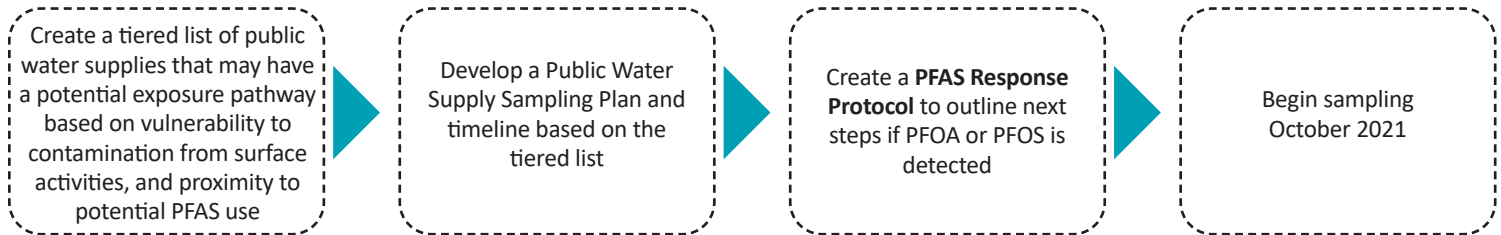


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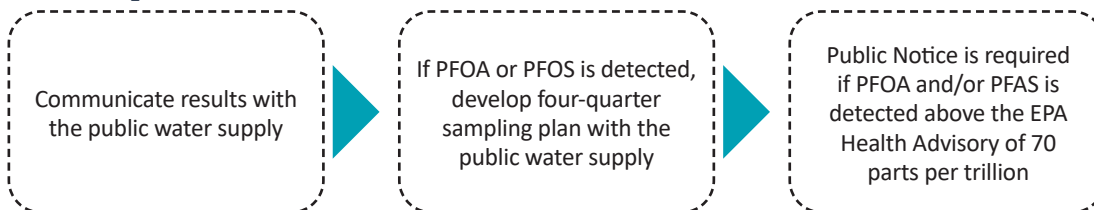
Identify and minimize exposure to PFAS through drinking water

The Iowa Department of Natural Resources (DNR) has developed a PFAS action plan to protect the health of Iowa residents and the environment from a class of chemicals of emerging concern known as per- and polyfluoroalkyl substances (commonly referred to as PFAS). These chemicals were used in such products as non-stick coatings, carpet, clothing, fabrics, furniture, paper packaging for food, metal plating, and some firefighting foams. The first focus area of the action plan is a precautionary approach to identify and minimize exposure of Iowans to PFAS through drinking water. The DNR is taking measures to undertake statewide sampling for PFAS in public water supplies to determine the prevalence of PFAS in Iowa.

Public Drinking Water Sampling Plan



PFAS Response Protocol



DNR finalized the following planning documents:

- Strategy for Ranking Public Water Supplies for PFAS sampling that may have a potential exposure pathway based on proximity to the potential PFAS use, land vulnerability to contamination from surface activities water intakes.
- Sampling Plan and Standard Operating Procedures for testing the public water supplies on the list. DNR will conduct the initial raw and finished water sampling effort, which will include sample collection by DNR personnel, the analysis of samples by a certified laboratory using an EPA approved method, and reporting the data to the public water supply.
- Water Supply Protocol for PFAS Detection that outlines the next steps for monitoring and notification if PFOA and/or PFOS are detected in the raw or finished water.

What happens if I have a detection of PFOA or PFOS?

If PFOA or PFOS is detected in the raw or finished water sample, then 4 quarters of consecutive monitoring at the Source Entry Point will be required. If PFOA and/or PFOS is detected above the EPA health advisory of 70 parts per trillion then public notice will be required as well as additional site investigation to determine the source of contamination. No action will be taken at this time if a PFAS chemical other than PFOA or PFOS is detected as HAs have not been established for additional chemicals.

Are there ways to remove PFAS from drinking water?

Yes. EPA has found technologies to remove PFAS from drinking water. These effective technologies include activated carbon treatment, ion exchange resins, and high pressure membranes, like nanofiltration or reverse osmosis.

What funding is available for public water supplies to add treatment for PFAS?

Iowa's Drinking Water State Revolving Fund is the best choice to finance the design and construction of drinking water systems to help ensure public health and provide safe drinking water for Iowans. There is a limited amount of loan forgiveness money dedicated strictly for systems facing imminent public health issues such as PFAS.

What are PFAS and where do they come from?

Per- and polyfluoroalkyl substances (PFAS) are a large group of manmade chemicals that are resistant to heat, and repel water, and oil. PFAS have been identified by the U.S. Environmental Protection Agency (EPA) as emerging contaminants on the national landscape.

For decades, they have been used in many industrial applications and consumer products such as carpeting, waterproof clothing, upholstery, food paper wrappings, personal care products, some firefighting foams, and metal plating. They are still used today. PFAS have been found at low levels both in the environment and in blood samples of the general U.S. population.

These chemicals are persistent, which means they do not break down in the environment. Some also bioaccumulate, meaning the amount builds up over time in the blood and organs.

How are people exposed to PFOA, PFOS and other PFAS compounds?

The main way people are exposed to these chemicals is by ingesting them. PFAS chemicals are sometimes found in drinking water and in cooking or food packaging products. PFAS can be ingested along with the water or food, from there they can enter the bloodstream. PFAS chemicals do not easily absorb through the skin; touching products made with PFAS or touching water that contains PFAS is not the main way people are exposed.

How do PFAS get into drinking water?

PFAS can get into drinking water when products containing them are used or spill onto the ground or into lakes and rivers. PFAS moves easily in the environment, getting into

groundwater that is used for some water supplies or for private drinking water wells.

When PFAS are released into lakes or rivers used as sources of drinking water, they can get into drinking water supplies. PFAS released into the air can also end up in surface waters.

How can PFAS affect people's health?

Some scientific studies suggest that certain PFAS may affect different systems in the body. The National Center for Environmental Health (NCEH)/Agency for Toxic Substances and Disease Registry (ATSDR) is working with various partners to better understand how exposure to PFAS might affect people's health.

What is the EPA's Lifetime Health Advisory for PFOA and PFOS?

Health advisories provide information on contaminants that can cause human health effects and are known or anticipated to occur in drinking water. EPA's health advisories are non-enforceable, non-regulatory, and provide technical information to state agencies and other public health officials on health effects, analytical methodologies, and treatment technologies associated with drinking water contamination. EPA has set a lifetime health advisory (HA) level for PFOA and PFOS. EPA's HA level for PFOA and PFOS offers a margin of protection for all Americans throughout their life from adverse health effects resulting from exposure to PFOA and PFOS in drinking water. The HA is the level, or amount, below which no harm is expected from these chemicals if consumed for many years. The HA level is 70 parts per trillion (ppt) for PFOA and PFOS individually or combined. The HA is protective of everyone, especially pregnant women, young children, and the elderly. Currently, the EPA has not set health advisory levels for other PFAS chemicals.

Additional Information

DNR's PFAS Action Plan | www.iowadnr.gov/Environmental-Protection/PFAS

EPA's PFAS Website | www.epa.gov/pfas