

How to Reduce Your Exposure to PFAS

What are PFAS?

Per- and polyfluoroalkyl substances (PFAS) are a group of man-made chemicals applied to many consumer goods to make them waterproof, stain resistant, or nonstick. PFAS are also used in products like cosmetics, fast food packaging, and a type of firefighting foam called aqueous film forming foam (AFFF) which is used mainly on large spills of flammable liquids, such as jet fuel.

Although many U.S. companies have stopped using certain PFAS chemicals in their products, PFAS are still commonly used in foreign products that can be imported and sold in the U.S.

PFAS used to be called perfluoro chemicals, or PFCs, but this term is no longer used.

There are dozens of chemicals in the PFAS family. Some of the more well-known and well-studied PFAS include:

- PFOS
- PFOA (C8)
- PFHxS
- PFNA

How might I be exposed to PFAS?

A Centers for Disease Control and Prevention (CDC) study from 2003-2004 found that PFAS were present in 98 out of every 100 (98%) blood samples they studied out of thousands of samples.

PFAS may enter a person's body when they ingest (eat or drink) it, or if they inhale (breathe in) PFAS dust. Food cooked in cookware or packaging that contains PFAS may become contaminated, and when a person eats that food, he or she will introduce PFAS into his or her body. Home textiles like furniture upholstery, carpeting, rugs and clothing that have been treated with PFAS-based stain-resistance or waterproofing treatments can shed dust that contains PFAS chemicals, and people, especially babies and young children who tend to crawl close to the ground, may inhale the dust.

In communities where PFAS have entered drinking water supplies, drinking water can be an additional source of exposure if it is not properly treated to remove chemicals. This includes food, ice, and baby formula prepared with contaminated water.

Scientific studies have shown that PFAS do not absorb easily through the skin. Bathing or showering in water contaminated with PFAS or simply touching an object that contains PFAS is not a main exposure route.

Can PFAS cause health effects?

Being exposed to PFAS does not mean you will necessarily have health effects.

Whether you get sick from exposure to any chemical depends on how much you were exposed to (dose), how long you were exposed for (duration), and how often you were exposed (frequency).

There are many chemicals in the PFAS family, and they may cause different health effects if you are exposed to them. Scientists are still learning about PFAS and their effects on human health. Some, but not all, studies in humans with PFAS exposure have shown that certain PFAS may:

- Affect growth, learning, and behavior of infants and children;
- Lower a woman's chance of getting pregnant;
- Interfere with the body's natural hormones;
- Increase cholesterol levels;
- Affect the immune system; or
- Increase the risk of certain cancers.

Always talk with your doctor or primary care provider if you are concerned about your health or have medical questions.

How can I reduce my PFAS exposure?

Although avoiding all exposures to all sources of PFAS may not be possible due to the wide use of PFAS in many consumer products, following the recommendations below can help a person reduce their exposure greatly.

Treating drinking water that contains PFAS or using an alternate source (like bottled water) for drinking, cooking, making ice, and preparing infant formula is one way to reduce exposures. See the PFAS Whole House or Point of Use Treatment Fact sheets for more information at pfas.ohio.gov.

Know whether the products you buy were made with PFAS, especially if they are non-stick, stain-resistant, or waterproof. Some products known to contain PFAS include (**NOTE** – some manufacturers for the below products may not use PFAS to make their products):

- **Non-stick cookware.** Instead of non-stick cookware, opt for ceramic, stainless steel, or cast iron. If the coating on your non-stick cookware begins to peel, do not use it.
- **Fast food containers and processed food packaging** like French fry cartons, pizza boxes, and microwave popcorn bags.
- **Stain-resistant carpets, rugs, and furniture.** Avoid using optional stain-resistant sprays and treatments on home textiles.
- **Waterproof clothing** like rain jackets, gloves, and boots. Avoid using optional waterproofing sprays on clothing and footwear. Although there is little risk from having skin contact with these products (since PFAS don't easily absorb into skin), they may shed fibers that can be inhaled or swallowed.
- **Cosmetics and personal care products.** Read the ingredients on cosmetics and personal care products, like dental floss, and look for words beginning with "fluoro-", "perfluoro-", or "polyfluoro-".

Dust the surfaces in your home often to reduce PFAS dust from products like carpet, upholstery, and clothing that was manufactured or treated with PFAS.

For more information on PFAS and your health, visit the Ohio PFAS website here: pfas.ohio.gov.

Or contact the ODH Health Assessment Section at BEH@odh.ohio.gov or by calling 614-728-9452.