**Appendix**

**A quantile regression approach to examine fine particles, term low birth weight and racial/ethnic disparities**

**Table s1:** The results of the linear regression showing intercept and birth weight change for 10μg/m3 increase in PM2.5 for the entire population, NH Black mothers, NH White mothers and Hispanic mothers.

|  |  |  |
| --- | --- | --- |
|   | Intercept (grams) | Birth weight change (grams) |
|  All population  |  34.08 | -7.31[-8.10, -6.51] |
|  NH Black  |  3310 | -10.33[-11.67, -8.98] |
|  NH White   |  3458 | -6.26[-7.32, -5.21] |
| Hispanic | 3380 | -6.31 [-7.20, -5.42] |

**Table s2:** The results of the quantile regression analysis showing intercepts for the entire population and for NH Black, NH White and Hispanic mothers.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Quantile** | **0.05** | **0.10** | **0.25** | **0.50** | **0.75** | **0.90** | **0.95** |
| **All population** |
| **Intercept\*****(All)** | 2725 | 2892 | 3135 | 3410 | 3691 | 3961 | 4130 |
| **By Race/Ethnicity** |
| **Intercept\*****(NH White)** | 2746 | 2906 | 3178 | 3468 | 3762 | 4042 | 4201 |
| **Intercept\*****(NH Black)** | 2673 | 2781 | 3037 | 3310 | 3617 | 3885 | 4049 |
| **Intercept\*****(Hispanic)** | 2708 | 2872 | 3113 | 3386 | 3661 | 3931 | 4100 |

\*intercepts correspond to the average value for birth weight in each quantile setting PM2.5 to 0 μg/m3

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Quantile** | **0.05** | **0.10** | **0.25** | **0.50** | **0.75** | **0.90** | **0.95** |
| **NH Black to NH White** |  |  |  |  |  |  |  |
| Cochran Q  | 31.41 | 19.96 | 29.75 | 10.30 | 17.16 | 10.40 | 4.11 |
| P-Value for heterogeneity  | <0.001 | <0.001 | <0.001 | <0.01 | <0.001 | <0.01 | 0.043 |
| **Hispanic to NH White** |  |  |  |  |  |  |  |
| Cochran Q  | <0.0001 | 0.25 | 0.02 | <0.0001 | 1.67 | 0.03 | 0.17 |
| P-Value for heterogeneity  | 0.98 | 0.62 | 0.88 | 0.99 | 0.20 | 0.85 | 0.68 |

**Table s3:** The results of the Cochran Q test showing heterogeneity in birth weight (grams) for 10μg/m3 increase in PM2.5 for NH Black mothers and Hispanic mothers with NH White mothers as comparison by quantile of birth weight.