

Analysis of EPA data shows millions subjected to high levels of cancer-causing industrial pollution

Chase Lawrence
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According to a new analysis by ProPublica of US Environmental Protection Agency (EPA) data from 2014 through 2018, 256,000 Americans are being exposed to pollution levels higher than the EPA's uppermost limit of 1 in 10,000 excess cancer risk, with 43,000 being subjected to at least triple this risk. Meanwhile 74 million people, nearly a quarter of the country's population, are exposed to pollution that carries a higher than 1 in 1 million excess cancer risk.

According to the US Centers for Disease Control, 1.7 million new cases of cancer were reported and almost 600,000 people died of the disease in 2018, accounting for at least 436 cancer cases and 149 deaths per 100,000 people in the US. Cancer was the second leading cause behind heart disease, with one in four deaths due to cancer that year.

ProPublica used data from an EPA model called Risk-Screening Environmental Indicators (RSEI). This data has significant limitations, with the EPA warning in its RSEI Methodology Document that "RSEI does not perform a detailed or quantitative risk assessment, but offers a screening-level, risk-related perspective for relative comparisons of certain waste management activities (e.g., releases to the environment) of TRI chemicals." That is, that the RSEI values are relative and by and large can be expected to be under the actual absolute value, meaning that actual cancer risk could be much higher.

Additionally, the analysis excludes the six criteria pollutants used for the EPA's National Ambient Air Quality Standards, which include ground-level ozone pollution, particulate matter, carbon monoxide, lead and sulfur dioxide, some of which may or are known to cause cancer.

According to the EPA, PM2.5 pollution concentration, which refers to the concentration of fine particles 2.5

microns or less in width in the air, increased over the period of 2016-18, and again in 2019-20. While increases were also seen in 2004-05, 2006-07 and 2009-10, the general trend has been downwards, with a 41 percent decrease in the national average since 2000. The American Lung Association puts the number of people living in unhealthy levels of ozone or particle pollution at over 135 million.

One of the most significant conclusions from ProPublica's analysis is that the EPA's method of risk assessments, which assess facilities one by one, is woefully inadequate when more than one facility is present, causing dangerous overlaps in pollution that lead to cancer risks much higher than the EPA's "acceptable" risk. Corporations frequently violate EPA rules with impunity, accepting fines from environmental violations as a mere cost of business, while the law does not even require the EPA to penalize polluters violating agency rules.

ProPublica identified more than 1,000 hot-spots of cancer-causing air. One environmental scientist and ex-EPA official, Wayne Davis, stated after reviewing the map the organization produced, "The public is going to learn that EPA allows a hell of a lot of pollution to occur that the public does not think is occurring."

Many of the affected areas are in residential zones and schools, though the highest concentrations are unsurprisingly located at the source of the emissions—factories.

According to a study by the National Institutes of Health, "Cancer Incidence and Mortality among Petroleum Industry Workers and Residents Living in Oil Producing Communities," those who work at factories experience much higher cancer rates than elsewhere. Employees in jobs which expose them on a daily basis to

crude petroleum or its product, compared with non-exposed employees, were found to have rate increases ranging from more than double for mesothelioma and between 1.2 and two times the baseline of a variety of cancers, including skin melanoma, multiple myeloma, prostate cancers, urinary bladder cancer, leukemia, stomach cancer and lung cancer. Residential proximity to petroleum facilities was found to increase childhood leukemia incidence by 1.9 times.

ProPublica's report and analysis provides a chilling visualization of this process of mass poisoning.

Almost all of the carcinogenic sites were found in southern states known for weaker regulations, with half in Louisiana and Texas combined. Texas is the number one oil producer out of all states, accounting for 41.4 percent of all oil production in 2019.

Celanese Ltd. Clear Lake plant in Houston, Texas, emits enough pollution to cause a lifetime cancer rate as high as 1 in 210 at the source, 48 times the EPA's "acceptable risk," with nearby Equistar Chemicals Bayport Chemicals plant having a similar rate of 1 in 220. Equistar produces this risk through ethylene oxide and acetaldehyde emissions, while Celanese produces this risk through emissions of ethylene oxide, methyl iodide, acetaldehyde and two other carcinogens. Shell Chemical LP has a 1 in 930 rate at the source.

In response to the publication of the map, Joe Goffman, the acting assistant administrator for the EPA's Office of Air and Radiation said that "toxic air emissions from industrial facilities are a problem that must be addressed" under the Biden administration and claimed that "the EPA has reinvigorated its commitment to protect public health from toxic air emissions from industrial facilities—especially in communities that have already suffered disproportionately from air pollution and other environmental burdens."

While pointing out where the sources of cancer are, ProPublica muddies the water by implying that pollution is either predominantly or solely a racial issue and not a class one. It is the working class, both those working at the polluting facilities and those living in the vicinity who bear the brunt of the pollution. The emissions are made by million-dollar and billion-dollar companies which have, through their representatives in the Democratic and Republican parties, systematically destroyed environmental regulations in the drive for profit. The time period that ProPublica is examining covers two years of the Democratic Party Obama administration, the first black president, as well as two of the Trump presidency.

Given that 46.9 million people in the US identify as black or African American according to the US Census Bureau, even if every single one of these people were confined to these cancer-causing areas, it would still not explain why the rest of the 27.1 million people are being poisoned, let alone the 135 million people in the US exposed to ozone and particle pollution.

The Democratic Party-controlled government of Flint, Michigan, which was predominantly "black and brown" in the parlance of the Democratic party and pseudo-left, presided in coordination with the state Republican party over the poisoning of the population with lead by switching the city to untreated Flint River water. In the wake of this, then-president Barack Obama trivialized the disaster and told residents whose children were poisoned by contaminated water that "the kids will be just fine."

Similarly, Houston, which is examined for a significant portion of one of ProPublica's articles, has been governed by the Democratic Party for years. It has had a black mayor, Sylvester Turner, since 2016, and every mayor since 1982 has been a Democrat. The city council has been dominated by the Democratic Party for almost as long, with 11 of the 16 seats held by Democrats. The current city council is composed mainly of women and minorities, with the latter group holding almost half of the seats. They, along with the Republican state government and the federal government under both the Democratic and Republican administrations and the polluting companies who the aforementioned parties serve, are responsible for the plumes of cancer-causing pollution spewing over Houston.

The situation in Louisiana is similar, where a whole swath, stretching from New Orleans—dominated by the Democratic Party since the 1870s—to Baton Rouge, which has had Democratic mayors since 2005, is commonly referred to as Cancer Alley. A previous investigation by ProPublica detailed such high levels of pollution from nearby chemical plants that residents living in St. Gabriel, Louisiana could observe a golden mist falling from the sky at night so thick that they had to wash it off their lawns the next day.



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