

THREATS ON TAP: FAQ

What did we find?

In 2015, there were **80,834 reported violations** of the Safe Drinking Water Act, including health-based violations and monitoring and reporting violations, at 18,094 community water systems across the nation. All 50 States and all U.S. territories had violations.

That means roughly **one out of three community water systems in the U.S. had a reported violation**. These systems **served 76,922,570 people, or nearly one-fourth of the U.S. population**.

And due to widespread underreporting, the actual number of violations and systems breaking the law is likely substantially higher.

It's notable that very small systems, such as those in rural and more sparsely populated areas, had a higher percentage of health-based violations. **Systems serving less than 500 people accounted for nearly 70 percent of all violations and a little over half of all health-based violations**. However, larger systems accounted for a higher percentage of the population served by systems with violations.

What data are the findings of the report based on?

NRDC used data from the EPA's official drinking water tracking system, the Safe Drinking Water Information System (SDWIS), to identify areas of the country impacted by violations of the Safe Drinking Water Act. The data is based on reporting from January–December, 2015.

Using official EPA violation and enforcement records, we have conducted extensive data analysis. We also used geographic information system (GIS) mapping software to highlight and map the scope of regulated contaminants in drinking water systems across the United States. These maps, based on data the EPA compiles from regular state reporting to the agency, show widespread violations of the Safe Drinking Water Act.

However, it is important to note that not *all* violations are reflected in the database, due in part to underreporting of violations by states and water systems. Sometimes states fail to report known violations, while in other cases water suppliers “game the system,” to avoid finding problems that would then need to be reported to the EPA.

Bottled water is not regulated by the EPA; the Food and Drug Administration regulates bottled water.

How are water contaminants regulated by the EPA?

The Safe Drinking Water Act requires the EPA to establish regulations to restrict the levels of certain contaminants in drinking water. Contaminants are defined as “any physical, chemical, biological, or radiological substance or matter in water.” The EPA sets a maximum contaminant level goal (MCLG) that is fully protective of health, and then sets a looser standard, the maximum contaminant level (MCL), that accounts for feasibility and costs—and isn't necessarily safe. (See more on Page 11)

EPA sets health-based standards for certain contaminants that appear in drinking water. For some contaminants, such as waterborne pathogens like *Giardia*, the EPA requires treatment to reduce health hazards. For toxic chemicals like arsenic or industrial chemicals that can cause cancer or other serious diseases, the EPA has established maximum contaminant levels, or MCLs.

A list of the contaminants regulated under the Safe Drinking Water Act rules is on page 12 of the report.

It should be emphasized that this data does not include chemicals that are not regulated by the EPA, such as pharmaceuticals, perchlorate or PFOA. The EPA has established primary drinking water regulations for about 100 of the many thousands of known or anticipated contaminants that appear in tap water. The EPA has not adopted a single new standard for regulating chemicals in drinking water since 1996.

How will President Trump's proposed cuts to the EPA of 31 percent overall and 24 percent to enforcement specifically impact drinking water quality?

Leaked Trump/Pruitt EPA budget documents show huge cuts to drinking water-related programs and grants totaling more than \$600 million. In addition, the EPA's enforcement budget would be cut by \$129 million and \$498 million would be cut from the water and wastewater loan and grant programs for rural communities at USDA.

Equally concerning, the documents outline staffing reductions of over 200 people working on water related programs. These are career professionals with deep expertise in understanding problems associated with America's water. These are the sort of professionals who told local officials in Flint, Michigan and East Chicago, Indiana that the local governments were using chemicals that exposed their city to lead contamination—and the ones who conducted studies that exposed a lead contamination crisis already underway.

Americans have a right to clean, safe drinking water but President Trump and congressional Republicans are taking those rights away from us by decimating the EPA's ability to ensure clean water.

What does this report show that is different than the lead problems in Flint and other cities?

