

Pennsylvania now has limits on forever chemicals, ahead of federal standards

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Pennsylvania has enacted a limit on two PFAS chemicals in drinking water, marking the first time the state has set its own limits instead of adopting a federal standard.

The state's Department of Environmental Protection in November proposed the rule that would limit perfluorooctane [sulfonic acid](#), or PFOS, and [perfluorooctanoic acid](#), or PFOA, to 18 parts per trillion and 14 parts per trillion respectively, after sampling performed on more than 400 [public water systems](#) in Pennsylvania found detectable levels of those chemicals in more than a quarter of them.

PFAS—shorthand for per- and polyfluoroalkyl substances—is the umbrella term for about 6,000 man-made chemicals embedded in many products since the 1930s and 1940s.

They've been added to cookware to make it nonstick, to carpeting, food packaging and firefighting foam, to name a few. The Pennsylvania rule regulates just two of the compounds, which are the most prevalent in the class.

Manufacturers have mostly phased out using these chemicals, but they remain present in air, soil and water because they do not break down, earning them the moniker of "forever chemicals."

The [federal government](#) has no mandated limits for these chemicals. Instead, in 2016, the U.S. Environmental Protection Agency put out a health advisory, recommending that the levels of PFOSs and PFOAs in drinking water should not exceed 70 parts per trillion.

Recent health research suggests that's not protective enough to avoid adverse impacts on human development and immune system function.

The state Department of Environmental Protection's rule notes that PFAS exposure has been potentially linked to "high cholesterol, developmental effects including [low birth weight](#), liver toxicity, decreased immune response, thyroid disease, kidney disease, ulcerative colitis and certain cancers, including testicular cancer and kidney

cancer."

"We are still learning more about these chemicals, and these new maximum contaminant levels are a step in the right direction," the department's acting Secretary Ramez Ziadeh said in a statement.

The PFOA and PFOS limits apply to more than 3,100 [water systems](#) in the state, which serve around 90% of Pennsylvania's population.

Larger water systems—those that serve at least 350 people—must begin complying on Jan. 1, 2024. Smaller systems have an extra year after that.

The U.S. Environmental Protection Agency is working on its own rule to regulate the chemicals and had said it would publish a proposal in December, with a final rule coming at the end of this year.

But the federal agency has yet to release its proposed rule, the Pennsylvania DEP noted, and even when it does, that rule is not expected to go into effect until three years after being finalized.

In adopting its own rules now, Pennsylvania joins seven other states, mostly in the Northeast, that have already set limits on PFAS chemicals.

The state's goal in crafting its regulations is to achieve a 90% improvement in [health outcomes](#) over the federal recommended standard of 70 parts per trillion, the DEP said.

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