

What are PFAS?

Per- and polyfluoroalkyl substances (PFAS) are a group of man-made chemicals applied to many consumer products to make them waterproof, stain-resistant, or nonstick. PFAS are also used in some 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.

PFAS can get into the environment at places where they are made, used, stored, or disposed of. In the environment, PFAS do not break down easily and may stay in soil and water for a very long time.

PFAS may cause different health effects if you are exposed to them. Always talk with your doctor or healthcare provider if you are concerned about your health or have medical questions. See the [PFAS fact sheet](#) or visit pfas.ohio.gov for information about the harmful health effects of PFAS.

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

- PFOS
- PFNA
- PFOA
- PFBA
- GenX (HFPO-DA)
- PFHxS

How might i be exposed to PFAS?

PFAS may enter your body when you ingest (eat or drink) it, or if you inhale (breathe in) dust with PFAS. PFAS can become part of food when prepared in cookware or from packaging that contains PFAS. Home textiles like furniture upholstery, carpeting, rugs, and clothing that have been treated with PFAS-based stain-resistance or waterproofing can shed dust that contains PFAS. People, especially infants and young children who tend to crawl and play close to the ground, may inhale or ingest that dust.

In communities where PFAS have entered 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. PFAS cannot be removed by heating or boiling water.

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

Can PFAS cause health effects?

There are many chemicals in the PFAS family, and they may cause different health effects if you are exposed to them. Scientists are still studying 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 healthcare provider if you are concerned about your health or have medical questions.

It is important to understand that exposure does not necessarily mean you will experience negative health effects. Whether a person gets sick may depend on how long they were exposed (duration), how often they were exposed (frequency), and how much PFAS they were exposed to (dose). Personal factors like age, lifestyle, and other illnesses may also contribute.

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, following these recommendations can help you greatly reduce exposure:

- 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. For more information see the PFAS [Whole House](#) or [Point of Use](#) Treatment fact sheets or visit pfas.ohio.gov. Bottled water is an alternative water source and is held to the same standards as public drinking water for PFAS.
- Know whether the products you buy are made with PFAS, especially if they are nonstick, stain-resistant, or waterproof. For questions or concerns about products you use in your home, you may contact the Consumer Product Safety Commission's Consumer Ombudsman by calling (301) 504-8120 or emailing ConsumerOmbudsman@cpsc.gov, or visit the [CSPC's website](#). Some products known to contain PFAS include (**NOTE – Some manufacturers for the below products may not use PFAS to make their products**):
 - **Nonstick cookware.** Instead of nonstick cookware, opt for ceramic, stainless steel, or cast iron. If the coating on your nonstick 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 the 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 were manufactured or treated with PFAS.

For more information:

For more information on PFAS and your health, visit the Ohio PFAS webpage at pfas.ohio.gov.

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