**S4 Appendix. Adjusted hazard ratios (HRs) and 95% confidence intervals (CI) of GH and PE-E associated with air pollution during the entire pregnancy in sensitivity analysis.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Air Pollutants** | **GH****HRs** | **95% CI** | **PE-E****HRs** | **95% CI** |
| Base model, further adjusted for pre-pregnancy body mass index (BMI) |
| PM2.5 total mass | 0.96 | 0.93 0.99 | 1.05 |  1.02 | 1.09 |
| PM2.5 sulfate | 0.98 | 0.96 1.00 |  0.99  | 0.97 | 1.01 |
| PM2.5 nitrate | 0.96 | 0.93 0.99 | 1.01  | 0.98  | 1.04 |
| PM2.5 ammonium | 0.96 | 0.93 1.00 | 1.01 | 0.98 | 1.03 |
| PM2.5 organic matter | 0.97 | 0.94 1.00 | 1.05 | 1.02 | 1.08 |
| PM2.5 black carbon | 0.95 | 0.91 1.00 | 1.11  | 1.07  | 1.15 |
| Base model, further adjusted for first pregnancy |
| PM2.5 total mass | 0.98 | 0.94 1.01 | 1.06  | 1.03 | 1.09 |
| PM2.5 sulfate | 0.98 | 0.96 1.00 | 1.00  | 0.98 | 1.03 |
| PM2.5 nitrate | 0.96 | 0.93 1.01 | 1.03 | 1.00 | 1.06 |
| PM2.5 ammonium | 0.99 | 0.96 1.01 | 1.01 | 0.99 | 1.03 |
| PM2.5 organic matter | 0.97 | 0.94 1.00 | 1.05 | 1.02 | 1.08 |
| PM2.5 black carbon | 0.97 | 0.93 1.01 | 1.10 | 1.05 | 1.15 |
| Discrete-time model (Odds Ratios) |
| PM2.5 total mass | 1.00  | 0.97 1.03 | 1.06  | 1.04 | 1.09 |
| PM2.5 sulfate | 1.00  | 0.98 1.01 | 1.01  | 0.99 | 1.02 |
| PM2.5 nitrate | 0.99  | 0.97 1.02 | 1.02  | 1.00 | 1.04 |
| PM2.5 ammonium | 1.00  | 0.98 1.03 | 1.01  | 0.99 | 1.03 |
| PM2.5 organic matter | 1.00  | 0.97 1.02 | 1.05  | 1.03  | 1.09 |
| 8PM2.5 black carbon | 1.01  | 0.97 1.05 | 1.11  | 1.07 | 1.16 |

GH: gestational hypertension; PE-E: preeclampsia-eclampsia. N=373,905 for GH cohort; N=386,361 for PE-E cohort. HRs and 95% CIs were calculated for per interquartile range (IQR) increment for each air pollutant. Base model adjusted for maternal age, race/ethnicity, education, household income, maternal exposure to tobacco (active and passive smoking), insurance type, season, and year of birth; zip code was fitted as a random effect.