Supplementary materials
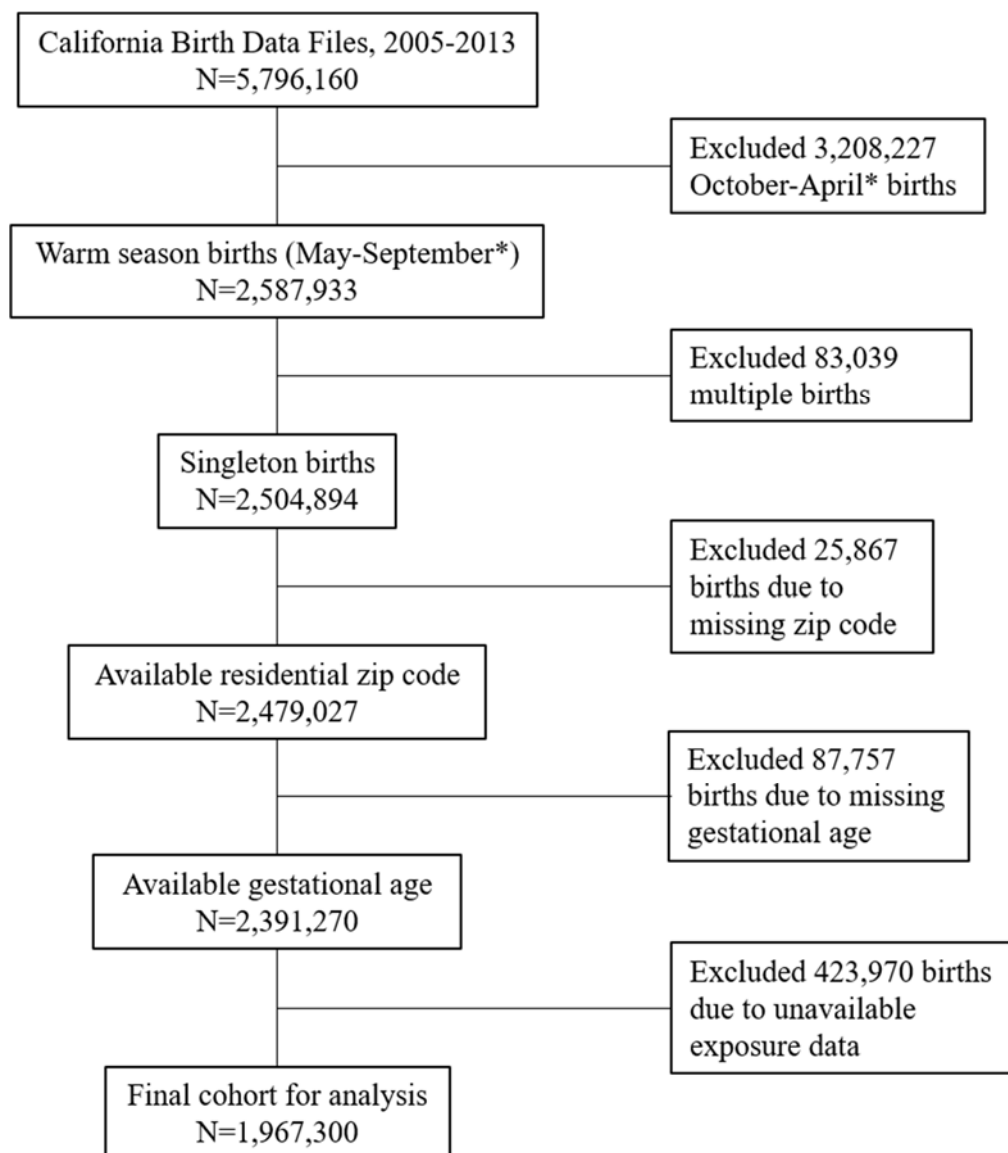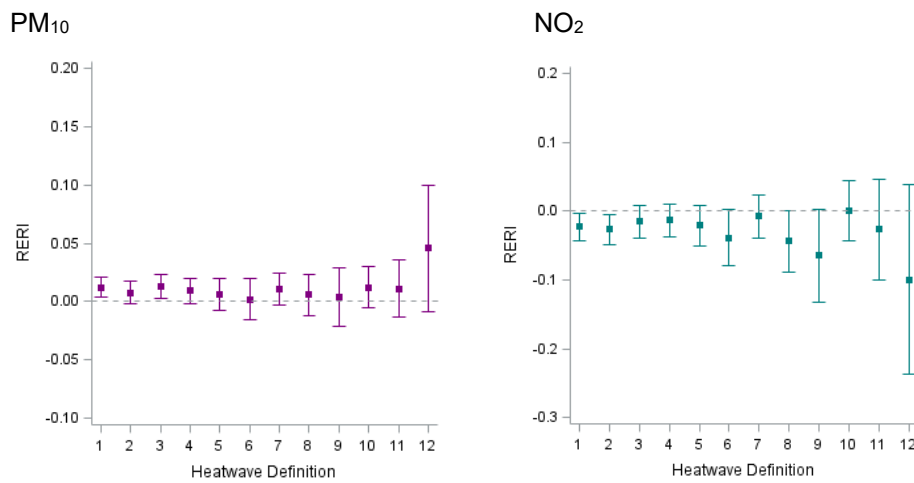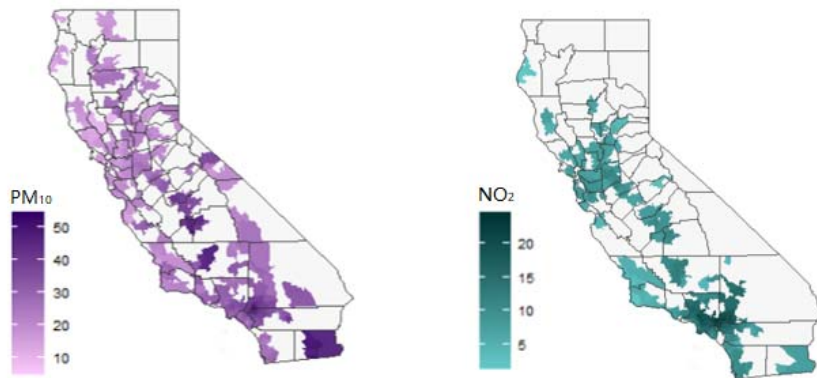
Appendix A. Flowchart of inclusion and exclusion criteria for study population

