



Wisconsin's

Community Response to PFAS in Drinking Water

Department of Natural Resources
Department of Health Services
Wisconsin Emergency Management

May 2023

Introduction

This resource is intended to provide local governments and residents with information about possible steps to take when responding to PFAS contamination in their community. It includes information about what happens when PFAS is found in drinking water – both from public water systems and private wells. It also offers steps local government and residents may take to address the contamination.

Drinking Water in Wisconsin

Public Water Systems

About 70 percent of Wisconsinites get their drinking water from a public water system.

The [Safe Drinking Water Act](#) defines a public water system as a system that provides drinking water to at least 15 service connections, or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.

There are four types of public water systems in Wisconsin:

- **Municipal community systems**, like cities, towns and villages that serve people where they live.
- **Other-than-municipal community systems**, like mobile home parks, subdivisions, apartment buildings and condominiums that serve people where they live.
- **Non-community, non-transient systems**, like schools, day care centers and factories that serve people where they work and learn.
- **Non-community, transient systems**, like restaurants, taverns, campgrounds, parks, motels and gas stations that serve people where they eat, drink and play.

The Safe Drinking Water Act requires that public water systems test for contaminants regularly and take action if contaminant levels are too high. In Wisconsin, the Department of Natural Resources (DNR) regulates [public water systems](#) to ensure that they are following these requirements. While most drinking water in Wisconsin is safe to drink, it is important to learn about the quality of your drinking water and follow any actions recommended by the public water system.

Private Wells

About 30 percent of Wisconsin residents get their drinking water from private wells.

Private wells can be owned by individuals or entities like a small business, mobile home or school. A well is considered to be private if it has fewer than 15 connections and serves fewer than 25 people.

Unlike public water systems, protection and maintenance of a private well is largely the responsibility of the well owners. Private well owners should test their wells regularly.

What are PFAS?

[PFAS](#) (per- and polyfluoroalkyl substances) are a group of human-made chemicals used for decades in numerous products, including non-stick cookware, fast food wrappers, stain-resistant sprays and certain types of firefighting foam. These contaminants have made their way into the environment through accidental spills of PFAS-containing materials, discharges of PFAS-containing wastewater to treatment plants and certain types of firefighting foams.

PFAS do not break down in the environment and have been discovered at concentrations of concern in groundwater, surface water and drinking water. These chemicals are known to accumulate in the human body, posing several risks to human health including certain cancers, liver damage and decreased fertility. Information about PFAS can also be found on the [DNR](#) and [DHS](#) PFAS websites.

What are PFAS?

PFAS are a group of human-made chemicals used for decades in numerous products.



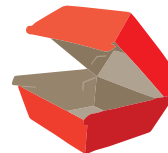
stain-resistant carpet & fabric



non-stick cookware



firefighting foam



fast food packaging

Products that **may contain PFAS.**

What is Wisconsin Doing About It?



establishing PFAS health standards for drinking water, groundwater and surface water



soil & water testing



researching fish & wildlife



listening & feedback sessions



state collaboration

Additional efforts include a **PFAS Action Committee (WisPAC)** and a **PFAS Technical Advisory Group.**

Why Should I Care?

PFAS persist in the environment and the human body for long periods of time. Recent findings indicate that exposure to certain PFAS may have harmful health effects in people.



certain types of cancers



thyroid & heart issues

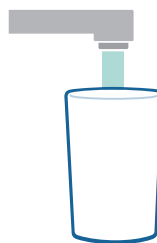


infertility & low birth weight



developmental delays

What You Can Do...



Test Your Well Water
dnr.wi.gov/u/?q=177



Check State Fish Advisories
dnr.wi.gov/u/?q=176



Learn More About PFAS Health Risks
dnr.wi.gov/u/?q=175



Visit dnr.wi.gov, search **PFAS.**



Public Health Advice for PFAS in Wisconsin

- The Department of Health Services (DHS) reviews the best available science to make recommendations and issue public health advice to protect human health.
- After reviewing and assessing the implications for human health based on exposure to PFAS through drinking water, DHS has issued drinking water health advisory levels for 18 PFAS, whether the water comes from a public water system or a private well.
- DHS uses a tool called the hazard index to also assess implications for human health based on exposure to a mixture of PFAS.
 - The hazard index is calculated by comparing the levels of each PFAS found in the water sample during laboratory analysis to their corresponding drinking water health advisory level and adding these ratios together. This [online tool](#) can be used to determine the hazard index of a water sample.
 - A hazard index equal to or greater than 1.0 indicates that the water may pose a health risk.

What is an Exceedance?

