

Union of Concerned Scientists

PFAS Contamination Is an Equity Issue, and President Trump's EPA Is Failing to Fix It

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We have a big national PFAS contamination problem. [PFAS—per- and polyfluoroalkyl substances—](#) are a class of man-made chemicals that are used in a variety of products to repel water and grease, including firefighting foam, nonstick cookware, and food packaging. These chemicals have been [linked to health effects](#) including various forms of cancer, thyroid disease, ulcerative colitis, pregnancy-induced hypertension and preeclampsia, and increased cholesterol levels. While [we're all exposed to some degree](#), who's most at risk of being harmed? In a new analysis for our report, [Abandoned Science, Broken Promises](#), we found that communities of color and low-income communities are more likely to bear the economic and biological burden of the federal government's lack of responsiveness to community concerns on this toxic class of chemicals.

Using data on 73 non-military sites from the [Northeastern University Social Science Environmental Health Research Institute](#), we found that nearly 39,000 more low-income households (15% more than expected based on US census data) and approximately 295,000 more people of color (22% more than expected) live within five miles of a site contaminated with PFAS. PFAS contamination is present in ground and surface water near industrial and [military sites](#) that used or released the compounds, and as a result, has been detected in the drinking water of the residents that live nearby.

Michigan is the only state that has conducted systematic testing of water sources and may lend insight into the true state of PFAS-contamination in the United States. At the 23 sites in Michigan alone, the racial and other social inequities are even more pronounced, with 36,170 more low-income households (49% more than expected based on US census data) and 134,488 more people of color (48% more than expected) living within five miles of a PFAS-contaminated site. These five-mile buffers are illustrative, but the impacts can be felt farther from a source depending on the type of contamination and

groundwater flow. It is unacceptable that safe, accessible, and affordable water, [which should be considered a human right](#), is not a certainty in some communities. Unfortunately, [for Michigan](#) and in other communities across the country, [this is not even close to being a new problem, as has been assiduously documented](#).

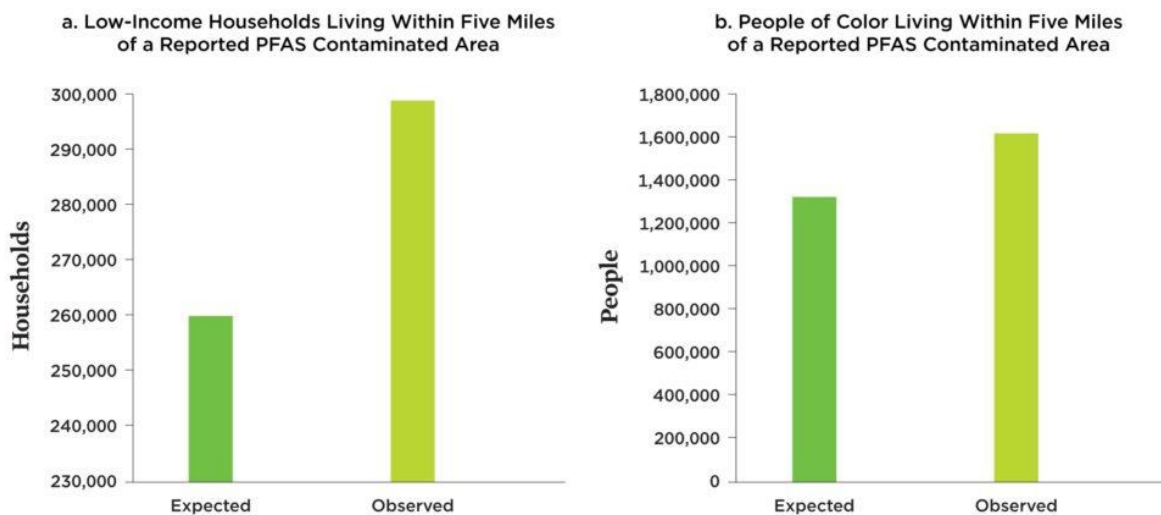


FIGURE 3. Number of Low-Income Households and People of Color Living Within Five Miles of a Reported PFAS Contaminated Area

We observed 38,962 more low-income households (A) and 294,591 more people of color (B) living within five miles of a site contaminated with PFAS than expected based on US census data. PFAS contamination occurs across the United States, and higher exposures are more likely to occur in communities of color and low-income communities.

Note: Residential location was considered as a proxy for PFAS exposure. A more detailed explanation of the methodology can be found in the appendix.

SOURCES: SSEHRI 2019; ACS 2017.