*Births first week of October were included in this analysis (censored outcomes) to capture women at risk for preterm birth the last week of September.

Appendix B. PM$_{10}$ and NO$_2$ concentrations in California (May-September, 2005-2013) and RERI of heatwave and PM$_{10}$, NO$_2$ on preterm birth.

Number of zip codes: PM$_{10}$:1287; NO$_2$:1128.

RERI: Relative excess risks due to interaction.

All models adjusted for maternal age, race/ethnicity, education, insurance, parity, infant sex, season; maternal residential ZIP code was fitted as a random effect.

RERI calculated for 10 μg/m^3 increase in PM$_{10}$; 10 parts per billion (ppb) increase in NO$_2$.

Appendix C. HRs and RERI of heatwave and air pollution, NDVI inverse on preterm birth in California, 2005-2013.

Heatwave Definition	HR_{11}	HR_{10}	HR_{01}	HR_{00}	RERI (95% CI)
$PM_{2.5}$					
HWD1	1.047	0.956	1.054	1.00	0.037 (0.012, 0.062)
HWD2	1.064	0.974	1.061	1.00	0.029 (0.0002, 0.058)
HWD3	1.065	0.962	1.061	1.00	0.043 (0.009, 0.076)
HWD4	1.061	0.959	1.060	1.00	0.042 (0.010, 0.075)
HWD5	1.085	0.981	1.063	1.00	0.041 (-0.002, 0.084)
HWD6	1.088	0.984	1.065	1.00	0.039 (-0.019, 0.098)
HWD7	1.074	0.969	1.063	1.00	0.042 (0.0003, 0.085)
HWD8	1.075	0.978	1.066	1.00	0.030 (-0.029, 0.090)
HWD9	1.084	0.976	1.067	1.00	0.041 (-0.057, 0.139)
HWD10	1.061	0.963	1.066	1.00	0.032 (-0.024, 0.088)
HWD11	1.125	1.036	1.067	1.00	0.023 (-0.070, 0.116)
HWD12	1.183	1.048	1.067	1.00	0.067 (-0.146, 0.280)
PM_{10}					
HWD1	0.990	0.959	1.018	1.00	0.012 (0.003, 0.021)
HWD2	1.011	0.983	1.021	1.00	0.008 (-0.002, 0.017)
HWD3	1.004	0.971	1.020	1.00	0.013 (0.002, 0.024)
HWD4	1.012	0.981	1.021	1.00	0.010 (-0.001, 0.020)
HWD5	1.044	1.016	1.022	1.00	0.006 (-0.008, 0.019)
HWD6	1.061	1.036	1.023	1.00	0.002 (-0.016, 0.02)
HWD7	1.016	0.983	1.022	1.00	0.011 (-0.003, 0.024)
HWD8	1.025	0.997	1.023	1.00	0.006 (-0.012, 0.023)
HWD9	1.046	1.019	1.023	1.00	0.004 (-0.021, 0.029)
HWD10	0.995	0.960	1.023	1.00	0.012 (-0.005, 0.03)
HWD11	1.052	1.018	1.023	1.00	0.011 (-0.013, 0.035)
