EPA Releases new drinking water standards, known as Maximum Contaminant Levels for PFAS – what does this mean?

The Environmental Protection Agency (EPA) has just released six new maximum contaminant levels (MCLs) for per- and polyfluoroalkyl substances (PFAS) in drinking water provided by public drinking water systems. Vermont began investigating the occurrence of PFAS in public and private drinking water starting in 2016 and is currently regulating PFAS in public drinking water systems under a state MCL adopted in 2019. The new federal MCLs will mean public water systems will be required to take a series of actions to address PFAS at lower levels than previously required.

What are PFAS?

PFAS stands for per- and poly-fluoroalkyl substances which are a group of thousands of human-made chemicals that have been used in industry and in many consumer products since the 1950s because they are resistant to heat, water, oil, grease, and stains.

- PFAS have been found in many places, including drinking water, soil, biosolids, food, indoor dust, and consumer and industrial products.
- Virtually everyone is exposed to PFAS and PFAS are known to cause risks to human health
- PFAS are introduced into the environment in a variety of ways including releases into the air and water as waste from certain industries and through the regular use and disposal of PFAS-containing products.
- PFAS are very stable and persistent, meaning that once they are released into the environment, they do not breakdown and can build up in the environment, wildlife, and humans.
- PFAS are water soluble and mobile, meaning they can travel in water far from where they are released into the environment, making many drinking water sources, including groundwater, vulnerable to contamination.

What do I need to know about PFAS?

PFAS are harmful to your health. The lower your exposure to PFAS, the lower your risk of having negative health effects. Health risks depend on the specific chemical you are exposed to, how much of the chemical you are exposed to, for how long, and during which life stage(s) you are exposed. Exposure to PFAS may result in a <u>wide range of health problems</u>.

Some populations are especially sensitive to PFOA and PFOS including babies, children who are developing, and people who are pregnant or might become pregnant.

If you have been exposed to PFAS and are concerned about your health, talk to your health care provider.

What is a Maximum Contaminant Level?

A Maximum Contaminant Level (MCL) is the highest level of a contaminant that is allowed in drinking water provided by a public drinking water system. It is a legally enforceable standard.

The EPA's PFAS MCLs require public water systems to:

- Monitor for the PFAS covered by the MCLs
- Notify the public of the levels of these PFAS
- Reduce the levels of these PFAS in drinking water if they exceed the MCL

The EPA's new MCLs do not go into effect immediately; Vermont water systems have three years to sample under the federal framework then two additional years to achieve compliance with the MCLs.

How do EPA's MCLs Compare to the Vermont MCLs?

The EPA MCLs regulate six PFAS chemicals:

EPA's Regulated PFAS	Name	MCL
PFOA	Perfluorooctanoic acid	4.0 ppt
PFOS	Perfluorooctane sulfonic acid	4.0 ppt
PFNA	Perfluorononanoic acid	10 ppt
PFHxS	Perfluorohexane sulfonic acid	10 ppt
HFPO-DA	Hexafluoropropylene oxide dimer acid	10 ppt
(commonly referred to as GenX)		
PFNA	Perfluorononanoic acid	Cumulative hazard Index of 1 (grouped MCL for the sum of 4 PFAS)
PFHxS	Perfluorohexane sulfonic acid	
PFBS	Perfluorobutane sulfonic acid	
HFPO-DA	Hexafluoropropylene oxide dimer acid	

Since 2019, Vermont's MCL for PFAS has been 20 parts per trillion (ppt) for the cumulative sum of five PFAS chemicals. That means the sum of the five regulated PFAS cannot exceed 20 ppt in public drinking water systems. The five PFAS that are currently regulated in Vermont are:

Vermont's Regulated PFAS	Name	MCL
PFOA	Perfluorooctanoic acid	Cumulative sum of 5 PFAS cannot exceed 20 ppt
PFOS	Perfluorooctane sulfonic acid	
PFNA	Perfluorononanoic acid	
PFHxS	Perfluorohexane sulfonic acid	
PFHpA	Perfluoroheptanoic acid	

What is DEC doing to address PFAS in Public Drinking Water?

Vermont began regulating PFAS in public drinking water systems in 2019. To comply with the state regulations, public water systems around the state tested for the presence of PFAS and were required to perform corrective action when levels found were above the State MCL. You can find <u>a list of up-to-date water system PFAS results</u> or search for the results through the <u>Agency of Natural Resources Atlas</u>.

EPA's new MCLs will result in additional public drinking water systems needing to take action to address PFAS contamination.

Vermont's Department of Environmental Conservation (VT DEC) is actively working with our public drinking water systems to achieve compliance with the new EPA MCLs. These actions include:

- All public drinking water systems that were required to collect samples for PFAS under the state rule have done so.
- Based on updates made in 2022 to the respective Health Advisories from EPA, water systems with detections of PFOA or PFOS have informed their users through public notification.
- When PFAS in exceedance of the State MCL were identified in drinking water, systems
 were directed to take immediate action. As of 2024, many of the systems with
 contamination have taken corrective action to address elevated PFAS and others are
 still working on addressing PFAS in the drinking water. DEC is actively working with the
 remaining systems to get them into compliance.
- Vermont has provided financial assistance to impacted systems through state and federal funding programs.
- Bottled water systems are required to submit PFAS results at least every 3 years. <u>Find a list of bottled water with no PFAS detected</u>.
- Moving forward, VT DEC will continue to work with our public drinking water systems to support the implementation of EPA's new PFAS rule. These actions include:
- Transition to monitoring for PFAS in drinking water per EPA monitoring requirements.
- Continuing to require systems to send out public notification when the system is in violation of the PFAS MCL(s).
- Continue requiring systems to take action when PFAS are in exceedance of the EPA PFAS MCLs to achieve compliance with the MCLs.
- To the extent possible, continue providing financial assistance to impacted systems through state and federal funding programs.
- Employing an Environmental Justice (EJ) approach to prioritize the limited funding to our most vulnerable systems and communities.
- Providing public water systems direct technical assistance through contracted support.
- Contracting and working in close collaboration with engineering firms to design treatment systems and achieve compliance, in the quickest way possible.



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- Providing direct assistance and, as available, funding for systems to pursue other
 potential solutions, such as new water source development or system consolidation, if
 they choose to do so.
- Working with our partner agencies to develop laboratory testing capacity in Vermont.

I am on a private well or spring. What should I do?

If you are on a private well or spring, the Vermont Department of Health recommends testing your drinking water for bacteria, inorganic chemicals and gross alpha radiation by using the <u>Vermont Homeowner Testing Package</u>. If high levels of contaminants are present in your drinking water, the Health Department recommends treating your water.

If you'd like to test your water for PFAS, <u>find a certified drinking water lab</u>. Testing for PFAS is more expensive than testing for the contaminants listed above. If you have a treatment system installed for other contaminants in Vermont water, it may also treat for PFAS. Health and DEC will be reviewing EPA's new PFAS treatment guidance and will update Vermont's treatment information as needed. <u>Learn more about PFAS in private drinking water</u>.

Where can I find more information?

For any questions or concerns, call Vermont's PFAS Hotline at (802) 693-0206.

Visit the Department of Environmental Conservation's <u>PFAS</u> website.