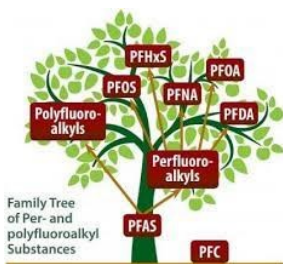


# PFAS: WHAT YOU NEED TO KNOW

## What are PFAS?



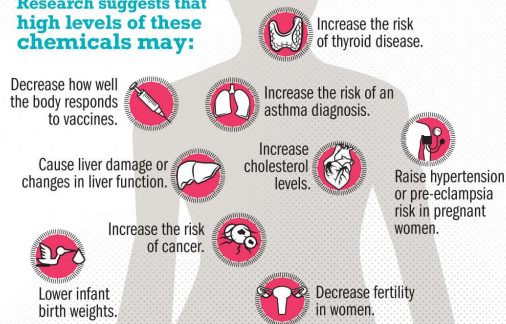
Per- and polyfluoroalkyl substances, also known as PFAS or “forever chemicals,” are a group of over 5,000+ man-made, toxic chemicals used in a variety of products. Two types of PFAS--PFOA and PFOS--have been phased out of production in the US, but not out of our environment. However, these two types have been replaced by other forms of PFAS that also cause severe threats to our health and environment.

## Why should we be concerned about PFAS?

PFAS do not break down in the environment. They can easily travel in air, dust, food, soil, and water. They can be found in water, fish, food, food wrappers, cosmetics, personal care products, clothing, fire-fighting foam, building supplies, and many household products: nonstick pans, rugs, and mattresses. Across the country, PFAS have been found in both public water systems and private wells, posing threats to many communities. There is also evidence that PFAS are present in our rain and snow.

### The Ill Effects of PFAS<sup>3</sup>

Research suggests that high levels of these chemicals may:



The prevalence of PFAS in our everyday lives poses concerning health risks. These chemicals may cause thyroid disease, ulcerative colitis, high cholesterol, pregnancy-induced hypertension, weakened immune systems, reproductive health problems in both men and women, learning and developmental disabilities in infants and children, and various cancers. Studies have proven that PFAS have been present in the breast milk of 100% of the women tested.

## Are PFAS present in Vermont?



Vermont has 24 contaminated sites across the state: 6 military sites, 12 landfills, 5 industrial sites, and 1 airport. We know that PFAS is entering the Winooski River near the Burlington International Airport and the Vermont National Guard. PFAS can travel long distances through water, so it is likely that this military PFAS, along with industrial and landfill PFAS, is in many of our waterways and flowing into Lake Champlain, Lake Memphremagog, and up into Canada.

Currently, Vermont does not test fish tissue for PFAS, a matter of deep concern considering the high levels of PFAS bio-accumulation in fish in many parts of the country.

## What products should I avoid?

It is not always easy to distinguish which products have PFAS in them. If you see the words “non-stick,” “water-resistant,” or “stain-resistant,” you should check out the product. The Environmental Working Group (EWG) has created guides to help you find the safest products: <http://www.ewg.org/consumerguides/> You can also look for EWG Verified safe product labels at: [www.ewg.org/ewgverified/](http://www.ewg.org/ewgverified/)

Many of these products contain PFAS:

- *Sunscreen*: 67% contain harmful ingredients to children and adults
- *Cosmetics*: 48% of cosmetics contain PFAS chemicals
- *Personal Care Products*, including shampoos, conditioners, moisturizers, nail polish, female hygiene products, etc.
- *Food*: Seafood and some produce contain high amounts of PFAS
- *Cleaning Products*: Floor wax is just one example
- *Bug Repellants*
- *Household and Consumer Products*, including rugs, paints, mattresses, clothing, etc.
- *Cookware and Food Containers*
- *Children’s Products*, including diapers, clothing, etc.
- *Water*, including tap, bottled, and well water



## How else can I avoid PFAS?



Besides checking products before buying them, you should know that the Federal Advisory limit of PFAS in water is 70 ppt; the Vermont state advisory is 20 ppt; and the Harvard School of Public Health recommends only 1 ppt. Where does your water come from? Check out your public water source at [www.ewg.org/tapwater/](http://www.ewg.org/tapwater/) If you have a well, you can have it tested. And think about investing in a water filter! Not all filters clean out PFAS. Also be aware that many single use water bottles, as well as bottled water, contain PFAS and other hazardous chemicals.

## How can I get involved and learn more about PFAS?

Here in Vermont, a coalition of individuals interested in PFAS contamination from the military, as well as other forms of PFAS contamination, are providing advocacy and education for all interested individuals.

For information about military PFAS contamination, visit [www.militarypoisons.org](http://www.militarypoisons.org) . For information about the coalition, visit our Facebook page: [Vermont Military Poisons Project](#) or email [madel51353@gmail.com](mailto:madel51353@gmail.com) .