HWD12	1.023	0.954	1.023	1.00	0.046 (-0.008, 0.1)
O_3					
HWD1	0.987	0.940	1.040	1.00	0.007 (-0.001, 0.014)
HWD2	0.996	0.948	1.041	1.00	0.007 (-0.001, 0.014)
HWD3	0.971	0.920	1.040	1.00	0.011 (0.003, 0.019)
HWD4	0.976	0.925	1.040	1.00	0.010 (0.002, 0.019)
HWD5	0.984	0.932	1.041	1.00	0.011 (0.001, 0.021)
HWD6	0.979	0.926	1.042	1.00	0.011 (-0.002, 0.024)
HWD7	0.927	0.869	1.040	1.00	0.018 (0.008, 0.027)
HWD8	0.965	0.913	1.043	1.00	0.010 (-0.004, 0.024)
HWD9	0.964	0.911	1.043	1.00	0.011 (-0.008, 0.030)
HWD10	0.848	0.782	1.041	1.00	0.025 (0.014, 0.036)
HWD11	0.902	0.837	1.042	1.00	0.023 (0.004, 0.041)
HWD12	1.080	1.026	1.042	1.00	0.012 (-0.033, 0.056)
NO_2					
HWD1	1.086	1.013	1.097	1.00	-0.023 (-0.043, -0.003)
HWD2	1.098	1.033	1.092	1.00	-0.027 (-0.048, -0.006)
HWD3	1.096	1.028	1.084	1.00	-0.015 (-0.04, 0.009)
HWD4	1.089	1.018	1.084	1.00	-0.013 (-0.037, 0.01)
HWD5	1.114	1.054	1.081	1.00	-0.021 (-0.051, 0.009)
HWD6	1.136	1.093	1.081	1.00	-0.039 (-0.088, 0.002)
HWD7	1.092	1.020	1.080	1.00	-0.008 (-0.039, 0.023)
HWD8	1.125	1.086	1.083	1.00	-0.043 (-0.089, 0.001)
HWD9	1.160	1.143	1.081	1.00	-0.065 (-0.133, 0.003)
HWD10	1.077	0.997	1.080	1.00	0.000 (-0.043, 0.043)
HWD11	1.157	1.105	1.079	1.00	-0.027 (-0.1, 0.046)

HWD12	1.302	1.323	1.080	1.00	-0.100 (-0.238, 0.038)
NDVI inverse					
HWD1	1.075	1.053	1.027	1.00	-0.006 (-0.016, 0.004)
HWD2	1.064	1.041	1.025	1.00	-0.002 (-0.013, 0.008)
HWD3	1.048	1.022	1.024	1.00	0.001 (-0.011, 0.014)
HWD4	1.092	1.073	1.026	1.00	-0.007 (-0.020, 0.007)
HWD5	1.111	1.092	1.025	1.00	-0.006 (-0.023, 0.012)
HWD6	1.118	1.098	1.025	1.00	-0.005 (-0.030, 0.019)
HWD7	1.102	1.083	1.025	1.00	-0.006 (-0.024, 0.012)
HWD8	0.998	0.964	1.024	1.00	0.010 (-0.010, 0.031)
HWD9	1.023	0.987	1.024	1.00	0.011 (-0.020, 0.041)
HWD10	1.021	0.990	1.024	1.00	0.007 (-0.017, 0.030)
HWD11	0.936	0.886	1.024	1.00	0.026 (-0.002, 0.054)
HWD12	0.893	0.827	1.024	1.00	0.041 (0.007, 0.076)

HR: hazard ratio; RERI: relative excess risks due to interaction; CI, confidence interval; HWD: heatwave definition.

