

10 Health Facts You Need to Know

1. Pittsburgh ranks as one of the top 10 most polluted cities in the nation for particle pollution (PM2.5). [1, 4]
2. Allegheny County ranks in the top 1 percent of counties in the U.S. for cancer risk from air pollution. [2]
3. Our air poses a significant threat to public health with an increased risk of heart and lung disease, asthma, diabetes, cancer, and premature death. [1, 2, 3, 4]
4. Asthma, cardiovascular disease, and stroke can be aggravated by short-term exposure to particulate pollution. [5, 7, 10]
5. Suspected carcinogens in air pollution are associated with lung cancer, bladder cancer and childhood leukemia. [8, 11]
6. Air pollution may be the cause of neurodevelopmental disorders (autism spectral) and neurodegenerative disorders (Parkinson's, ALS, Alzheimer's), which have increased at alarming rates in recent decades. [11]
7. Low birth weight and developmental effects in babies are linked to chronic exposures to toxic air pollutants and particulate matter. [10, 11]
8. Air pollution has been linked with pregnancy and birth complications among women living in Allegheny County, including increased risk of preeclampsia, gestational hypertension, and preterm births. [9]
9. Fine particulate matter may alter metabolism in genetically susceptible populations, leading to higher body mass index (BMI) and obesity. [10, 11]
10. The construction of the Shell Petrochemical facility in Beaver County could erase many years' worth of regional air quality improvements and bring a variety of health risks from the VOCs it will emit. [6]

Our Region's Air IS STILL POLLUTED

MONITORS SHOW OUR REGION'S POOR AIR IS CAUSED MOSTLY BY LOCAL SOURCES

- The air quality in the Pittsburgh region was considered NOT GOOD for 170 days in 2020 and 230 days in 2019, between half and two-thirds of all days. [4]
- During 2018 - 2020, one regional air monitor in Pittsburgh registered particulate matter (PM 2.5) concentrations worse than 90% of all monitors in the U.S. and four others worse than 80% of the U.S. [4]
- During the same period, seven out of 8 monitors in the Pittsburgh region had PM-2.5 levels in the worst 50% in of all monitors in the U.S. and do not meet World Health Organization standards for fine particles. [4]
- Allegheny County fails to meet national air quality standards for sulfur dioxide. Of the four sulfur dioxide monitors in Allegheny County, two were in the worst 10% and two were in the worst 50% of all monitors in the U.S. [4]
- Of the three ozone monitors in Allegheny County, one was in the worst 30% and two were in the worst 40% of all monitors in the U.S. [4]

SOURCES

1. "State of the Air, 2021," American Lung Association, 2021. Online: <https://www.lung.org/research/sota/city-rankings/states/pennsylvania/alleggheny>
2. Graham J, Jacobs M, Hoppin P. National Air Toxics Assessment and Cancer Risk in Allegheny County Pennsylvania. Clean Air Task Force and Cancer and Environment Network of Southwest Pennsylvania; 2021 May. Available from: <https://censwpa.org/wp-content/uploads/2021/07/NATA-Factsheet.pdf>
3. Pittsburgh Regional Environmental Threats Analysis (PRETA) Report PRETA AIR: Hazardous Air Pollutants (2013) Online: http://www.heinz.org/UserFiles/Library/PRETA_HAPS.pdf
4. *EPA AQI Data 2018 – 2020.*
5. Circulation: Journal of the American Health Association, "Particulate Matter Air Pollution and Cardiovascular Disease," Brook et al. June 1, 2010. Online: <https://doi.org/10.1161/CIR.0b013e3181d8ece1>
6. Clean Air Council, "Health Impact Assessment of the Shell Chemical Appalachia Petrochemical Complex." Online: <https://cleanair.org/wp-content/uploads/HIA-Final.pdf>
7. Laden, F.; Schwartz, J.; Speizer, F.; and Dockery, D. "Reduction in Fine Particulate Air Pollution and Mortality: Extended Follow-up of the Harvard Six Cities Study," 2006. Online: <https://www.ncbi.nlm.nih.gov/pubmed/16424447>
8. Kurt Straif, Aaron Cohen, Jonathan Samet, "Air Pollution and Cancer" Online: <https://www.iarc.who.int/wp-content/uploads/2018/07/AirPollutionandCancer161.pdf>. Page 166-168 of the report, "Although the studies were limited in scope, the results indicate that the joint contribution may be substantial."
9. Pa. Dept. of Health Asthma Fact Sheet 2021. Online: https://www.health.pa.gov/topics/Documents/Programs/Asthma%20Prevalence%20Fact%20Sheet_6-1-2021.pdf
10. "Case-Crossover Analysis of Air Pollution and Cardiorespirator Hospitalizations: Using Routinely Collected Health and Environmental Data for Tracking. Online: https://www.researchgate.net/publication/23312248_Case-Crossover_Analysis_of_Air_Pollution_and_Cardiorespiratory_Hospitalizations_Using_Routinely_Collected_Health_and_Environmental_Data_for_Tracking_Science_and_Data
11. The Lancet Commission on Pollution and Health, Oct. 19, 2017. Online: <http://www.thelancet.com/commissions/pollution-and-health>.