**Table 1: Air Pollution and Racial Disparities in Pregnancy Outcomes in the United States**

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Reference** | **Study design** | **Study years** | **Country** | **Study population**  **/sample size** | **Total black** | **Total white** | **Total**  **Hispanic** | **Method used to capture exposure** | **Outcome measure** | **Adverse Pregnancy outcome**  **Total** | **Adverse Outcome**  **Blacks** | **Adverse Outcome**  **Whites** | **Adverse Outcome**  **Hispanics** |
| Benmarhnia T et al | Retrospective cohort | 2005-2010 | California USA | 1,066,783 | 175,297 | 891,486 | Not specified | Measurement of PM2.5 and NO2 by EPA | PTB, SGA | Prevalence PTB=10.9%, SGA=2.2% | PTB=15%; SGA=18.3% | PTB=11.3%; SGA=9.9% | Not specified |
| Gray SC et al | Retrospective cohort | 2001-2006 | North Carolina USA | 457,642 | 22.8% | 62.4% | 14.8% | Bayesian Measurement of PM2.5 and O3 | LBW, SGA, PTB | LBW=7.3%; SGA=10.2%; PTB=9.8% | OR LBW=2.13(2.05,2.22); PTB=1.46(1.42,1.50) | Reference | LBW=0.99 (0.93, 1.05); PTB=0.78 (0.75, 0.81) |
| Wallace ME et al | Retrospective cohort study | 2000-2008 | Multi national | 223,375 | 50,255 | 110,541 | 38,811 | CMAQ model | PROM | PROM=7% | PROM=7.6% | PROM=6.9% | PROM=6.4% |
| Hao H, et al | Retrospective cohort | 2002-2006 | Georgia USA | 511,658 | 161,583 | 329,152 | Not Specified | CMAQ model  CO, SO2, O3, NO2, PM2.5 | PTB | PTB=9.3% | PTB=20,283 | PTB=25,514 | Not specified |
| Woodruff TJ et al | Retrospective cohort | 1998-1999 | California USA | 4,098,740 | 15.0% | 61.2% | 18.8% | U.S. EPA Ambient air quality measurement PM10, O3, CO, NO2, SO2 | SGA, PTB | SGA=9.0%, PTB=9.9% | AOR for SGA=2.0  OR for PTB-1.9 | Reference | Not specified |
| Kingsley SL et al | Retrospective cohort | 2002-2012 | Rhode Island USA | 61,640 | 4,706 | 36,510 | Not Specified | land-use regression and satellite remote sensing. PM2.5, BC | PTB |  | PTB=478 | PTB=2,853 | Not specified |
| DeFranco E et al | Retrospective cohort | 2006-2010 | Ohio USA | 351,036 | 46.6% | 44.8% | 5.8% | U.S. EPA Local measurement of PM2.5 | Stillbirths | Stillbirths=0.5% | Stillbirth=8.6 per 1000 | Stillbirth=3.7 per 1000 | Stillbirth=5.7 per 1000 |
| Nobles CJ et al | Retrospective cohort | 2002-2010 | Maryland USA | 109,126 | 216 | 43,055 | 5,328 | CMAQ model, SO2, NO2, PM10 | FGR | FGR=1.5% (825) | FGR=8 | FGR=708 | FGR=88 |
| Le HQ et al | Retrospective cohort | 1990-2001 | Michigan USA | 164,905 | 93,078 | 68,164 | Not specified | Ambient air monitors, SO2, O3CO, NO2, , PM10 | PTB, SGA | nSGA=13,754  nPTB=24,954 | SGA=69.1%, PTB=71.1% | SGA=28.6%, PTB=27.1% |  |
| Miranda ML et al | Retrospective cohort | 2004-2008 | North Carolina USA | 468,517 | 23.3% | 60.3% | 16.4% | Proximity to major road | LBW, PTB, SGA | LBW=6.8%, PTB=10.5%, 10.2% | LBW=11.6%, PTB=14.6%, SGA=16.1% | LBW=5.5%, PTB=9.1%, SGA=8.1% | LBW=5.0%  PTB=9.9%  SGA=9.3% |
| Laurent O et al | Retrospective cohort | 1997-2006 | California USA | 70,000 | 6,261 | 30,548 | 23,678 | Mixed method  NOx, CO, O3, PM | LBW |  | LBW=3.19% | LBW=1.23% | LBW=1.59% |
| Bell ML et al | Retrospective cohort | 1999-2002 | California USA | 358,504 | 10.7% | 83.4% | Not specified | US EPA measurements on NO2, SO2, PM, CO | LBW | LBW=4.01% | LBW=-97.8(-102.9 to -92.7) | reference | Not specified |
| Rich DQ et al | Retrospective cohort | 1999-2003 | New Jersey USA | 350,107 | 38,978 | 84,747 | 54,473 | US EPA measurements  PM2.5, NO2, SO2, CO | SGA | SGA=8%, VSGA=2% | SGA=24% | SGA=46% | SGA=30% |
| Geer LA et al | Retrospective cohort | 1998-2004 | Texas USA | 1,548,904 | 10.6% | 34.7% | 50.7% | US EPA measurements PM, SO2 NO2, CO | LBW | LBW=2.8% | LBW=-168.1(-170 to-165) | reference | LBW=-64.1 (-66.0 to -62.3) |
| Ghosh JK et al | Case control | 2003 | CaliforniaUSA | 1,761 | 7% | 10.9% | 73.6% | Air quality monitoring data | LBW |  | LBW=3.85(1.54,9.79) | reference | LBW=2.75 (1.32,5.72) |
| Kahr MK et al | Retrospective chohort | 2011-2014 | Texas USA | 9004 | 10.7% | 30.5% | 69.5% | People commuting to work | PTB | PTB=10% | PTB=11% | PTB=32% | PTB=68% |