All models adjusted for maternal age, race/ethnicity, education, insurance, parity, infant sex, season; maternal address ZIP code was fitted as a random effect.

HRxy; x=heatwave, y=$PM_{2.5}$; PM_{10}; NO_2; O_3; NDVI inverse.

RERI calculated for 10 μg/m^3 increase in $PM_{2.5}$ and PM_{10}; 10 ppb increase in NO_2 and O_3; 0.1 unit decrease in NDVI. RERI = $HR_{11}-HR_{10}-HR_{01}+HR_{00}$

Appendix D. RERI of heatwave and NDVI inverse, PM$_{2.5}$, and O$_3$ on preterm birth in California, 2005-2013 with varying exposure windows.

HWD	NDVI Inverse		PM$_{2.5}$		O$_3$	
	4 days	2 weeks	4 days	2 weeks	4 days	2 days
HWD1	-0.008 (-0.019, 0.003)	-0.008 (-0.017, 0.002)	0.033 (0.007, 0.060)	0.023 (-0.003, 0.050)	0.008 (0.001, 0.015)	0.003 (-0.005, 0.010)
HWD2	-0.004 (-0.018, 0.009)	-0.003 (-0.013, 0.006)	0.028 (-0.005, 0.061)	0.012 (-0.016, 0.040)	0.01 (0.002, 0.018)	0.002 (-0.006, 0.009)
HWD3	-0.011 (-0.030, 0.007)	-0.008 (-0.019, 0.003)	0.027 (-0.015, 0.069)	0.025 (-0.005, 0.056)	0.016 (0.007, 0.025)	0.007 (-0.001, 0.014)
HWD4	-0.007 (-0.024, 0.009)	-0.012 (-0.024, -0.001)	0.033 (-0.005, 0.072)	0.028 (-0.002, 0.059)	0.012 (0.003, 0.021)	0.010 (0.002, 0.017)
HWD5	-0.008 (-0.033, 0.016)	-0.012 (-0.026, 0.002)	-0.005 (-0.061, 0.052)	0.025 (-0.013, 0.062)	0.012 (0.0001, 0.024)	0.011 (0.003, 0.019)
HWD6	-0.026 (-0.069, 0.017)	-0.014 (-0.033, 0.005)	-0.003 (-0.094, 0.088)	-0.004 (-0.054, 0.047)	0.007 (-0.011, 0.025)	0.013 (0.004, 0.023)
HWD7	-0.006 (-0.030, 0.017)	-0.019 (-0.034, -0.003)	0.012 (-0.040, 0.065)	0.015 (-0.024, 0.053)	0.014 (0.003, 0.025)	0.016 (0.009, 0.024)
HWD8	0.005 (-0.026, 0.036)	-0.008 (-0.027, 0.011)	-0.002 (-0.078, 0.073)	-0.015 (-0.069, 0.039)	0.006 (-0.012, 0.025)	0.010 (-0.001, 0.020)
HWD9	-0.005 (-0.062, 0.052)	-0.023 (-0.054, 0.009)	-0.019 (-0.176, 0.139)	-0.035 (-0.118, 0.049)	0.008 (-0.02, 0.036)	0.013 (0.000, 0.026)
HWD10	0.013 (-0.015, 0.042)	-0.016 (-0.038, 0.007)	0.003 (-0.064, 0.070)	0.012 (-0.041, 0.066)	0.027 (0.016, 0.039)	0.026 (0.017, 0.034)
HWD11	0.028 (-0.012, 0.068)	-0.001 (-0.031, 0.029)	0.039 (-0.069, 0.147)	-0.046 (-0.134, 0.043)	0.02 (-0.006, 0.046)	0.021 (0.007, 0.035)
HWD12	0.015 (-0.090, 0.119)	-0.002 (-0.050, 0.047)	0.370 (0.208, 0.531)	-0.037 (-0.207, 0.133)	0.04 (0.026, 0.054)	0.022 (0.001, 0.044)