This report is a follow-up to [our study last year showing widespread lead contamination in the tap water in Flint and other towns across the country](#). While we include the lead results, we've significantly expanded our analysis to cover all contaminants regulated under the Safe Drinking Water Act—from common bacteria and other pathogens to arsenic and radioactive material.

What does contamination in places like Flint, East Chicago and other places around the country illustrate about the health risks of failing to invest in America's water infrastructure?

Solving our water challenges requires much more vigorous implementation and enforcement of our clean water laws, and much greater investment in upgrading our aging, crumbling infrastructure. Unfortunately, we are doing neither.

The public health threat from our failure to invest in our water infrastructure is enormous. Most large drinking water systems still use basic coagulation, sedimentation, sand filtration, and chlorination as treatment—technology that served us well in reducing waterborne disease a century ago but is not up to the task of removing many of today's contaminants like industrial chemicals, pesticides and nitrates.

America needs 21st Century water infrastructure.

Treatment technology such as granular-activated carbon, membranes, and ultraviolet light or ozone for disinfection is not widely used. Moreover, many water systems do not effectively use optimized corrosion control treatment, as illustrated by Flint and East Chicago, Ind.

The best and least expensive way to avoid drinking water contamination is to prevent pollution of surface water or ground water in the first place. But many pollution sources still are poorly controlled, such as runoff from large industrial farms, mining waste, and sewage.

What solutions does NRDC advocate for to improve drinking water quality?

Number one, the US water infrastructure needs to be improved and our drinking water treatment plants must be modernized. These types of violations are too often caused by deteriorating and outdated water collection, treatment, and distribution infrastructure. Old, often poorly maintained water lines have outlived their useful lives—many were built by our great-grandparents' generation. As aging pipes rupture, 240,000 water main breaks happen each year in America. In addition, many cities lose 25 percent of the water pumped into their systems due to

leakage from failing ancient water lines. And there are 6 to 10 million service lines across the nation that are made of lead and should be replaced.

There are nearly a trillion dollars' worth of upgrade and maintenance projects for drinking water infrastructure across the nation. To meet the need, Congress should increase funding for drinking water to \$8 billion per year, roughly triple the amount currently budgeted at \$2.3 billion. Getting this type of commitment to safe water will be a stretch in the age of Trump. However, this investment will fix our water supply and provide millions of well-paid jobs in construction, steel mills, and other trades across the country.

Additionally:

- Existing drinking water regulations should be strengthened and new ones should be established to cover unregulated contaminants.
- A more robust testing system for drinking water contaminants should be developed
- Drinking water enforcement mechanisms should be strengthened
- Citizens should be allowed to act immediately through the court system in cases of imminent and substantial health threats.

NRDC recently entered into a settlement in the case of Flint, Michigan. What other actions has NRDC recently taken to address drinking water issues in other parts of the country?

Responding to reports of elevated lead levels in East Chicago, Indiana, NRDC and a broad range of local, regional and national advocacy groups [petitioned](#) the EPA to address the city's lead-contaminated tap water because it poses an "imminent and substantial endangerment" to public health. (NRDC served a similar petition on EPA in the context of Flint before filing suit against the City of Flint and local officials under the Safe Drinking Water Act.)

EPA conducted a pilot water study in East Chicago, released in December 2016. The study results found more than 40% of tested households with lead levels above the action level for corrective action by public water systems. EPA concluded that the study demonstrated a system-wide lead problem with the drinking water for this city of 29,000 residents.

Similar to the water crisis in Flint, inadequate corrosion control and the existence of lead service lines resulted in elevated levels of lead in drinking water in East Chicago. Unfortunately, East Chicago is also home to the USS Lead Superfund Site, a former industrial area contaminated with lead and arsenic in the local soil from past industrial activity. East Chicago's kids face cumulative exposures to lead, including from the soil, air and water, and have higher blood lead levels than in other parts of Indiana. NRDC expects a decision from EPA soon.

