



FACT SHEET: GENERAL INFORMATION ON PFAS CHEMICAL EXPOSURE
July 22, 2019

Protecting Vermont from PFAS

The State of Vermont Agency of Natural Resources and the Vermont Department of Health are working together to investigate and address contamination from the release of PFAS chemicals into the environment.

What are PFAS?

PFAS stands for “Per- and poly-fluoroalkyl substances.” This is a large group of human-made chemicals that have been used in industry and in many consumer products since the 1950s because they are resistant to heat, water, oil, grease and stains.

Sources of PFAS chemical contamination

Virtually everyone is exposed to PFAS chemicals, and some PFAS chemicals have known toxic effects on human health. PFAS can be found in drinking water, food, indoor dust, many consumer products, and in the workplace. While some PFAS chemicals are no longer used in consumer products, many consumer products may still contain PFAS, including:

- Food wrappers, pizza boxes
- Microwave popcorn bags
- Baking papers
- Nonstick cookware
- Pet food bags
- Water & stain resistant fabrics, leather
- Stain resistant carpets and upholstery
- Cleaning products
- Paints, varnishes and sealants
- Firefighting foam
- Cosmetics
- Metal plating with corrosion prevention
- Wire manufacturing with coating & insulation
- Industrial plastics, resins and molds
- Firefighting foam

Concerns about PFAS

Some of these PFAS chemicals, if found in drinking water, could pose potential health risks even at very low contamination levels. Health risks from low level exposure to PFAS chemicals from sources other than drinking water are less known. Some PFAS chemicals have been linked to health problems in people including babies and young children. Refer to [Vermont Department of Health PFAS in Drinking Water Fact Sheet](#) for information related to potential health-related impacts from PFAS exposure.

These chemicals are also very stable and persistent, meaning that past contamination will remain in the environment for a long time and will not breakdown. Some of these substances can also build up in people and in the environment. They are also water soluble and highly mobile, making groundwater vulnerable for contamination.

Types of PFAS

The Vermont Agency of Natural Resources (ANR) has in place an interim drinking water standard and the Department of Health (VDH) has an updated Health Advisory to cover five PFAS chemical substances. The most extensively produced and studied chemicals are PFOA and PFOS.

- **PFOA** – Perfluorooctanoic acid
- **PFOS** – Perfluorooctane sulfonic acid
- **PFHxS** – Perfluorohexane sulfonic acid
- **PFHpA** – Perfluoroheptanoic acid
- **PFNA** – Perfluorononanoic acid

New Laws Targeting PFAS Chemical Contamination

In recent years, Governor Scott has signed two laws dealing with PFAS chemicals:

- [Act 55 \(Senate Bill 10\)](#), signed on June 2, 2017, which holds parties that contaminate groundwater responsible for connecting those Vermonters affected by the contamination to municipal water to a municipal water supply.
- [Act 21 \(Senate bill 49\)](#), signed on May 16, 2019, contains testing requirements for public water systems, a process to finalize drinking water standards, and state water quality standards for rivers, lakes, ponds and wetlands, and a process to investigate potential sources of PFAS contamination statewide, and a report on managing PFAS in leachate from landfills.

Next Steps

The State is proactively taking steps to safeguard the public from PFAS contamination:

- Ensure drinking water is safe.
 - ANR will undertake a rule to finalize a state drinking water standard for the five PFAS chemicals.
 - Public community water systems, schools, and other water systems that serve the same 25 people more than 6 months per year (referred to as “nontransient-noncommunity” water systems) across the state will monitor for the five PFAS substances in drinking water.
- Investigate and manage PFAS contamination.
 - ANR will continue to conduct a statewide investigation of potential sources of PFAS contamination.
 - ANR will report on managing chemical contaminants from landfill leachate – a liquid draining from landfills that potentially contain harmful substances.
- Reduce the risks to drinking water from firefighting foam.
 - ANR conducted a takeback program in 2018 for fire departments to properly dispose of firefighting foam.
- Ensure rivers, lakes, ponds and wetlands, fish and wildlife are safe from PFAS contamination.
 - ANR will develop a plan and undertake a rulemaking to adopt water quality standards for the five PFAS chemicals.