

BARNSTABLE FIRE DISTRICT WATER DEPARTMENT
Important Information about Your Drinking Water
-- Translate it or speak with someone who understands it --

The reason for this public notification?

Small amounts of Per and Polyfluoroalkyl compounds have been detected in 4 out of 5 of the Barnstable Fire District Water Department's drinking water wells. PFAS compounds are problematic due to their long half-lives, meaning they can bioaccumulate in our bodies. Massachusetts Department of Environmental Protection's Office of Research and Standards

Guideline currently recommends that sensitive subgroups—**PREGNANT WOMEN, NURSING MOTHERS AND INFANTS NOT CONSUME DRINKING WATER WITH PFAS LEVELS ABOVE 20 ng/L or PARTS PER TRILLION.**

THIS NOTICE IS ONLY FOR WATER USED FOR DRINKING OR COOKING PURPOSES. CONSUMERS WITH CONCERNS ABOUT PFAS LEVELS SHOULD USE BOTTLED WATER OR FILTER THEIR TAP WATER THROUGH A CARBON FILTER THAT CAN BE ATTACHED TO A FAUCET, CAN BE INSTALLED UNDER A FAUCET OR THAT CAN STAND ALONE. CONSUMERS CHOOSE A FILTER AT THEIR OWN RISK.

The following is a link to a list of National Sanitary Foundation water filter specifications:
<https://info.nsf.org/Certified/DWTU/Listings.asp?ProductFunction=053%7CPFOA+Reduction&ProductFunction=053%7CPFOS+Reduction&ProductFunction=P473%7CPFOA+Reduction&ProductFunction=P473%7CPFOS+Reduction&ProductType=&submit2=Search>

The Water Department is working to maintain a PFAS concentrations below 20 ng/L. There may be times when water delivered to your tap may contain PFAS concentrations that slightly exceed 20 ng/L because of fluctuating levels in various drinking water wells. PFAS levels fluctuate up and down due to rainfall, the amount of water being pumped from various sources, or from alterations in groundwater levels. The Water Department is blending water from various sources to reduce the levels of PFAS chemicals in the drinking water supply.

Although we are not required by USEPA to routinely monitor for Per and Polyfluoroalkyl Substances (PFAS), we sampled our water for PFAS during the period 1/4/2016 to 5/21/2020. On May 21, 2020, our system's Wells #2 and #5 combined test results for the sum of the levels of the six PFAS chemicals was 23.66 ng/L (parts per trillion), which is above the MassDEP advisory level. Wells #2 and #5 pump simultaneously into the water system at the same location, thus a combined sample is allowed and appropriate. On June 8, 2020, Wells #2 and #5 combined were resampled and found to have a concentration of 18.8 ng/L for the six PFAS compounds.

Email questions to Superintendent Thomas Rooney at bfdwatersupt@barnstablefiredistrict.com.

What is our water system doing?

We have taken the following pro-active measures:

- Barnstable Water Department is blending water from various sources to minimize PFAS concentrations the water you receive.
- Barnstable Fire District's other well water sources (Wells #3 and #4) were sampled, and those sources did not exceed 20 ng/l for the combination of the six PFAS compounds at their combined pumping location into the water system.
- We will continue to sample our water sources for PFAS.
- We are investigating treatment options for possible future use of filtration to remove PFAS.
- Well #1, in which no PFAS compounds have been found, is being reactivated.
- Prior to Well #5 being returned to use, public notice will be provided.
- When additional information becomes available this public notice will be updated.

What should you do?

- ***You do not need to do anything at this time because the source causing elevated PFAS levels is being blended to reduce the levels of PFAS below 20 PPT. If you have concerns about PFAS in your drinking water, then a point-of-use filtration device is an option you may want to consider.***
- ***If you have specific health concerns regarding your past exposure, you should consult a health professional, such as your doctor.***

In May 2016, the United States Environmental Protection Agency (EPA) issued a lifetime Health Advisory of 70 nanograms (ng) per liter (L) (70 ng/L which equals 70 parts per trillion (ppt) for the combination of two PFAS chemicals, PFOS and PFOA. Based on additional consideration of information about PFAS, and out of an abundance of caution, MassDEP has adopted a more conservative advisory addressing an additional four PFAS chemicals, because these compounds share very similar chemical structures and the available data indicates they are likely to exhibit similar toxicities. MassDEP Office of Research and Standards Guideline (ORSG) covers the following PFAS: perfluorooctanoic acid (PFOA), perfluorooctane sulfonic acid (PFOS), perfluorononanoic acid (PFNA), perfluorohexanesulfonic acid (PFHxS), perfluorodecanoic acid (PFDA) and perfluoroheptanoic acid (PFHpA). Based on the January 27, 2020 MassDEP ORSG, MassDEP recommends that:

1. Consumers in sensitive subgroups (pregnant women, nursing mothers and infants) not consume, drink or cook with water when the level of the six PFAS substances, individually or in combination, is above 20 ng/L and,
2. Public water suppliers take steps expeditiously to lower levels of the six PFAS, individually or in combination, to below 20 ng/L for all consumers.

As part of its efforts to address PFAS compounds, MassDEP has continued to review the current scientific information, studies and assessments on PFAS and proposed a drinking water standard for public drinking water systems, known as a Massachusetts Maximum Contaminant Level (MMCL) of 20 ng/L for the six compounds individually or collectively. Information on this effort, including the proposed regulations, can be found at

<https://www.mass.gov/lists/development-of-a-pfas-drinking-water-standard-mcl>

What are PFAS?

PFAS are contained in firefighting foams, which have been used in training exercises and to extinguish oil and gas fires at a variety of locations including airfields. PFAS are also used in a number of industrial processes and have been used to make carpets, clothing, fabrics for furniture, paper packaging for food and other materials (e.g. cookware) that are resistant to water, grease or stains. Because these chemicals have been used in an array of consumer products, most people have been exposed to them.

Between 2000 and 2002, PFOS was voluntarily phased-out of production in the U.S. by its primary manufacturer. In 2006, eight major companies voluntarily agreed to phase out their global production of PFOA and PFOA-related chemicals, although there are a limited number of ongoing uses.

While consumer products and food are a large source of exposure to these chemicals for most people, drinking water can be an additional source in the small percentage of communities where these chemicals have contaminated water supplies. Such contamination is typically localized and associated with a specific facility, for example, an industrial facility where these chemicals were produced or used to manufacture other products or an airfield at which they were used for firefighting.

For more information on PFAS see the attached MassDEP Factsheet or visit the websites listed below.

What are the potential adverse health effects with exposure to PFAS?

EPA's 2016 Health Advisory values for PFOS and PFOA were based on recent studies of these substances in laboratory animals and were also informed by studies of exposed people. Overall, these studies indicate that exposure to sufficiently elevated levels of PFOA and PFOS may cause developmental effects in fetuses during pregnancy and in breastfed infants. Effects on the thyroid, the liver, kidneys, hormone levels and the immune system have also been reported. Some studies also suggest a cancer risk may exist in people exposed to levels well above the Health Advisory. The additional four PFAS chemicals are chemically similar to PFOS and PFOA.

It is important to note that consuming water with PFAS above the 20 ng/L does not mean that adverse effects will occur. The degree of risk depends on the level of the chemicals and the duration of exposure. The 20 ng/L level assumes that individuals drink only contaminated water, which typically overestimates exposure, and are also exposed to PFAS from sources beyond drinking water, such as food. To enhance safety, several uncertainty factors are additionally applied to account for the differences between animals and humans and the differences from one human to another human. Scientists are still working to study and understand the health risks posed by exposures to PFAS.

Where can I get more information?

For more information, please contact Barnstable Fire District Superintendent Thomas Rooney at email address bfdwatersupt@barnstablefiredistrict.com, mailing address P.O. Bo 546 Barnstable, Ma 02630, or phone number 508-362-6498 x 102.

You can also get more information from the following sources:

- MassDEP at <https://www.mass.gov/info-details/per-and-polyfluoroalkyl-substances-pfas>
- USEPA’s Drinking Water Health Advisories can be found at: <https://www.epa.gov/ground-water-and-drinking-water/drinking-water-health-advisories-pfoa-and-pfos>
- The Centers for Disease Control and Prevention’s Public Health Statement for PFOS and PFOA can be found at: <https://www.atsdr.cdc.gov/pfas/index.html>
- For additional information on possible health effects, you may contact the Massachusetts Department Environmental Protection, Office of Research and Standards, at 617-556-1165.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

This notice is being sent to you by: Barnstable Fire District Board of Water Commissioners
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