HWD	PM$_{10}$		NO$_2$	
	4 days	2 weeks	4 days	2 days
HWD1	0.010 (-0.000, 0.019)	0.007 (-0.003, 0.016)	-0.009 (-0.027, 0.01)	-0.033 (-0.055, 0.011)
HWD2	0.011 (-0.001, 0.022)	0.008 (-0.001, 0.017)	-0.010 (-0.032, 0.011)	-0.032 (-0.053, -0.011)
HWD3	0.009 (-0.005, 0.023)	0.011 (0.001, 0.021)	-0.013 (-0.04, 0.015)	-0.031 (-0.053, -0.009)
HWD4	0.007 (-0.006, 0.021)	0.012 (0.002, 0.022)	-0.016 (-0.04, 0.009)	-0.022 (-0.044, -0.001)
HWD5	0.001 (-0.019, 0.021)	0.010 (-0.001, 0.022)	-0.021 (-0.057, 0.015)	-0.032 (-0.058, -0.006)
HWD6	-0.007 (-0.037, 0.024)	0.003 (-0.012, 0.017)	-0.063 (-0.125, -0.002)	-0.057 (-0.09, -0.024)
HWD7	0.006 (-0.013, 0.024)	0.010 (-0.002, 0.022)	-0.034 (-0.07, 0.002)	-0.022 (-0.049, 0.005)
HWD8	0.004 (-0.023, 0.03)	0.002 (-0.014, 0.018)	-0.055 (-0.113, 0.004)	-0.045 (-0.08, -0.009)
HWD9	0.005 (-0.036, 0.046)	-0.004 (-0.027, 0.018)	-0.051 (-0.153, 0.051)	-0.080 (-0.134, -0.026)
HWD10	0.010 (-0.017, 0.037)	0.012 (-0.004, 0.028)	-0.024 (-0.076, 0.028)	-0.018 (-0.056, 0.021)
HWD11	0.023 (-0.012, 0.058)	-0.007 (-0.033, 0.054)	-0.042 (-0.152, 0.067)	-0.066 (-0.131, -0.001)
HWD12	0.093 (0.045, 0.141)	0.012 (-0.031, 0.054)	-0.052 (-0.292, 0.188)	-0.109 (-0.215, -0.003)

HWD: heatwave definition; RERI: relative excess risks due to interaction.

All models adjusted for maternal age, race/ethnicity, education, insurance, parity, infant sex, season; maternal address ZIP code was fitted as a random effect.

RERI calculated for 10 μg/m^3 increase in PM$_{2.5}$ and PM$_{10}$; 10 parts per billion (ppb) increase in O$_3$ and NO$_2$; 0.1 unit decrease in NDVI.

Appendix E. RERI of heatwave and chronic exposure to air pollution on preterm birth in California, 2005-2013.

HWD	RERI (95% CI)			
	PM$_{2.5}$	PM$_{10}$	O$_3$	NO$_2$
HWD1	0.078 (0.046, 0.110)	0.049 (0.04, 0.059)	0.025 (0.018, 0.031)	0.158 (0.137, 0.178)
HWD2	0.062 (0.026, 0.098)	0.039 (0.028, 0.05)	0.019 (0.012, 0.027)	0.143 (0.119, 0.166)
HWD3	0.075 (0.033, 0.116)	0.044 (0.032, 0.057)	0.023 (0.016, 0.031)	0.143 (0.116, 0.170)
HWD4	0.054 (0.012, 0.096)	0.039 (0.026, 0.052)	0.023 (0.016, 0.031)	0.138 (0.111, 0.165)
HWD5	0.048 (-0.007, 0.103)	0.032 (0.015, 0.049)	0.026 (0.018, 0.035)	0.134 (0.099, 0.17)
HWD6	0.023 (-0.053, 0.100)	0.021 (-0.033, 0.045)	0.025 (0.014, 0.036)	0.101 (0.05, 0.151)
HWD7	0.083 (0.027, 0.138)	0.049 (0.034, 0.065)	0.030 (0.022, 0.038)	0.146 (0.11, 0.182)
HWD8	0.018 (-0.067, 0.103)	0.032 (0.008, 0.056)	0.025 (0.014, 0.036)	0.109 (0.055, 0.163)
HWD9	-0.018 (-0.152, 0.116)	0.004 (-0.038, 0.046)	0.023 (0.005, 0.040)	0.081 (-0.004, 0.167)
HWD10	0.112 (0.034, 0.190)	0.055 (0.035, 0.076)	0.033 (0.025, 0.042)	0.186 (0.135, 0.237)
HWD11	0.045 (-0.096, 0.186)	0.034 (-0.004, 0.073)	0.028 (0.010, 0.047)	0.126 (0.033, 0.219)
HWD12	0.066 (-0.192, 0.323)	0.034 (-0.03, 0.097)	0.030 (-0.004, 0.065)	0.039 (-0.138, 0.215)

