26)	1.89(1.35-2.64)*	1.59(1.04-2.44)*
<i>SO₂</i>						
Trimester 1	1.19(1.07-1.34)*	1.14(1.00-1.30)*	1.20(1.05-1.37)*	1.14(0.96-1.36)	1.10(0.84-1.42)	1.11(0.80-1.53)
Trimester 2	0.92(0.81-1.04)	0.99(0.86-1.14)	0.91(0.79-1.05)	0.94(0.80-1.12)	1.27(0.97-1.66)	1.26(0.92-1.73)
Pregnancy	1.07(0.95-1.21)	1.17(1.02-1.35)*	0.98(0.84-1.14)	1.01(0.85-1.22)	1.27(0.95-1.69)	1.27(0.90-1.78)
<i>CO</i>						
Trimester 1	1.09(0.97-1.22)	1.15(0.99-1.33)	1.09(0.99-1.20)	1.20(1.05-1.36)*	0.99(0.74-1.34)	1.33(0.96-1.84)
Trimester 2	0.86(0.76-0.98)*	1.00(0.86-1.17)	0.95(0.86-1.05)	1.10(0.96-1.25)	0.86(0.63-1.19)	1.12(0.79-1.60)
Pregnancy	0.93(0.84-1.03)	1.09(0.96-1.24)	0.97(0.90-1.05)	1.12(1.01-1.25)*	0.88(0.67-1.15)	1.24(0.94-1.66)
<i>O₃</i>						
Trimester 1	1.07(0.92-1.23)	1.02(0.83-1.25)	1.01(0.86-1.19)	0.94(0.74-1.19)	1.32(0.94-1.86)	1.11(0.73-1.71)
Trimester 2	1.14(1.00-1.30)*	1.00(0.85-1.17)	1.11(0.95-1.30)	0.91(0.73-1.12)	0.77(0.56-1.07)	0.68(0.46-1.01)
Pregnancy	1.24(1.11-1.40)*	1.00(0.86-1.17)	1.24(1.10-1.40)*	0.95(0.80-1.14)	1.22(0.91-1.63)	0.95(0.66-1.37)

^a Adjusted for maternal age, race, education, marital status, smoking during pregnancy, season of conception, year of conception, prenatal care began, and tract median household income.

* p<0.05

Supplemental Table 4. Stratified ORs for risk of HDP for an IQR increase in air pollution (NO₂, PM₁₀, PM_{2.5}, SO₂, CO, and O₃) exposure by air pollutants and pregnancy period of exposure among women who gave birth from 2004-2005 in Jacksonville, FL.

