PFAS in Drinking Water

for Private Residential Well Owners



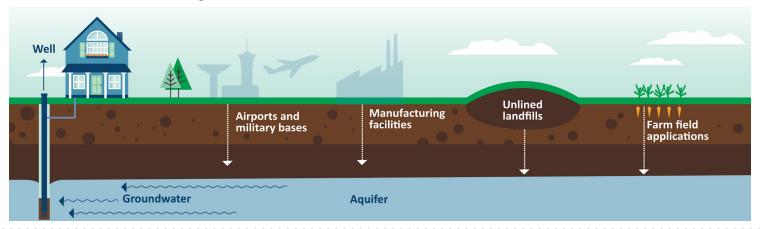
Per- and polyfluoroalkyl substances (PFAS) have been used in the industry of manufacturing and commercial products for many years. When these products are made or used in industry, they are sometimes released into the environment. When this happens and depending on where you live, your well water could be impacted or contaminated by PFAS.

Having a private residential well means you are responsible for your own water system! This includes taking care of your well system and knowing your surroundings to protect your drinking water and health.

Read on to learn important information about PFAS. It could help you decide if you should test your drinking water.

How PFAS get into drinking water

- PFAS are a large group of human-made chemicals that do not occur naturally in our environment. PFAS are
 used in many commercial products such as stain repellents, fast food wrappers, and waterproofing sprays.
 They are also used in manufacturing processes.
- When PFAS are released in the environment from the sources listed below, they can seep into groundwater which becomes drinking water.



Common sources of PFAS in groundwater



Airport and Military Bases. PFAS have been and continue to be used in firefighting foam. Groundwater contaminated with PFAS near airports and military bases is often associated with the use of firefighting foams.



Manufacturing facilities. PFAS have been used in manufacturing. They can be released into lakes and rivers during production or may be in industrial waste that seeps into the soil and groundwater.



Unlined Landfills. PFAS are used in many different consumer products that eventually end up in landfills. PFAS in unlined landfills can seep into groundwater.



Farm field applications. PFAS may be in treated biosolids which are materials produced during the processing of wastewater. Biosolids are sometimes used on farmland as fertilizer. Once applied, it can seep into groundwater.

Health risks of PFAS

Some PFAS can stay in people's bodies for many years. Scientists are still learning about the health problems associated with PFAS exposure.

Some studies in people have shown that certain PFAS are linked to:

- High blood pressure or pre-eclampsia in pregnant women (PFOA, PFOS)
- Thyroid disease (PFOA, PFOS)
- Decreased immune system response to vaccines (PFOA, PFOS, PFHxS, PFDeA)
- Reduced fertility (PFOA, PFOS)
- Liver damage (PFOA, PFOS, PFHxS)
- Higher cholesterol, especially total cholesterol, and LDL cholesterol (PFOA, PFOS, PFNA, PFDeA)
- Small decreases in infant birth weight (PFOA, PFOS)
- Developing certain types of cancer, in particular kidney and testicular cancers (PFOA)



How to find out if PFAS is in your drinking water

Step 1: Identify potential PFAS sources in your area

- Potential sources of PFAS include:
 - Sources listed on page 1 of this document.
 - Known PFAS sites in Michigan. Visit https://bit.ly/MiPFASsites to learn if you may live near one.
- You can also call your local health department or the MDHHS Division of Environmental Health Hotline at 800-648-6942. They can help you understand potential risks based on where you live.

Step 2: Consider testing your drinking water if you live nearby a potential PFAS sources

- If you live near a potential source or if you are unsure, consider testing your drinking water as a precaution. Call the MDHHS Division of Environmental Health Hotline at 800-648-6942 to see if your home is in an area that is under investigation for PFAS. We may be able to test your water for free.
- If we cannot test your water for free, contact a certified drinking water lab about PFAS testing and the test cost. They can help you get sample bottles and provide instructions on how to collect your water sample yourself. Visit http://bit.ly/PFASLabTesting for a list of labs that offer PFAS testing.
- It is important to follow the instructions provided for accurate results. To read more on home testing guidance for PFAS, visit http://bit.ly/PFASHomeSampling.

Step 3: Understand what your test results for PFAS in drinking water mean

 You can call the MDHHS Division of Environmental Health Hotline at 800-648-6942 to review your water test results with a toxicologist. They can help you understand any potential risks and advise on next steps based on your results.

Consider using a water filter to reduce PFAS in drinking water

Consider a filter that can reduce the amounts of PFOA and PFOS, two types of PFAS. Make sure the filter has an NSF/ANSI Standard 53 for PFOA or PFOS reduction or NSF/ANSI 58 certification for reverse osmosis systems for PFOA and PFOS reduction.

There are filters that can reduce PFOA and PFOS at the point water is used, such as a faucet. This is called a point-of-use filter.

Another option to consider is a filter that reduces PFOA and PFOS at the point where the water enters your home. This is called a point-of-entry filter.



For more information on choosing a water filter, go to http://bit.ly/PFASHomeFilter.

Using a certified filter does not guarantee that all PFAS, including PFOA and PFOS, will be completely removed from the water. Testing your drinking water after installing a filter can help verify that PFAS are reduced to levels that are at or below public health screening values. Follow the manufacturer's maintenance guide to make sure the filter continues to work as expected over time.

It is important to know that there are no filters that are certified to reduce every type of PFAS. Call the MDHHS Division of Environmental Health Hotline at 800-648-6942 and ask for a toxicologist to talk about the PFAS in your drinking water and what a filter can do for you.

• If you live in an area that is under investigation for PFAS contamination, you may qualify for a free water filter. Call the MDHHS Division of Environmental Health Hotline at 800-648-6942 to learn more.

For More Information

Michigan PFAS Response Team (MPART)

Michigan.gov/pfasresponse

Michigan Department of Health and Human Services

Environmental Health Hotline 800-648-6942

List of Michigan Local Health
Departments
Malph.org/Resources/Directory

Michigan Department of Environment, Great Lakes, and Energy

Well Construction
Michigan.gov/WaterWellConstruction

Laboratory Services

Michigan.gov/EGLElab and choose "drinking water laboratory"

