Frequently Asked Questions: Per- and Polyfluoroalkyl Substances (PFAS)

Last updated: November 18, 2021

Q: Is PFAS in our local public drinking water?

A*:* Natick continues to test the drinking water for PFAS levels every month. The most recent results can be found on the PFAS webpage, under Current Monthly Results: https://www.natickma.gov/DocumentCenter/View/11118/Current-Monthly-PFAS-Results.

Please note that water from all three active treatment facilities (Springvale, Elm Bank, and Pine Oaks) combine in Natick's drinking water distribution system.

Q: What are you doing to address the presence of PFAS?

A: As a result of detecting PFAS levels in our source water and in conjunction with MassDEP, The Natick Water/Sewer Division has taken the following proactive actions:

- Natick is in the process of installing Granulated Activated Carbon (GAC) filters, and a building to house them, in order to remove PFAS at the Springvale Water Treatment Facilities. This filtration system is anticipated to be complete by the end of December 2021.
- Elm Bank, our source with the lowest detected PFAS6 results, has be used as the primary source.
- Springvale, our only active source which has previously exceeded the PFAS6 MCL, has been minimized to the extent possible where other sources can be used to meet the water system demand
- Natick continues to take monthly samples for PFAS6 at every entry point to the drinking water system. Latest results are posted on the Natick DPW Water/Sewer Division's PFAS web page (www.natickma.gov/1753/PFAS).
- Morse's Pond, our source with the highest detected PFAS6 results, has not pumped water into our system for approximately five years. The existing well is currently being replaced with new wells and will not be utilized until treatment is added at the site to remove PFAs.
- Natick conducted a POU filter study with a contracted engineering firm, which had successful results and is now posted on the webpage as well, under Retail Point-of-Use Filter Study (https://www.natickma.gov/DocumentCenter/View/11852/Retail-Point-of-Use-Filter-Study-8-10-21).

Q: Is my water safe to drink?

When a water source contains PFAS6 at levels above 20 ng/L (or ppt), the Massachusetts Department of Environmental Protection recommends consumers in a sensitive subgroup (pregnant or nursing women, infants and people diagnosed by their health care provider to

have a compromised immune system), are advised not to consume, drink, or cook with water when the level of PFAS6 is above 20 ng/L.

For consumers not in one of those categories, there is no recommendation by MassDEP to not consume the water and continue to use it. It is important to consider the standard is applicable to a lifetime of consuming the water, and shorter duration exposure presents less risk for most of the population. MassDEP also notes "that consuming water with PFAS6 above the recommended limits does not mean that adverse effects will occur."

All public drinking water sources in Massachusetts are tested regularly for potential contaminants to ensure they meet or exceed state standards. When a water source is found to have a contaminant in quantities above state standards, the utility, in partnership with Massachusetts Department of Environmental Protection, takes steps necessary to address the problem.

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Q: What are PFAS?

A: PFAS are a family of manmade chemicals used for non-stick coatings and firefighting foams. Their manufacturing was discontinued in the U.S. about 30 years ago, but they may still be used in imported products. PFAS are resilient and do not degrade easily in soil and water. As a result, they are widely found in the environment where they migrate to the food supply and drinking water.

The PFAS6 Regulated Under MassDEP's Drinking Water Standard

PFOA	perfluorooctanoic acid
PFOS	perfluorooctane sulfonic acid
PFHxS	perfluorohexane sulfonic acid
PFNA	perfluorononanoic acid
PFHpA	perfluoroheptanoic acid
PFDA	perfluorodecanoic acid

Q: What are the health concerns regarding PFAS?

A: As of now, the MassDEP recommends pregnant women, nursing mothers and infants, and people diagnosed by their health care provider to have a compromised immune system avoid consuming water with PFAS6 above 20 ppt. For those affected, alternate sources of water may include in-home filtration systems or bottled water tested for PFAS.*

MassDEP says that "consuming water with PFAS6 above the recommended limits does not mean that adverse effects will occur. The degree of risk depends on the level of the chemicals and the duration of exposure.'' Most people have been exposed to PFAS as it is prevalent in homes and the environment due to its widespread use in consumer products and industrial uses.

There are scientific studies that suggest potential links between exposure to certain PFAS in the environment and health effects. The studies have looked at the effects on the development of fetuses and infants, the thyroid, the liver, kidneys, hormone levels and the immune system, as well as if a cancer risk exists for people exposed to levels well above the drinking water standard.

MassDEP and CDC both note more research is needed and ongoing, and it is important to remember consuming water with high PFAS6 levels does not mean adverse effects will occur. As we await further scientific study, MassDEP has acted to set a drinking water standard, and we are working in the best interest of our consumers to lower PFAS6 levels below 20 ppt.

Q: How are people exposed to PFAS?

A: People are exposed to PFAS from many sources, far beyond their drinking water. According to the U.S. Environmental Protection Agency, people are exposed to PFAS by food packaged in materials containing PFAS, processed with equipment that used PFAS, or grown in PFAS-contaminated soil or water. People may also have been exposed to PFAS in the workplace through production facilities or industries that involve chrome plating, electronics manufacturing, and oil recovery.

In addition, many commercial household products contained PFAS, and if made outside the United States, may still be made with PFAS. Those include stain- and water-repellant fabrics, nonstick cookware and other products, polishes, waxes, paints, and cleaning products, to name a few.

When found in drinking water, it is often the result of PFAS discharged from a nearby manufacturer, landfill, wastewater treatment plant, or firefighter training facility that used fire-suppressing foams.

In the United States and other industrialized countries, most people have concentrations of these compounds in their blood. The good news is the levels have been dropping as use of certain PFAS have been discontinued. A 2015-2016 federal study found an 82% drop in PFOS and 70% drop in PFOA in the general population, according to the U.S. Center for Disease Control and Prevention

Q: How long has PFAS been in our water supply?

A: With relatively recent advances in laboratory testing, the presence of PFAS can be found in parts per trillion whereas in the past it would be undetected in parts per million or billion. In 2013, the Water/Sewer Division tested for PFAS at the higher level parts per billion and found no detects. However, recently, when testing for PFAS at the lower parts per trillion, the Division did find the presence of PFAS.

Still, these tests do not tell us when the PFAS entered the water source or from where. This issue continues to develop and there is much we still do not know with certainty, but as we learn new information, we will share it with you.

***NOTE on bottled water:** Even though bottlers are not required to test for PFAS6, some bottlers have. The best way to know if the bottled water you are drinking or plan to drink has been tested for PFAS6 is to contact the bottler and ask for the latest PFAS testing results. Contact information should be available on the bottle or you may need to search the internet. For more information, see MassDEP's website on PFAS and bottled water at: https://www.mass.gov/info-details/per-and-polyfluoroalkyl-substances-pfas#bottled-water-and-home-water-filters-

***NOTE on in-home filtration systems:** Point of Use (POU) and Point of Entry (POE) treatment devices are not specifically designed to meet Massachusetts' drinking water standard for PFAS6. There are systems that have been designed to meet the USEPA's Health Advisory of 70 ppt for the sum of PFOS and PFOA.

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