N (HDP) N (No HDP)	Non-smoker		Smoker (<10 cigarettes/day)		Smoker (≥10 cigarettes/day)		
	954 18919	28 781	39 947	Unadjusted OR (95% CI)	Adjusted OR ^a (95% CI)	Unadjusted OR (95% CI)	Adjusted OR ^a (95% CI)
<i>NO₂</i>							
Trimester 1	1.28(1.16-1.40)*	1.16(1.02-1.31)*	0.80(0.46-1.40)	0.73(0.37-1.47)	1.15(0.71-1.86)	1.00(0.58-1.72)	
Trimester 2	1.03(0.93-1.16)	0.99(0.84-1.17)	1.59(0.82-3.12)	1.69(0.71-4.03)	0.77(0.45-1.33)	0.59(0.32-1.10)	
Pregnancy	1.22(1.15-1.31)*	1.23(1.10-1.37)*	1.08(0.73-1.60)	1.07(0.63-1.83)	1.10(0.80-1.52)	0.98(0.65-1.48)	
<i>PM_{2.5}</i>							
Trimester 1	1.11(1.02-1.21)*	1.12(1.00-1.25)*	0.93(0.58-1.50)	1.01(0.54-1.88)	0.98(0.63-1.52)	0.82(0.51-1.32)	
Trimester 2	1.53(1.39-1.69)*	1.27(1.12-1.45)*	1.25(0.70-2.24)	1.20(0.54-2.63)	1.55(0.93-2.57)	1.65(0.91-2.98)	
Pregnancy	1.43(1.28-1.58)	1.25(1.08-1.44)*	1.17(0.65-2.11)	1.23(0.55-2.77)	1.29(0.76-2.18)	1.13(0.60-2.13)	
<i>SO₂</i>							
Trimester 1	1.19(1.09-1.30)*	1.14(1.03-1.27)*	1.40(0.87-2.26)	1.51(0.83-2.77)	1.17(0.76-1.78)	0.82(0.50-1.34)	
Trimester 2	0.95(0.87-1.04)	0.99(0.89-1.11)	1.12(0.68-1.83)	0.96(0.52-1.77)	1.05(0.68-1.63)	1.15(0.71-1.86)	
Pregnancy	1.06(0.96-1.16)	1.11(1.00-1.24)*	1.45(0.86-2.42)	1.47(0.80-2.72)	1.27(0.82-1.99)	1.26(0.77-2.06)	
<i>CO</i>							
Trimester 1	1.14(1.06-1.22)*	1.21(1.09-1.34)*	0.96(0.62-1.51)	0.87(0.47-1.61)	0.87(0.60-1.26)	0.92(0.60-1.41)	
Trimester 2	0.95(0.88-1.02)	1.06(0.95-1.18)	1.13(0.76-1.68)	1.15(0.69-1.91)	0.80(0.53-1.21)	0.92(0.58-1.47)	
Pregnancy	1.00(0.94-1.06)	1.13(1.04-1.23)*	0.98(0.69-1.38)	1.02(0.64-1.62)	0.83(0.60-1.15)	0.94(0.65-1.38)	
<i>O₃</i>							
Trimester 1	1.03(0.93-1.15)	0.99(0.83-1.18)	0.94(0.50-1.78)	0.87(0.39-1.94)	1.30(0.77-2.18)	1.29(0.72-2.30)	
Trimester 2	1.08(0.97-1.19)	0.93(0.82-1.07)	1.05(0.60-1.85)	1.22(0.60-2.50)	1.16(0.71-1.89)	0.89(0.51-1.55)	
Pregnancy	1.20(1.11-1.31)*	0.99(0.87-1.11)	1.04(0.66-1.64)	0.92(0.51-1.69)	1.24(0.82-1.89)	0.91(0.55-1.48)	

^a Adjusted for maternal age, race, education, marital status, smoking during pregnancy, season of conception, year of conception, prenatal care began, and tract median household income.

* p<0.05

Supplemental Table 5. Stratified ORs for risk of HDP for an IQR increase in air pollution (NO₂, PM₁₀, PM_{2.5}, SO₂, CO, and O₃) exposure by air pollutants and pregnancy period of exposure among women who gave birth from 2004-2005 in Jacksonville, FL.

N (HDP) N (No HDP)	Gestational diabetes		Non-gestational diabetes	
	Unadjusted OR (95% CI)	Adjusted OR ^a (95% CI)	Unadjusted OR (95% CI)	Adjusted OR ^b (95% CI)
		58 568		979 20436
<i>NO₂</i>				
Trimester 1	1.25(0.85-1.84)	1.27(0.77-2.11)	1.25(1.14-1.37) *	1.13(0.99-1.28)
Trimester 2	0.99(0.64-1.52)	1.45(0.78-2.72)	1.03(0.93-1.15)	0.94(0.80-1.12)
Pregnancy	1.02(0.76-1.35)	1.50(0.95-2.46)	1.22(1.14-1.30) *	1.20(1.08-1.34) *
<i>PM_{2.5}</i>				
Trimester 1	1.34(0.93-1.96)	1.53(0.96-2.50)	1.08(0.99-1.18)	1.08(0.96-1.21)
Trimester 2	1.05(0.68-1.63)	1.05(0.65-1.69)	1.54(1.39-1.70) *	1.31(1.15-1.49) *
Pregnancy	1.56(0.97-2.57)	1.45(0.82-2.64)	1.39(1.25-1.54) *	1.23(1.06-1.42) *
<i>SO₂</i>				
Trimester 1	0.94(0.64-1.36)	1.08(0.71-1.63)	1.20(1.11-1.31) *	1.14(1.03-1.27) *
Trimester 2	0.67(0.46-0.94) *	0.67(0.42-1.03)	0.98(0.90-1.07)	1.03(0.92-1.15)
Pregnancy	0.73(0.49-1.06)	0.73(0.46-1.12)	1.09(0.99-1.20)	1.16(1.04-1.30) *
<i>CO</i>				
Trimester 1	0.94(0.69-1.26)	1.15(0.76-1.72)	1.13(1.05-1.21) *	1.19(1.06-1.32) *
Trimester 2	0.81(0.56-1.14)	0.76(0.46-1.21)	0.96(0.89-1.03)	1.08(0.97-1.20)
Pregnancy	0.86(0.65-1.12)	0.86(0.59-1.22)	1.00(0.94-1.06)	1.14(1.04-1.24) *
<i>O₃</i>				
Trimester 1	1.31(0.87-1.98)	1.09(0.56-2.20)	1.03(0.93-1.14)	0.99(0.83-1.19)
Trimester 2	1.14(0.74-1.75)	1.18(0.68-2.01)	1.07(0.97-1.18)	0.92(0.80-1.05)
Pregnancy	1.38(0.96-2.02)	1.53(0.92-2.61)	1.19(1.10-1.29) *	0.95(0.85-1.08)