Access to clean water should be a human right

Every day, parents make choices about how to nourish their children. They rely on the government to ensure the safety of the tap water to mix with powdered formula, put in a child’s sippy cup, or use to cook food. They shouldn’t have to worry about what invisible toxins might be lurking in the water, but across the country that’s a daily reality—and the costs are startling. Families in Flint, Michigan have faced devastating [health costs](#) as children were exposed to life-altering levels of lead in water without their knowledge. It has meant financial costs in making different purchasing decisions to avoid contaminated water and paying higher utility and tax bills to help resolve the problem. Nearby, [in Detroit, Michigan](#), residents have been dealing with water accessibility as water rates are rising and those unable to pay their bills risk losing access to drinking water altogether. These are avoidable problems that should be addressed [when science is used for good](#); when it is used with compassion to protect people and to make sure that the injustices are not falling disproportionately on communities of color and low-income communities.

As the [UCS report](#) details, it is rare for frontline communities to face just one environmental challenge. Instead, these communities face cumulative impacts from multiple routes of exposure to hazards, leading to increased health burdens. A [2015 report](#) revealed levels of PFAS higher than state standards in the Flint River around the same time that residents were exposed to lead in drinking water and contamination in the river [has persisted](#). The PFAS contamination issue is adding to the cumulative burden that Flint and other communities across the country have been experiencing for decades.

There are many studies showing that Black, Latinx, [Indigenous communities](#), and children from low-income families are [more likely](#) to live near industrial sites, abandoned mines, landfills, and congested highways than white and affluent communities and there are chronic health impacts associated with those zip codes. There is also [evidence](#) that there are socioeconomic disparities in drinking water contamination on a national scale. These [are systematic and ongoing](#) inequities that weren't created by the Trump administration, but are being exacerbated by current leadership who don't seem to care about science or public health.

The neighborhoods most plagued by anxiety about clean drinking water are communities of color and low-income communities. Just a short drive from where I grew up, in Newark, New Jersey, tens of thousands of residents were told about unsafe levels of lead in their water [this summer](#) after health officials had denied the crisis for years. The local response to keep the entire community safe has been wholly inadequate, and the federal action, by way of the recently [proposed Lead and Copper Rule revisions](#), would still not require the replacement of lead service lines that pose an ever-present threat to communities.

Similarly, the response from local and state governments to PFAS contamination has not been uniform. And because there is not a federal maximum containment level nor any other federal regulation for these toxic chemicals, sites located in communities with access to more resources are being prioritized for cleanup. The [costs of cleaning](#) these sites up are staggering. For local water testing for PFAS contamination, not all communities can afford the tax hikes required to do weekly or biweekly monitoring, and as a result, don't have the same access to vital water quality information that higher-income communities have. This is an environmental injustice. The companies that created this mess should be paying for water utilities to test for and filter out these chemicals, and to remove contamination from the source. One way of broaching this issue is by ensuring that PFAS are regulated as hazardous substances under the Superfund law, which EPA has so far failed to do, and that an amendment to the 2019 [National Defense Authorization Act would require](#).

We will not stand idly by

In many cases, communities facing PFAS contamination are facing a host of other environmental burdens and are not waiting around for change that seems unlikely to come under this administration. In states across the country, scientists, regulators, and community members are working together to inform and develop enforceable drinking water standards. Residents in [Flint](#) and [Detroit](#) have organized and mobilized to gain access to clean, affordable water. At the state level, the Michigan Department of Environment, Great Lakes, and Energy and the PFAS Action Response Team [have issued draft rules](#) for seven PFAS chemicals and hopes to implement them by spring 2020. The Michigan Attorney General (AG), Dana Nessel, is also [following the lead of other state Attorneys General](#) to [bring legal action](#) against the companies responsible for PFAS releases. Community members, [including youth](#), have

been organizing, testifying before Congress, writing to their members, and [publishing their opinions in local newspapers](#) to make their voices heard.

Decisionmakers need to listen to the voices of their constituents who know better than anyone else what's at stake. They should listen to and work with community members to design policies that use the best available science to mitigate cumulative impacts and to ensure the enforcement of these measures will meaningfully protect people, rather than just sounding good on paper. We need strong regulations that keep our water safe, accessible, and affordable for everyone; we need companies responsible for inflicting these pollutants on the rest of us [to pay for their legacy of harm](#); and we need all stakeholders to step up and think about how we can change the way of doing business so that the next generation doesn't have to deal with this s**t.

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Genna Reed is a senior analyst in the Center for Science and Democracy at the Union of Concerned Scientists. In her role, she researches political and corporate influences on science-informed decision making—working to inform the public about issues where science is stifled or obscured, and to ensure that federal, state, and local policies are based on rigorous, independent science.

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