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Researchers out of the University of Pittsburgh School of Public Health released a study investigating the relationship between living in an area with heavy unconventional natural gas development and birth outcomes. They utilized data collected by the Pennsylvania Department of Health on 15,451 live births that occurred in Washington, Westmoreland, and Butler (southwest Pennsylvania) counties between 2007 and 2010. They found that the most exposed mothers, in this case those with more gas wells in closer proximity, bore babies who were more likely to be small for gestational age (SGA) and have lower birth weight than the least exposed mothers, who lived farther away from unconventional wells that were fewer in number. They did not find an association between being born prematurely and living in a more heavily fracked area in the region. In arriving at these results, the researchers took into consideration other maternal and child risk factors including maternal age, race, education, pre-pregnancy weight, prenatal care, smoking status, diabetes, and poverty. Researchers often use birth outcomes as an indicator of environmental exposure because a developing fetus is highly sensitive to toxic exposures, the time period of exposure is well-defined (9 months), and birth data is often collected by state health agencies. Several other studies have found associations between exposure to unconventional natural gas development and fetal health impacts.

To learn more about the study, check out these links:

[PittChronicle: Lower Birth Weight Associated with Proximity of Mother's Home to Gas Wells Undergoing Fracking](#)

Full Text of Article: [Stacy, S.I., Brink, L.L., Larkin, J.C., Sadovsky, Y., Goldstein, B.D., Pitt, B.R., and Talbot, E.O. \(2015\). Perinatal Outcomes and Unconventional Natural Gas Operations in Southwest Pennsylvania. PLoS ONE 10\(6\): e0126425. doi:10.1371/journal.pone.0126425](#)