PFAS WHAT YOU NEED TO KNOW

WHAT ARE PFAS CHEMICALS?

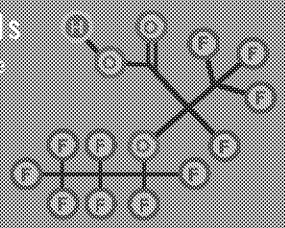
Per- and polyfluoroalkyl substances (PFAS) are a group of man-made chemicals that includes PFOA, PFOS and GenX chemicals. Since the 1940s, PFAS have been manufactured and used in a variety of industries around the globe, including in the United States. PFOA and PFOS have been the most extensively produced and studied of these chemicals. Both are very persistent in the environment and in the human body. Exposure to certain PFAS can lead to adverse human health effects.

PFOA & PFOS

U.S. manufacturers voluntarily phased out PFOA and PFOS, two specific PFAS chemicals.

GenX Chemicals

GenX chemicals are a replacement for PFOA.



WHAT EPA IS DOING

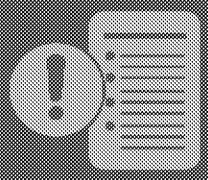
Some of the agency's work includes: development of additional toxicity values, analytical methods for additional PFAS and non-drinking water media as well as treatment options for PFAS in drinking water. EPA is also hosting a National Leadership Summit on PFAS in May 2018.

Established methods to measure 14 PFAS compounds in drinking water

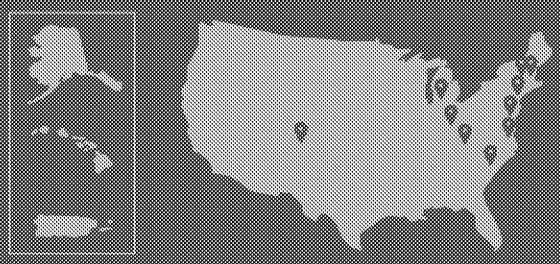
Identified five treatment processes for PFOA and PFOS

Identified all PFAS chemicals that are legally available for production and use

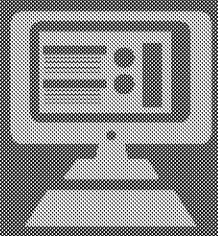
Provided national monitoring data for 6 PFAS in drinking water



Issued drinking water health advisories (70 parts per trillion) for PFOA and PFOS in 2016



Provided support for 10 states with site-specific PFAS challenges and problems: NC (Cape Fear River), MI, DE, WV, CO, NY (Hoosick Falls), OH, NH, VT and NJ



Updated website to include tools and information so that states, tribes and local communities can understand, assess and address PFAS incidents and emergencies

HOW ARE WE EXPOSED TO PFAS?

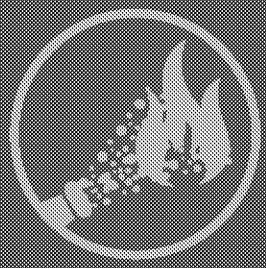
PFAS include a large number of important chemicals that can be used in some food packaging and can make things grease- and stain-resistant. They are also used in firefighting foams and in a wide range of manufacturing practices. Unfortunately, some of these substances don't break down over time. That means they build up in the environment and in our bodies.

Drinking water can be a source of exposure in communities where these chemicals have contaminated water supplies. Such contamination is typically localized and associated with a specific facility, for example,

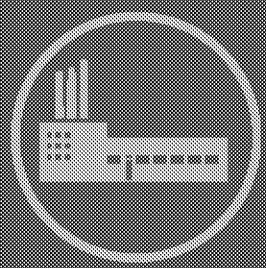
- an industrial facility where PFAS were produced or used to manufacture other products, or
- locations where firefighting foam was used such as oil refineries, airfields or other training facilities for firefighters

If you are concerned about the possibility of PFAS in your drinking water, contact your local water supplier and ask for more information about PFAS.

STAIN/GREASE REPELLENT



FIREFIGHTING FOAMS



INDUSTRIAL USES

HEALTH EFFECTS

There is evidence that exposure to PFAS can lead to adverse health outcomes in humans. If humans or animals ingest PFAS (by eating or drinking food or water than contain PFAS), the PFAS are absorbed and can accumulate in the body. PFAS stay in the human body for long periods of time. In some cases, the level of PFAS in the body can increase to the point where people can suffer from adverse health effects.

Studies indicate that high concentrations of PFOA and PFOS can cause reproductive and developmental, liver and kidney, and immunological effects in laboratory animals. Both chemicals have caused tumors in animal studies. The most consistent findings from human studies are increased cholesterol levels among exposed populations, with more limited findings related to:

- infant birth weights
- adverse effects on the immune system
- cancer (for PFOA)
- thyroid hormone effects (for PFOS)

WWW.EPA.GOV/PFAS SOURCE: U.S.EPA