

professionals to help address conditions more successfully. Discuss the need for testing with your primary care physician (PCP).

Will my insurance cover these tests?

Unfortunately, there is no single answer to this question. However, in several states, individuals or communities have filed legal actions that, if successful, would force production, use, and deployment industries to pay for medical monitoring of affected residents. These lawsuits emphasize the potential for harm related to PFAS exposure and require industries to pay for ongoing medical testing associated with the early detection of disease. For further information, see the STEEP website:

<https://web.uri.edu/steeep/>

What is my state doing to address PFAS chemicals?

Checkout the SaferStates bill tracker at <https://www.saferstates.com/bill-tracker>



Sources, Transport, Exposure & Effects of PFASs
UNIVERSITY OF RHODE ISLAND SUPERFUND RESEARCH PROGRAM

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Superfund Research Program

Taking Control of Your Health

Medical monitoring of PFAS health effects

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What are PFAS?

PFAS (per- and polyfluoroalkyl substances) are a large class of chemicals used in a wide range of consumer products and industrial applications. There are thousands of different PFAS in use, but the most familiar types are PFOA and PFOS. PFAS are used to make products stain-, water-, and oil-resistant, and they are very stable and therefore remain in the environment for a long time. PFAS are often called “forever chemicals” and have been found all over the globe, even in places where they are not made or sold. Their usefulness in consumer products and the fact that they are so persistent means that nearly everyone is exposed to them. PFAS have been detected in the blood of over 99% of the US population.

How am I exposed to them?

There are a number of ways people can become exposed to PFAS. They are commonly found in products that are stain-

or grease-resistant, nonstick, or waterproof or water resistant. Because PFAS are also stable at high temperatures, they have been used in firefighting foam on military bases and firefighting training centers. PFAS are slightly water soluble and can enter private well water or public drinking water sources, thereby causing additional exposure. You can be exposed to PFAS through food and drink, your clothing, items in your home, and any associated dust that you breathe.

What are the effects of PFAS on the human body?

Several studies have shown links between high PFAS exposure and the likelihood of adverse health effects. This does not mean that all people exposed to PFAS will develop these health problems, but the higher the levels in your blood, the more likely you are to experience some adverse effects over time. For example, some studies have found links between high PFAS levels and:

- Elevated cholesterol*
- Thyroid disease*
- Ulcerative colitis*
- Liver problems
- Allergies and autoimmune diseases
- Lower antibody protection from vaccinations
- Elevated blood pressure during pregnancy*
- Longer time to get pregnant
- Babies born with low birth weights

- PFAS transference to infants during breastfeeding
- Increased body weight
- Increased risk of diabetes
- Kidney cancer*
- Testicular cancer*
- Prostate cancer
- Bladder cancer

* In West Virginia, thousands of people were exposed to PFOA when DuPont used the chemical for over 50 years to manufacture Teflon. In a court-approved settlement, DuPont agreed to offer people who were exposed free screening tests for a range of diseases or conditions. These tests helped exposed people get early treatment in order to minimize any possible adverse health effects. This option was offered to all who had been exposed to drinking water with PFOA concentrations of at least 50 parts per trillion (ppt), which was the lowest level at which the chemical could be detected in the early 2000s.

What levels of exposure can impact health?

The US Environmental Protection Agency (EPA) has set a lifetime health advisory level of 70 ppt for two of the most common PFAS found in drinking water (PFOA and PFOS). Seventy ppt is the equivalent of a tablespoon of salt in an Olympic swimming pool, but is still thought to be much too high by many scientists, who consider the current EPA standard insufficiently protective of human and ecosystem health, and believe maximum exposure levels should be lowered

significantly. In fact, ongoing research has led to a continual decrease in the level of safe PFAS exposure (<https://www.ewg.org/news-insights/news/pfas-drinking-water-hazardous-ever-lower-levels>). The European Union (EU) currently recommends an even lower limit of 2ppt.

If I was exposed to PFAS years ago, should I still be concerned about the adverse health effects today?

PFAS can remain in your body for many years and adverse health effects can appear years after you were first exposed. For example, if you were exposed to PFAS from contaminated drinking water over many years, you can still have high amounts of PFAS in your body that can also be detected in your blood. This explains the PFAS moniker of “forever chemicals.”

What action can I take if I am worried about my PFAS levels?

Regular monitoring or screening is often used to identify early stages of disease development. For rare conditions, certain screening tests that would not be recommended for the general population may be advisable in PFAS-exposed people. If your community has higher levels of PFAS exposure, targeted medical monitoring may reveal early stages of possible adverse health effects. This identification will allow medical