QUICK GUIDE TO MICHIGAN'S SCREENING VALUES & MCLs

Per- and polyfluoroalkyl substances (PFAS)

What is PFAS?

Per- and polyfluoroalkyl substances (PFAS) are a family of man-made chemicals, including PFOS, PFOA, PFBS, PFHxS, PFNA, and many others, that have been used in manufacturing and commercial products since the 1940s. Practical uses of PFAS include non-stick surfaces on cooking pans and food wrappers, waterproofing chemicals, foams used to fight fires, and in industries to keep fumes down for worker safety.

What are public health screening values and MCLs?

Multiple government agencies work to ensure that public health is protected when it comes to drinking water and contaminants. Some work to enforce regulations; others are focused on learning about where the contamination is coming from and where it has spread in the area; others assess who might be exposed and what that might mean for a community; and others ensure contaminant levels remain within acceptable limits based on the best available science of the time. These agencies use screening values, criteria, and rules in different ways to fulfill their obligations to protect public health.

While criteria and MCLs are rules that are meant to be a hard stop – a red light at the intersection that applies to everyone equally; public health drinking water screening levels are tools used to help determine risk. These screening levels are like a blinking yellow light – meaning use caution and consider factors on a case-by-case basis. Every drinking water supplier in the state must follow these rules and keep chemicals in water from going above the levels that are set by the government agencies. Public health drinking water screening levels are not regulations. They are used to inform public health decisions.

Drinking Water Criterion (2020)
Maximum Contaminant Levels (2020)

MCLs and criteria are set to be achievable and protective.

Drinking water suppliers must make sure the water that they're sending to your home does not contain any chemicals in amounts that go above the MCL for that chemical as set by law. If testing finds too much of a chemical in your drinking water, the supplier must find a way to reduce it to levels that are lower than the amount allowed by the law. If a chemical goes over the amount set by the MCL, it does not mean you will have health problems. It does mean that the drinking water supplier must take action. Criteria and other regulatory values are used to issue violation notices and take legal action against responsible parties that don't comply with the state's environmental cleanup rules at sites of contamination that could affect groundwater or surface water that are used as sources of drinking water.

MCLs and criteria can include technological and economic considerations.

Public health screening levels do not take into account how much an action costs or if it is possible to achieve given today's technology. This can result in lower public health screening level values. This may lead to public health actions even when regulations are being met.

Final MCLs for PFOS, PFOA and other PFAS were released in August 2020.

Starting in 2019, Michigan reviewed the findings of an independent Science Advisory Workgroup and new science to help determine what the MCLs for PFAS in Michigan should be. These rules were put out for public comment and were signed into law in August of 2020.

The Drinking Water Criteria were updated in August and additional PFAS were added in December 2020.

In 2020, Michigan adopted the new MCLs as the enforceable environmental cleanup criteria for residential and nonresidential drinking water. There are now seven PFAS regulated under Part 201. Part 201 is Michigan's primary environmental cleanup program and provides the regulatory framework for most contaminated sites in the state.

Public Health Drinking Water Screening Levels (2019)
Health-based Values (2019)

Public health drinking water screening levels are not enforceable.

There are many other factors that go into regulatory drinking water values that were not considered here but do factor into the development of the MCLs.

Public health drinking water screening levels are used as a caution signal.

If PFAS levels in your drinking water levels get near or go beyond the public health drinking water screening levels, it signals to public health officials that they need to look closer at the area in which you live and the source of your water to see what might be the cause. If you live near an area where a lot of PFAS has been measured at high levels, or if there isn't enough data to show if your area could have been affected by nearby PFAS plume, public health officials may recommend you use a filter.

Public health drinking water screening levels are set to make sure there is low to no risk of health problems from exposure to PFAS in drinking water.

Drinking water that contains PFAS over the screening levels does not mean that you will have health problems. Likewise, if you have health problems, it's hard to be certain those problems were caused by PFAS. These numbers were meant to represent the level at which scientists have found there to be a low to no risk of health problems in people, based on studies of exposed populations and laboratory animals available at the time. Other sources of exposure, besides just drinking water, are also considered when developing these levels. These levels will be reviewed and reconsidered as science progresses.

If PFAS in your drinking water is measured below the public health screening values, there is no known risk of harm based on the science available today.

PFAS are chemicals that come from many sources besides just drinking water. In fact, even if you don't have PFAS in your drinking water, you likely already have some PFAS in your blood. Based on blood testing conducted by the CDC throughout the United States, it's estimated that 98% of Americans have some amount of PFAS in their blood. However, if you wish to further limit your exposure to PFAS, you can also use a water filter that is tested and certified to NSF/ANSI Standard 53 for the reduction of PFOA and PFOS in your drinking water.

Why do these values keep changing?

Public health decisions are based on the best science and data available at the time. Michigan's regulatory and public health professionals will continue to look to the best available science to protect the people of Michigan. This has and will continue to result in changing screening levels to ensure that we are all drinking the safest water possible.

Learn More...

Overview of Michigan's Screening Values and MCLs (PFAS)

This document provides a technical timeline of Michigan's response to PFAS through regulations and screening values. In addition, there are charts demonstrating how PFAS health-based values, screening levels, and promulgated standards have changed over a relatively short amount of time across a selection of states and federal agencies that have developed them.

Understanding the Risk: What's Behind the Numbers (PFAS)

This document provides a breakdown and explanation of all the considerations that go into the development of public health screening levels and regulatory criteria. In addition, there are graphics that show state and federal values and their considerations for each.

Questions?

Questions about the Public Health Drinking Water Screening Levels or drinking water filters can be directed to the Michigan Department of Health and Human Services at 800-648-6942.

Questions about the development of criteria and MCLs can be directed to the Department of Environment, Great Lakes, and Energy at 800-662-9278.

Updates regarding Michigan's PFAS response efforts can be found at Michigan.gov/PFASResponse.

v. 2/2022