

University of Pittsburgh Health Studies

Overview

In December 2020, the Wolf Administration provided a \$2.58 million, no-bid contract to the University of Pittsburgh (Pitt) aimed at correlating public health issues with unconventional natural gas development. Pitt looked at three specific issues – childhood cancer, asthma and birth outcomes – within an eight-county region of southwestern Pennsylvania. The studies were released publicly in August 2023.

Pitt conducted an observational study that consisted of examining written health records and conducting a limited number of interviews. The majority of funds (94%) went to researcher salaries, benefits and administrative overhead costs. No new research was conducted, and Pitt researchers refused invitations to visit natural gas sites or speak directly with industry experts.

Despite these and other shortcomings, Pitt researchers failed to establish any causal link between natural gas development and adverse health impacts. Below are key takeaways from each of these studies.

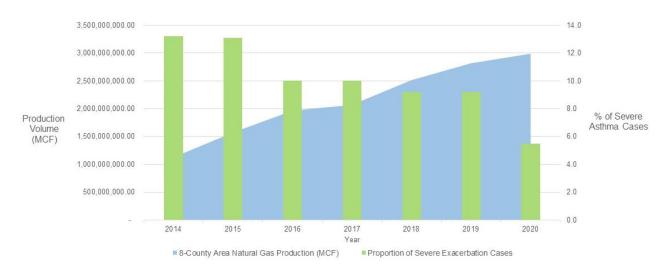
Childhood Cancer

- "No evidence was found to support an association between exposures to [natural gas] activities and other environmental factors and the risk of leukemia, [central nervous system] tumors, and malignant bone tumors, including [Ewing's Family of Tumors]," said Pitt researchers.
- Association with lymphoma was extremely low and underscores the limits of the studies' methodologies:
 - o Assumed people do not move from their residence at birth.
 - o Failed to consider smoking status, prenatal care and other genetic/lifestyle factors.
 - o Failed to identify the age of diagnosis or associate time of diagnosis with any known exposures.
 - o Estimated risk of lymphoma remains extremely low: 0.006% 0.0084%.

Asthma

- Pitt researchers deviated from accepted standards in medical studies and categorized all asthma cases as 'severe', despite many such cases meeting the accepted definitions of either 'mild' or 'moderate'. The American Thoracic Society estimates that between 5-10% of asthmatics have a 'severe' case, yet Pitt's study estimated this percentage at around 40% a clear deviation from commonly held medical understandings of asthma.
- Despite the researchers suggesting that residents in proximity to natural gas production were more likely to suffer from a severe asthma attack, their data demonstrates otherwise.
- In fact, between 2014–2020 severe asthma cases in the study region *declined by over 50%*, despite natural gas production *increasing by over 200%* in the study region.

8-County Area Gas Production vs. Distribution of Severe Asthma Exacerbation Cases in Pitt Study, 2014-2020



Birth Outcomes

- Researchers identified no specific adverse birth outcomes related to natural gas development.
- Lower birthweights (3400 grams) identified in the study region were still well within the national average of 2400 4000 grams and "pose little health risk".
- Common causes of low birthweight, such as smoking or alcohol consumption, were not factored into the study.
- Researchers suggested that fine particulate matter in the air *may* have been a causal exposure pathway, yet state and federal environmental data shows that particulate matter concentrations actually *declined* in the region during the study period.
- Pitt's data showed that the odds of a pre-term birth were actually *higher* for those living with no natural gas activity near the mother's residence during pregnancy.

Where Can I Learn More?

To learn more, please visit www.marcelluscoalition.org/resources/healthstudies or click on any of the following links:

- MSC Letter to PA General Assembly
- Very Little Correlation & No Causation in Pitt Health Studies
- Pitt Studies Contain Serious Methodological Flaws
- Health & Environmental Impacts Studies Fact Sheet