

HEALTH IMPACTS OF AIR POLLUTION

RESEARCH REVIEW

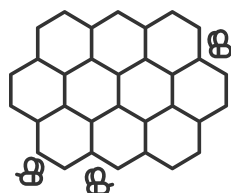


Compiled by Ren Griffeth

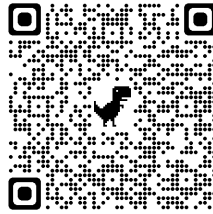
Version 1

There is a growing body of research from around the world showing that human health suffers quite substantially from exposure to air pollution. Furthermore, much of this data indicates that Utah residents live shorter, sicker lives as a result of consistently poor air quality. Below is a compiled list of quality, published research on the topic.

Scan the QR code for each item or click on the linked source to find the original publication.



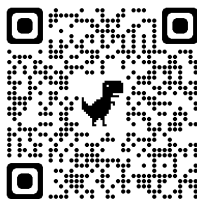
- **Utah residents have been shown to lose 1.1 to 3.5 years of their life on average due to poor air quality.** Up to 23% of the population loses 5 years or more. Source: [Brigham Young University](#), published 11/18/2020.



- **Short-term exposure to air pollution is known to increase the rates of suicide completion in Utah.** Suicide is the 8th leading cause of death in Utah, and we have one of the highest rates of death by suicide in the country. Source: [American Journal of Epidemiology](#), published 02/10/2015.



- **In 2020, death by suicide was the leading cause of death for ages 10-24.** For ages 15-19, suicide outweighs the next 4 leading causes of death all combined. Source: [Utah Department of Health](#).



- **The risk for a spontaneous loss of pregnancy is increased by up to 16% in women along the Wasatch Front** from even short-term exposure to some pollutants. 1,398 women were evaluated who had suffered a sudden loss of pregnancy from 2007-2015. Source: [University of Utah](#), published 02/2019.



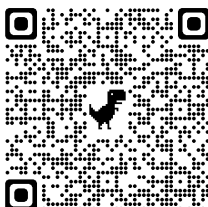
- Babies who are exposed to air pollution in-utero are more likely to be born preterm or underweight**, putting them at an increased risk of long-term health complications and death. These complications are more likely for babies exposed to air pollution in-utero. Source: [Utah's Bureau of Epidemiology](#).



- Utah averages 1.51 infant deaths from birth defects per 1,000 live births.** The US Target for infant deaths from major birth defects is 1.3 per 1,000 live births. Source: [Utah's Public Health Indicator Based Information System](#).

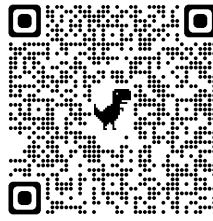


- Harvard's School of Public Health found that early childhood exposure to elevated levels of particulate matter (PM) pollution increases the risk of developing Autism by up to 64%.** The risk is increased by 31% for babies exposed in-utero. Source: [Harvard's T.H. Chan School of Public Health](#). Published 04/29/21.

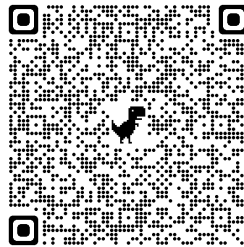


- Utah is the 2nd highest state in the US for lifetime prevalence of asthma among adults as of 2020, at 16.3%.** West Virginia is the only state with a higher

lifetime prevalence, at 16.9%. Source: [Statista](#).



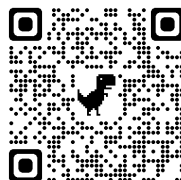
- According to the World Health Organization, and many published studies, “The specific disease outcomes most strongly linked with exposure to air pollution include stroke, ischemic heart disease, chronic obstructive pulmonary disease, lung cancer, pneumonia, and cataract (household air pollution only).”** Source: [World Health Organization](#).



- Multiple studies from across the globe reveal that air pollution increases rates of depression and other mental illnesses.** According to one study, every 1 standard deviation rise in particulate matter over an average PM2.5 concentration increases the likelihood of having a mental illness (including depression) by 6.67%. Source: The [Ochsner Journal](#), published Spring 2019.



- Utah is currently ranked #48 in the country for mental health.** Only Oregon, Wyoming, and Colorado have higher rates of mental illness in the US. Source: [Mental Health America](#).



- ***Air pollution is linked to higher rates of criminal behavior and Alzheimer's disease, decreased cognitive function, and impaired emotional and behavioral development in infants.*** Source: [Utah Physicians for a Healthy Environment- New Research](#).



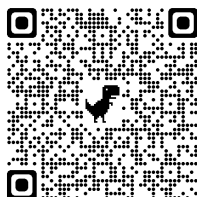
- ***Alzheimer's is the 5th leading cause of death in Utah.*** Chronic lower respiratory diseases are the 6th leading cause of death. Source: [Centers for Disease Control and Prevention](#).



- ***As the Great Salt Lake dries up, its newly exposed lakebed adds arsenic, lead, antimony, and several other highly hazardous chemicals to the air we breathe.*** A report published on January 4th, 2023 reveals that the lake could be completely gone within 5 years without intervention. Source: [Brigham Young University](#).



- ***Air pollution costs Utah taxpayers an average of \$1.8 billion annually in healthcare costs and loss of tourism, among other costs.*** Source: [Brigham Young University](#), published 01/23/2020.



Conclusion

My deepest hope is that this information alerts readers to the severity and urgency of the current situation in Utah. Undeniably, the longer we go without definitive legislative action to safeguard our future as Utah grows, the worse the consequences and statistics will become. Importantly, these statistics represent real people, who are suffering every day as a result of the environment they live in.

Utah is such a beautiful place, filled with incredible people. However, it has disastrous downsides that must be mitigated in order for the people who live here to thrive.

Please visit [and](#) contact your legislators. Let's ask for more to be done on behalf of the people of Utah.