- An [individual exceedance](#) occurs when PFAS are found at levels above a drinking water health advisory level or maximum contaminant level (MCL).
 - An MCL is an enforceable drinking water standard.
 - Wisconsin currently has MCLs for two PFAS - PFOA and PFOS - which are 70 parts per trillion (ppt) either individually or combined. These became effective on Aug. 1, 2022. In March 2023, the U.S. Environmental Protection Agency (EPA) proposed MCLs lower than Wisconsin's MCL. Information about EPA's draft MCLs is available on [EPA's website](#). Wisconsin's MCL of 70 ppt remains in effect until EPA's MCLs are finalized.
- A cumulative exceedance occurs when the calculated [hazard index](#) is equal to or greater than one.
- If PFAS are detected in a **private well** at levels in excess of DHS' drinking water health advisory levels or hazard index of 1.0, DHS recommends that well users take action to reduce their exposure.
- If PFAS are detected in a **public water system** at levels in excess of DHS' drinking water health advisory levels or hazard index of 1.0, DNR requires that the system notify their customers of the contamination.
- If PFAS are detected in a **public water system** at levels in excess of an MCL, the public water system is required to share information about the contamination with its customers AND develop a plan of action to reduce the levels of contamination to below the MCL.

Financial Resources Available to Communities

Private Well Owners

- **Temporary Water:** The DNR may be able to provide [temporary bottled drinking water](#) to a well owner or user for up to 6 months when PFAS is detected above a state drinking water advisory.

The DNR will first ask the party responsible (RP) for the contamination to provide temporary, emergency drinking water to affected private water supply owners or users. If the RP is unknown, unable or unwilling to provide water to the eligible, affected residences, the DNR may contract with a private water supplier to provide temporary emergency drinking water to the property once a drinking water advisory is issued.

- **Well Replacement or Abandonment:** The [American Rescue Plan Act \(ARPA\) Well Compensation Grant Program](#) provides funding to eligible landowners, renters or Wisconsin business owners to replace, reconstruct or treat contaminated private water supplies that serve a residence or non-community public water system wells. Currently, eligible landowners can receive up to \$16,000 to replace, reconstruct, treat or abandon their well or water system. In December 2024 or ARPA funds are exhausted, whichever occurs first, eligibility for the Well Compensation Grant Program will revert to the original statutory program.

Community Water Systems

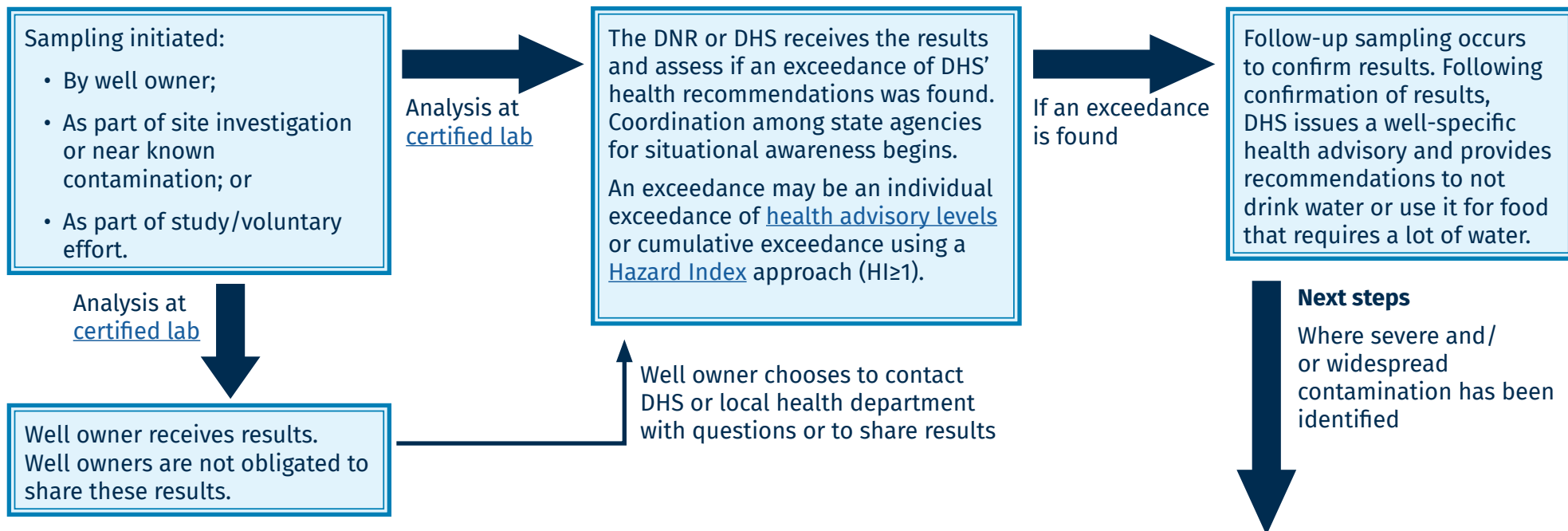
- The Bipartisan Infrastructure Law (BIL) will provide over \$900 million in additional funding through the [DNR's Environmental Loans programs](#), such as the Clean Water Fund and Safe Drinking Water Loan Programs. Eligible communities may use these funds to pay for public drinking water system infrastructure including municipal well construction, drinking water and wastewater treatment systems and distribution systems.

