It's Time to Take Action on Toxic 'Forever Chemicals' in Kentucky's Drinking Water

This week, Kentuckians learned a startling fact: half of the drinking water tested by the Kentucky Department of Environmental Protection (KDEP) found toxic fluorinated chemicals, known as PFAS.

Per- and polyfluoroalkyl substances, or PFAS, may be one of the most alarming groups of manmade chemicals that you've probably never heard of. https://www.youtube.com/watch?v=ZdfsoDOYumo

PFAS have been used for decades to make non-stick cookware, grease-proof food wrappers, water and stain-resistant textiles, and military grade firefighting foams. The same heat, grease and water-resistant properties that make them commercially advantageous also make them virtually indestructible.

PFAS are often called "forever chemicals" because once they've been released into the environment they never break down naturally. In addition to being incredibly persistent in the environment, they also bioaccumulate in our bodies and have been linked to a host of serious health concerns, including cancer, harm to the reproductive and immune systems, liver and kidney damage, and hormone disruption.

The study of Kentucky's public drinking waters systems illustrates that our state is not immune from the growing PFAS contamination crisis that impairs the drinking water for an estimated 110 million people.

And while numerous water systems in Kentucky are impacted by PFAS contamination, the study found that all of drinking water systems tested that draw water from the Ohio River tested positive for PFAS.

This is notable because for decades these cancer-causing PFAS chemicals flowed downriver from DuPont's Washington Works plant in Parkersburg, WV to Kentucky and Ohio. Used to manufacture the non-stick chemical Teflon, the Washington Works plant dumped untold amounts of PFAS waste into the Ohio River and nearby landfills where the chemicals eventually contaminated drinking water sources downriver in Cincinnati and Northern Kentucky.

Researchers have found that the people living in Northern Kentucky have PFAS blood serum levels that are significantly higher than the national average. One study found that 94 percent of girls six to eight years old in a study sample in Northern Kentucky had PFAS blood serum levels above the 95th percentile, based on national blood monitoring data from the Centers for Disease Control.

Recent testing of drinking water supplies in Louisville, KY, also downriver from the Washington Works plant, detected 10 different PFAS chemicals.

However, it's not just industrial uses of PFAS that have caused the contamination across the country.

The Navy worked with chemical company 3M to develop PFAS-based firefighting foam in the 1960s and began requiring its use beginning in 1969. The decades-long use of PFAS-based firefighting foams by the military – largely for training purposes – has contaminated the drinking water on and around hundreds of military installations across the country, including the site of the Louisville Air National Guard.

The chemical companies and the military knew for decades about the health risks of PFAS exposure and yet continued using it, exposing untold numbers of military personnel and their families to toxic PFAS in the drinking water.

Our state already leads the nation in cancer deaths per year. And as the KDEP study confirms, when states test for these toxic chemicals in drinking water, they find it.

Even though the impacts of PFAS to the environment and human health are well established, the federal government has failed to take decisive action. The Environmental Protection Agency has delivered no concrete plan for action, while the Department of Defense has been actively fighting efforts to adequately clean-up PFAS contamination. Most notably, the military has justified slow walking its meager cleanup efforts by saying that PFAS chemicals have not been deemed "hazardous substances" under the federal Superfund law designated by the EPA or Congress.

It is clearly time for Congress to step in and Senate Majority Leader Mitch McConnell (R-Ky.), along with the rest of Kentucky's federal elected officials are just the people we need.

Sen. McConnell has stood up to protect Kentuckians from toxic chemicals before. He and I have worked together since the 1980's to ensure that chemical weapons were disposed of safely at the Bluegrass Army Depot, just miles from my home, in Berea, Ky., and he has continued to champion safe chemical weapons destruction in Congress. As was done on chemical weapons, the National Academy of Sciences should examine safe methods of PFAS disposal.

Earlier this year the Senate included a number of provisions in the FY 2020 National Defense Authorization Act (NDAA) that would fund research on health impacts, force EPA to set a drinking water limit for some PFAS chemicals, require reporting of PFAS discharges, provide guidance on PFAS destruction, and expand monitoring for PFAS contamination in drinking water and source water.

Those are all important steps, but Congress must do more. Namely, we must kickstart the clean-up of legacy PFAS contamination, assess effective destruction technologies for PFAS chemicals, and not make matters worse by continuing to allow companies to dump their PFAS waste directly into rivers and other sources of drinking water.

Thankfully, the House version of the NDAA would do just that by designating PFAS chemicals as hazardous substances under the Superfund law as well as regulating discharges of PFAS waste under the Clean Water Act. The House version also included a provision requiring safe and effective destruction of PFAS chemicals – the same kind of provision directing safe chemical weapons disposal.

It is important that the Committees of Jurisdiction in both Chambers include these safeguards in the final version of the FY2020 NDAA.

Given the startling new findings about toxic PFAS in Kentucky's drinking water, I hope the Kentucky Delegation will fight to ensure that the strongest PFAS provisions make it into the final package.

Craig Williams, Project Director/KY Environmental Foundation Berea, KY 859-302-1103

Craig Williams is a Vietnam Veteran and is the Project Director at the Kentucky Environmental Foundation. He is the recipient of the 2006 Goldman Environmental Prize for North America.