HWD: heatwave definition; RERI: relative excess risks due to interaction; CI, confidence interval.

All models adjusted for maternal age, race/ethnicity, education, insurance, parity, infant sex, season; maternal address ZIP code was fitted as a random effect.

Chronic exposure defined as average concentration over full gestational period.

RERI calculated for 10 µ g/m^3 increase in PM$_{2.5}$ and PM$_{10}$; 10 parts per billion (ppb) increase in O$_3$ and NO$_2$.

Appendix F. RERI of heatwave and NDVI inverse on preterm birth in California, 2005-2013, restricted to urban zip codes.

HWD	RERI (95% CI)
HWD1	-0.007 (-0.018, 0.004)
HWD2	0.000 (-0.012, 0.012)
HWD3	0.000 (-0.015, 0.014)
HWD4	-0.005 (-0.020, 0.010)
HWD5	-0.008 (-0.029, 0.012)
HWD6	-0.006 (-0.033, 0.022)
HWD7	-0.009 (-0.030, 0.012)
HWD8	0.007 (-0.018, 0.032)
HWD9	0.012 (-0.022, 0.046)
HWD10	0.002 (-0.027, 0.030)
HWD11	0.023 (-0.012, 0.058)
HWD12	0.045 (0.009, 0.080)

HWD: heatwave definition; RERI: relative excess risks due to interaction; CI, confidence interval.

All models adjusted for maternal age, race/ethnicity, education, insurance, parity, infant sex, season; maternal address ZIP code was fitted as a random effect.

RERI calculated for 0.1 unit decrease in NDVI.

Urban defined as RUCA < 3.0 (at least 30% commute to urban area for work).

Appendix G. RERI of heatwave and lack of green space on preterm birth in California, 2005-2013, green space measured by tree canopy.

HWD	RERI (95% CI)
HWD1	-0.00024 (-0.00136, 0.00087)
HWD2	-0.00013 (-0.0014, 0.00114)
HWD3	0.00007 (-0.0014, 0.00153)
HWD4	0.00013 (-0.00122, 0.00149)
HWD5	0.00038 (-0.00131, 0.00207)
HWD6	-0.00029 (-0.00343, 0.00286)
HWD7	0.00033 (-0.00139, 0.00205)
HWD8	0.00032 (-0.00214, 0.00277)
HWD9	-0.00025 (-0.00526, 0.00476)
HWD10	0.00063 (-0.00152, 0.00278)
HWD11	0.00138 (-0.00071, 0.00347)
HWD12	0.00202 (-0.00001, 0.00406)

HWD: heatwave definition; RERI: relative excess risks due to interaction; CI, confidence interval.

All models adjusted for maternal age, race/ethnicity, education, insurance, parity, infant sex, season; maternal address ZIP code was fitted as a random effect.

RERI calculated for 1 unit decrease in tree canopy percentage.

Appendix H. RERI of heatwave and air pollution, NDVI inverse stratified by preterm birth subgroups in California, 2005-2013.