The BIL provides funding for each of the next five federal fiscal years (2022-2026) so the DNR recommends that communities take advantage of this once-in-a-generation investment in infrastructure.

Process for Identifying and Addressing PFAS Contamination

The following flowcharts identify the general steps for how PFAS are identified in private wells and public water supplies. They also show possible steps local government and, if applicable, the public water system may choose to take to address the contamination. Other agencies may be able to assist local entities as resources allow.

Sampling Private Wells for PFAS - Process and Follow-up Actions



Potential actions that state and local government may take to address contamination

State agencies may have limited authority to assist with these actions

Immediate Actions

- Identify immediate response actions.
State Point of Contact: Wisconsin Emergency Management (WEM)
- Communicate risks to potentially impacted community members.
State Point of Contact: DHS

Interim Actions

- Determine if more sampling is warranted.
State Point of Contact: DNR
- Identify options for safe temporary and/or long-term water.
State Point of Contact: DNR
- Communicate interim actions to reduce health risks.
State Point of Contact: DHS

Long-Term Actions

- Community works to determine the likely source(s) of contamination. It may not be possible to identify a source.
State Point of Contact: DNR
- Assess feasibility and interest in public infrastructure projects.
State Point of Contact: DNR

Sampling Public Water Supplies for PFAS - Process and Follow-up Actions

Sampling required under [NR 809](#) for:

- Municipal systems;
- Other than Municipal systems (e.g., mobile home parks or rural subdivisions); and
- Non-Transient, Non-Community systems (e.g., rural schools, day cares and businesses on a private well).

Analysis at [certified lab](#). Results pushed to DNR's [drinking water database](#)

The DNR and water system receive the results and assess if an exceedance of DHS health recommendations was found.

An exceedance may be an individual exceedance of [health advisory levels](#) or cumulative exceedance using a [Hazard Index](#) approach ($HI \geq 1$).

Results are posted publicly approximately 24 hours later.

If an exceedance is found

Follow-up sampling occurs to confirm results. Following confirmation of results, the water system is required to provide public notice to their customers.

Next steps

These depend on level of contamination and other location-specific considerations

Potential actions that public water systems and local government may take to address contamination

State agencies may have limited authority to assist with these actions

Immediate Actions

- Community assesses immediate response options, including possible activation of incident command system (ICS) for coordination.

Point of Contact: Local or County Emergency Manager

- Community assesses impact to available water sources and steps that can be taken to lower the contamination while still meeting demand.

State Point of Contact: DNR

- Community communicates risks to potentially impacted community members and surrounding municipalities.

State Point of Contact: DHS

Interim Actions

- Community determines feasibility of long-term solutions, such as infrastructure upgrades.

State Point of Contact: DNR

- Community implements available interim solutions.

State Point of Contact: DNR

Long-Term Actions

- Community upgrades infrastructure or takes other steps to ensure water meets DHS' health recommendations.

State Point of Contact: DNR

- Community works to determine the likely source(s) of contamination. It may not be possible to identify a source.

State Point of Contact: DNR

Defining State Agency Roles, Resources and Contacts

When a community learns all or some of their water is impacted by a contaminant, there is an expectation that community and state leaders will be available to quickly address it. In Wisconsin, local, state and federal law direct the role different agencies can and may play.

Wisconsin Department of Natural Resources (DNR)

Roles	Resources and Key Contacts
<ul style="list-style-type: none">• Enforce state and federal drinking water standards• Support water utilities and well owners• Provide technical assistance, when requested, as individuals and communities identify and implement interim and long-term solutions• Administer funding programs that provide financial assistance for PFAS remediation	<ul style="list-style-type: none">• DNR PFAS Webpage• Secretary's Directors• DNRPFASInquiries@wisconsin.gov• Questions about drinking water and PFAS: 608-266-8696

Wisconsin Department of Health Services (DHS)

Roles	Resources and Key Contacts
<ul style="list-style-type: none">• Evaluate if people who live at or near a contaminated site may be affected• Determine whether the contamination poses a human health risk• Make recommendations for interventions to protect public health• Support local health departments and DNR with community outreach and education	<ul style="list-style-type: none">• DHS PFAS Webpage• DHSEnvHealth@dhs.wisconsin.gov• Questions about health and PFAS: 608-266-1120

Wisconsin Emergency Management (WEM)

Roles	Resources and Key Contacts
<ul style="list-style-type: none">• Support response planning and implementation• Support coordination of resource requests	<ul style="list-style-type: none">• Regional Offices• DMAWEMDutyOfficer@widma.gov• Questions about coordinating an emergency response to PFAS: 608-242-3000

Other State Agencies

Depending on the situation and site impacted by a contaminant, other state agencies may have a role to play in the response. This may include agencies that are part of the [Wisconsin PFAS Action Council](#).