

Perfluoroalkyl and polyfluoroalkyl substances (PFAS) are a large group of human-made chemicals that have been used in industry and consumer products worldwide since the 1950s. There are hundreds of PFAS chemicals, including PFOA (perfluorooctanoic acid) and PFOS (perfluorooctane sulfonic acid).

- PFAS do not occur naturally, but are widespread in the environment.
- PFAS are found in people, wildlife and fish all over the world.
- Some PFAS can stay in people's bodies for a long time.
- Some PFAS do not break down easily in the environment.

## How can I be exposed to PFAS?

PFAS contamination may be in drinking water, food, indoor dust, some consumer products, and workplaces. Most non-worker exposures occur through drinking contaminated water or eating food that contains PFAS. Although some types of PFAS are no longer used, some products may still contain PFAS:

- Food packaging materials
- Nonstick cookware
- Stain resistant carpet treatments
- Water resistant clothing
- Cleaning products
- Paints, varnishes and sealants
- Firefighting foam
- Cosmetics

## What is the health advisory level for PFAS in drinking water?

Vermont's health advisory level for the **combination of five PFAS** (PFOA, PFOS, PFHxS (perfluorohexane sulfonic acid), PFHpA (perfluoroheptanoic acid) and PFNA (perfluorononanoic acid)) is **20 ppt (parts per trillion)**. That means that the sum of the five PFAS levels should not exceed 20 ppt in your drinking water.

## What should I do if PFAS exceed the health advisory level?

To minimize your exposure, do not use your water for drinking, food preparation, cooking, brushing teeth, preparing baby formula, or any other manner of ingestion. Use bottled water instead or water from a known safe source. Do not use water containing the five PFAS over 20 ppt to water your garden. The PFAS could be taken up by the vegetables.

## How can PFAS affect people's health?

Some scientific studies suggest that certain PFAS may affect different systems in the body. Although more research is needed, some studies in people have shown that certain PFAS may:

- Affect growth, learning and behavior of babies and older children

- Lower a woman's chance of getting pregnant
- Interfere with the body's natural hormones
- Increase cholesterol levels
- Affect the immune system
- Increase the risk of cancer

These health effects may be the same for pets. If you are concerned, you can give your pet bottled water or water from a known safe source.

### **Should I have my blood tested for PFAS?**

We know that almost every American has PFAS in their blood, including PFOA and PFOS. We know from scientific studies that if you drink water containing PFAS, you are likely to have PFAS in your blood at levels that are higher than most Americans. Studies have shown that once the exposure has stopped, the level of PFAS in the body will decrease over time.

A blood test cannot tell if your exposure to PFAS will cause you health problems, or if a condition you have was caused by PFAS.

### **What can be done to take PFAS out of the body?**

There are no medical interventions that will remove PFAS from the body. The best intervention is to stop the source of exposure. This means people who have PFOA and PFOS in their water above 20 ppt should not drink the water.

### **When should I see a health care provider?**

If PFAS are detected in your water, or if you or family members have signs or symptoms that you think are related to PFAS exposure, discuss your concerns with your family's health care provider. The Health Department has information available for health care providers on our website.

### **How can I learn more?**

For questions about testing your drinking water for PFAS, call the Vermont Department of Environmental Conservation at 802-828-1138.

For questions about the health effects of PFAS, call the Health Department at 1-800-439-8550 or visit [www.healthvermont.gov/water/pfas](http://www.healthvermont.gov/water/pfas)

Centers for Disease Control and Prevention PFAS Information:  
[www.atsdr.cdc.gov/pfc/index.html](http://www.atsdr.cdc.gov/pfc/index.html)