

WHAT EXACTLY IS PFAS?

PFAS stands for "per- and polyfluoroalkyl substances" and is a broad, catch-all name for a class of man-made industrial chemicals.

The class includes thousands of chemicals you've probably never heard of, but the most common and well-known are PFOA and PFOS.



PFOA
perfluorooctanoic acid



PFOS
perfluorooctanesulfonic acid

Invented by 3M, PFOA and PFOS were widely used by American manufacturers from the 1940s until they were phased out in the early 2000s due to health concerns.

PFAS are still manufactured overseas and can be imported via consumer goods.

PFAS have been commonly used in many industrial & household products like...



Non-Stick Cookware



Firefighting Foams



Food Wrappers



Stain- & Water-Resistant Fabrics



Household Cleaners

WHERE ARE THEY FOUND?

Well... everywhere. PFAS exist at low levels in the environment, in most animals and in us.

But the hotspots? The air, soil, and ground/ surface water around some factories and refineries, fire stations and military bases where fire training takes place, and in landfills full of trash made with PFAS.

ARE THEY DANGEROUS?

Various studies have linked regular exposure to low levels (as low as 7-11 ppt) of PFAS to:

- Liver and kidney disease
- High cholesterol
- Testicular, kidney, prostate & breast cancers
- Developmental delays
- Decreased fertility, pregnancy issues, low birth weights
- Thyroid, pancreatic and hormonal disruption

WHAT IS BEING DONE ABOUT THEM?

Many PFAS are "long chain" molecules, and this can mean they are harder to clean up & more risky to human health. But...

- Treatment options for soil and ground/surface water are evolving
- The EPA is developing new drinking water standards for PFOA and PFOS & some states are adopting their own (including New Hampshire)

HOW MUCH IS SAFE?

The most recent EPA health advisory (2016) suggests limiting exposure to 70 parts per trillion (ppt).

One part per trillion is like a grain of sand in an Olympic size swimming pool.