HWD	RERI (95% CI)		
	Extremely PTB	**Very PTB**	**Late PTB**
PM$_{2.5}$			
HWD1	-0.045 (-0.189, 0.10)	-0.023 (-0.118, 0.073)	0.054 (0.028, 0.079)
HWD2	-0.045 (-0.211, 0.122)	-0.075 (-0.193, 0.043)	0.049 (0.019, 0.078)
HWD3	0.017 (-0.156, 0.189)	-0.033 (-0.169, 0.102)	0.056 (0.021, 0.09)
HWD4	-0.090 (-0.299, 0.119)	-0.035 (-0.163, 0.094)	0.061 (0.028, 0.093)
HWD5	-0.299 (-0.681, 0.082)	-0.004 (-0.166, 0.159)	0.059 (0.016, 0.104)
HWD6	-0.471 (-1.148, 0.206)	-0.217 (-0.540, 0.107)	0.067 (0.01, 0.124)
HWD7	-0.305 (-0.70, 0.090)	-0.042 (-0.218, 0.133)	0.067 (0.025, 0.109)
HWD8	-0.299 (-0.859, 0.261)	-0.037 (-0.279, 0.205)	0.049 (-0.011, 0.107)
HWD9	-0.448 (-1.57, 0.674)	-0.423 (-1.117, 0.270)	0.078 (-0.015, 0.172)
HWD10	-0.142 (-0.576, 0.291)	-0.056 (-0.302, 0.191)	0.052 (-0.002, 0.106)
HWD11	-0.571 (-1.926, 0.783)	-0.215 (-0.774, 0.344)	0.054 (-0.034, 0.141)
HWD12	-0.846 (-4.162, 2.47)	-1.102 (-3.55, 1.34)	0.121 (-0.077, 0.32)
PM$_{10}$			
HWD1	-0.002 (-0.047, 0.042)	0.002 (-0.03, 0.034)	0.012 (0.003, 0.021)
HWD2	-0.008 (-0.056, 0.041)	-0.029 (-0.069, 0.011)	0.008 (-0.001, 0.0179)
HWD3	0.016 (-0.028, 0.06)	-0.022 (-0.068, 0.025)	0.011 (0.001, 0.022)
HWD4	-0.038 (-0.107, 0.03)	-0.003 (-0.044, 0.037)	0.009 (-0.002, 0.0197)
HWD5	-0.072 (-0.178, 0.035)	-0.005 (-0.057, 0.047)	0.004 (-0.009, 0.018)
HWD6	-0.094 (-0.261, 0.073)	-0.082 (-0.193, 0.028)	0.003 (-0.013, 0.02)
HWD7	-0.053 (-0.155, 0.048)	-0.037 (-0.104, 0.03)	0.013 (0.00, 0.025)
HWD8	-0.059 (-0.197, 0.08)	-0.010 (-0.083, 0.063)	0.002 (-0.015, 0.019)
HWD9	-0.197 (-0.627, 0.232)	-0.127 (0.35, 0.096)	0.003 (-0.019, 0.026)
HWD10	-0.079 (-0.26, 0.102)	-0.014 (-0.096, 0.068)	0.010 (-0.006, 0.026)
HWD11	-0.084 (-0.372, 0.204)	-0.023 (-0.16, 0.113)	0.005 (-0.018, 0.029)
HWD12	0.090 (-0.071, 0.251)	0.013 (-0.229, 0.256)	0.046 (-0.008, 0.1)
O$_3$			
HWD1	0.023 (-0.01, 0.056)	-0.021 (-0.053, 0.01)	0.007 (0.00, 0.015)
HWD2	0.015 (-0.018, 0.049)	-0.013 (-0.044, 0.019)	0.006 (-0.001, 0.014)
HWD3	0.024 (-0.004, 0.052)	-0.011 (-0.047, 0.026)	0.010 (0.002, 0.018)
HWD4	0.021 (-0.012, 0.054)	0.003 (-0.029, 0.035)	0.009 (0.001, 0.017)
HWD5	-0.002 (-0.055, 0.051)	0.022 (-0.009, 0.052)	0.009 (-0.002, 0.019)
HWD6	-0.006 (-0.084, 0.072)	-0.032 (-0.109, 0.045)	0.012 (0.001, 0.024)
HWD7	0.014 (-0.031, 0.06)	0.012 (-0.026, 0.049)	0.017 (0.008, 0.026)
HWD8	0.026 (-0.002, 0.054)	-0.004 (-0.065, 0.057)	0.007 (-0.006, 0.021)
HWD9	0.016 (-0.078, 0.089)	-0.078 (-0.252, 0.096)	0.013 (-0.004, 0.029)
HWD10	0.007 (-0.073, 0.087)	-0.013 (-0.088, 0.062)	0.024 (0.015, 0.034)
HWD11	0.013 (-0.069, 0.095)	-0.017 (-0.147, 0.114)	0.023 (0.007, 0.039)
HWD12	0.018 (-0.208, 0.244)	-0.061 (-0.399, 0.277)	0.018 (-0.018, 0.054)
NO$_2$			
HWD1	-0.042 (-0.153, 0.069)	-0.067 (-0.141, 0.008)	-0.027 (-0.048, -0.005)
HWD2	-0.026 (-0.142, 0.089)	-0.060 (-0.139, 0.019)	-0.036 (-0.059, -0.013)
HWD3	-0.013 (-0.139, 0.112)	-0.036 (-0.125, 0.053)	-0.026 (-0.052, 0.0)
HWD4	-0.034 (-0.165, 0.096)	-0.060 (-0.149, 0.03)	-0.019 (-0.044, 0.006)
HWD5	-0.100 (-0.287, 0.087)	-0.030 (-0.138, 0.078)	-0.033 (-0.066, -0.001)
HWD6	-0.141 (-0.418, 0.136)	-0.113 (-0.283, 0.057)	-0.050 (-0.095, -0.005)
HWD7	-0.074 (-0.264, 0.116)	-0.052 (-0.172, 0.067)	-0.016 (-0.048, 0.017)
HWD8	-0.135 (0.422, 0.152)	-0.061 (-0.226, 0.105)	-0.056 (-0.105, -0.008)
HWD9	-0.163 (-0.626, 0.3)	-0.291 (-0.646, 0.064)	-0.073 (-0.147, 0.001)
HWD10	-0.234 (-0.614, 0.146)	-0.042 (-0.213, 0.129)	-0.003 (-0.049, 0.042)
HWD11	-0.014 (-0.386, 0.358)	-0.097 (-0.402, 0.209)	-0.047 (0.129, 0.034)