^a Adjusted for maternal age, race, education, marital status, season of conception, year of conception, prenatal care began, and tract median household income.

^b Adjusted for maternal age, race, education, marital status, smoking during pregnancy (<10 or ≥10 cigarettes/day), season of conception, year of conception, prenatal care began, and tract median household income.

* p<0.05

Supplemental Table 6. Stratified ORs for risk of HDP for an IQR increase in air pollution (NO₂, PM₁₀, PM_{2.5}, SO₂, CO, and O₃) exposure by air pollutants and pregnancy period of exposure among women who gave birth from 2004-2005 in Jacksonville, FL.

N (HDP) N (No HDP)	<High school		High school		>High school		
	155 3676	341 7085	526 10043	Unadjusted OR (95% CI)	Adjusted OR ^a (95% CI)	Unadjusted OR (95% CI)	Adjusted OR ^a (95% CI)
<i>NO₂</i>							
Trimester 1	1.23(0.97-1.55)	1.18(0.88-1.58)	1.21(1.31-1.41)*	1.09(0.89-1.33)	1.29(1.14-1.46)*	1.15(0.99-1.35)	
Trimester 2	0.91(0.69-1.20)	0.88(0.62-1.24)	1.08(0.90-1.30)	0.89(0.69-1.14)	1.05(0.90-1.22)	1.06(0.87-1.28)	
Pregnancy	1.15(0.98-1.36)	1.22(0.98-1.53)	1.21(1.09-1.35)*	1.10(0.93-1.29)	1.23(1.13-1.34)*	1.27(1.13-1.44)*	
<i>PM_{2.5}</i>							
Trimester 1	1.00(0.81-1.24)	1.08(0.83-1.39)	0.99(0.86-1.13)	0.98(0.81-1.17)	1.20(1.07-1.35)*	1.19(1.03-1.37)*	
Trimester 2	1.49(1.17-1.92)*	1.16(0.83-1.62)	1.56(1.32-1.84)*	1.31(1.05-1.63)*	1.50(1.31-1.72)*	1.30(1.10-1.54)*	
Pregnancy	1.29(1.00-1.68)*	1.10(0.79-1.54)	1.32(1.11-1.56)*	1.18(0.93-1.49)	1.50(1.30-1.72)*	1.32(1.10-1.58)*	
<i>SO₂</i>							
Trimester 1	1.27(1.02-1.58)*	1.10(0.83-1.46)	1.15(1.00-1.33)*	1.05(0.87-1.26)	1.21(1.08-1.35)*	1.19(1.05-1.36)*	
Trimester 2	1.05(0.84-1.31)	1.09(0.83-1.42)	0.95(0.82-1.10)	0.95(0.79-1.14)	0.93(0.83-1.05)	1.00(0.87-1.14)	
Pregnancy	1.23(0.97-1.56)	1.26(0.96-1.67)	1.05(0.90-1.23)	1.06(0.87-1.28)	1.04(0.91-1.18)	1.13(0.99-1.30)	
<i>CO</i>							
Trimester 1	1.02(0.87-1.20)	1.13(0.92-1.38)	1.13(1.01-1.27)*	1.09(0.93-1.27)	1.19(1.07-1.33)*	1.29(1.13-1.48)*	
Trimester 2	0.98(0.83-1.15)	1.03(0.83-1.27)	0.99(0.88-1.12)	1.06(0.91-1.25)	0.91(0.81-1.03)	1.07(0.93-1.23)	
Pregnancy	0.96(0.84-1.10)	1.05(0.89-1.24)	1.01(0.91-1.10)	1.08(0.95-1.23)	1.01(0.93-1.11)	1.17(1.05-1.31)*	
<i>O₃</i>							
Trimester 1	1.15(0.88-1.49)	1.03(0.73-1.45)	1.05(0.88-1.26)	1.14(0.88-1.46)	1.01(0.87-1.17)	0.92(0.75-1.13)	
Trimester 2	0.96(0.75-1.23)	0.91(0.67-1.23)	0.99(0.84-1.18)	0.84(0.68-1.05)	1.15(1.01-1.31)*	1.00(0.85-1.18)	
Pregnancy	1.17(0.96-1.42)	0.99(0.77-1.28)	1.16(1.02-1.33)*	0.94(0.78-1.13)	1.24(1.11-1.40)*	1.00(0.86-1.17)	