HWD12	0.095 (-0.413, 0.604)	-0.379 (-1.119, 0.361	-0.135 (-0.293, 0.023)
NDVI			
HWD1	0.001 (-0.041, 0.043)	0.013 (-0.016, 0.041)	-0.008 (-0.019, 0.002)
HWD2	0.011 (-0.029, 0.05)	0.012 (-0.019, 0.043)	-0.005 (-0.016, 0.007)
HWD3	0.002 (-0.049, 0.054)	0.017 (-0.018, 0.052)	-0.001 (-0.015, 0.013)
HWD4	-0.032 (-0.114, 0.05)	-0.010 (-0.056, 0.037)	-0.005 (-0.019, 0.008)
HWD5	0.010 (-0.048, 0.067)	0.004 (-0.048, 0.056)	-0.008 (-0.027, 0.011)
HWD6	0.003 (-0.097, 0.103)	0.034 (-0.007, 0.075)	-0.012 (-0.041, 0.016)
HWD7	-0.029 (-0.142, 0.084)	-0.008 (-0.071, 0.055)	-0.006 (-0.025, 0.013)
HWD8	0.014 (-0.053, 0.081)	0.030 (-0.016, 0.076)	0.008 (-0.014, 0.031)
HWD9	0.038 (0.013, 0.063)	0.034 (-0.026, 0.095)	0.004 (-0.032, 0.041)
HWD10	0.021 (-0.054, 0.095)	0.039 (0.003, 0.075)	0.000 (-0.027, 0.028)
HWD11	0.025 (-0.019, 0.068)	0.051 (0.024, 0.078)	0.019 (-0.016, 0.054)
HWD12	0.042 (-0.049, 0.133)	0.050 (0.016, 0.084)	0.031 (-0.019, 0.081)

HWD: heatwave definition; RERI: relative excess risks due to interaction; CI, confidence interval; PTB, preterm birth.

All models adjusted for maternal age, race/ethnicity, education, insurance, parity, infant sex, season; maternal address ZIP code was fitted as a random effect.

RERI calculated for 10 μ g/m^3 increase in $PM_{2.5}$ and PM_{10}; 10 parts per billion (ppb) increase in O_3 and NO_2; 0.1 unit decrease in NDVI.