^a Adjusted for maternal age, race, education, marital status, smoking during pregnancy, season of conception, year of conception, prenatal care began, and tract median household income.

* p<0.05

Supplemental Table 7. Stratified ORs for risk of HDP for an IQR increase in air pollution (NO₂, PM₁₀, PM_{2.5}, SO₂, CO, and O₃) exposure by air pollutants and pregnancy period of exposure among women who gave birth from 2004-2005 in Jacksonville, FL.

	Distance ≤10 km		Distance >10 km	
	Unadjusted OR (95% CI)	Adjusted OR ^a (95% CI)	Unadjusted OR (95% CI)	Adjusted OR ^a (95% CI)
<i>NO₂</i>				
Trimester 1	1.29(1.12-1.50)*	1.23(0.99-1.54)	1.23(1.10-1.38)*	1.09(0.94-1.27)
Trimester 2	1.05(0.88-1.25)	0.99(0.74-1.30)	1.03(0.90-1.17)	0.97(0.79-1.18)
Pregnancy	1.25(1.12-1.38)*	1.35(1.12-1.64)*	1.19(1.10-1.29)*	1.15(1.01-1.30)*
<i>PM_{2.5}</i>				
Trimester 1	1.20(1.04-1.39)*	1.18(0.98-1.42)	1.04(0.94-1.15)	1.05(0.92-1.21)
Trimester 2	1.61(1.37-1.89)*	1.43(1.16-1.75)*	1.46(1.30-1.65)*	1.20(1.02-1.41)*
Pregnancy	1.67(1.41-2.00)*	1.55(1.22-1.99)*	1.28(1.13-1.45)*	1.10(0.92-1.30)
<i>SO₂</i>				
Trimester 1	1.23(1.10-1.37)*	1.17(1.02-1.34)*	1.13(1.00-1.28)	1.08(0.92-1.25)
Trimester 2	0.92(0.82-1.03)	0.96(0.84-1.10)	0.98(0.85-1.11)	1.00(0.83-1.20)
Pregnancy	1.06(0.94-1.20)	1.11(0.96-1.28)	1.03(0.89-1.19)	1.12(0.94-1.33)
<i>CO</i>				
Trimester 1	1.06(0.97-1.16)	1.13(0.98-1.30)	1.18(1.06-1.31)*	1.25(1.07-1.46)*
Trimester 2	0.90(0.82-0.99)	1.04(0.90-1.21)	0.98(0.88-1.10)	1.08(0.92-1.25)
Pregnancy	0.93(0.86-1.00)	1.06(0.94-1.19)	1.05(0.96-1.14)	1.19(1.05-1.34)*
<i>O₃</i>				
Trimester 1	1.02(0.81-1.29)	0.92(0.65-1.33)	1.05(0.94-1.18)	1.02(0.84-1.25)
Trimester 2	1.23(0.99-1.53)	1.06(0.81-1.39)	1.04(0.94-1.16)	0.91(0.78-1.05)
Pregnancy	1.25(1.04-1.52)*	1.01(0.79-1.32)	1.20(1.10-1.31)*	0.97(0.85-1.11)

^a Adjusted for maternal age, race, education, marital status, smoking during pregnancy, season of conception, year of conception, prenatal care began, and tract median household income.

* p<0.05