What are PFAS & Why Should I Care?

Per- and Polyfluoroalkyl Substances (PFAS) are a large group of human-made chemicals known for their heat-stable, friction-reducing, and water-, grease-, and stain-resistant properties. PFAS have been added to many industrial and consumer products since the 1940s and there are thousands of different PFAS chemicals in use today. PFAS move easily in the environment and can be found in our water, food, soil, and air, often far away from where they were made or used by industry. PFAS are frequently called "forever chemicals" because they do not break down and build up over time in the environment, animals, and people.

There are many sources of PFAS in the environment. **This fact sheet focuses on use and disposal of PFAS-containing Consumer Products.** Understanding which products are likely to contain PFAS and how to avoid buying them, helps reduce your personal exposure and decreases the amount of PFAS entering the environment and drinking water supplies.

How Are People Exposed to PFAS?

A recent study* conducted by the U.S. Centers for Disease Control and Prevention (CDC) found that most people have PFAS in their body.

- The main exposure routes are ingestion of food and water and inhalation of dust that contain PFAS
- PFAS can be harmful to human health, particularly if someone is exposed to high levels for an extended period of time
- PFAS are minimally absorbed by skin so touching objects or water containing PFAS does not present a significant risk
  - o The potential health impact from the application of PFAS-containing personal care products on the skin is unclear and further research is required

What Are the Health Effects?

Scientists have found exposure to PFAS can cause many effects, including:

- *Reduced immune system function*
- *Increased cholesterol levels*
- *Increased risk of pre-eclampsia in pregnant women*
- *Increased thyroid disorders and other hormone disruption*
- *Increased risk of liver, kidney, prostate, and testicular cancer*

Due to the thousands of different PFAS chemicals, assessing the risk of each compound, or combinations of compounds, on human health is difficult to assess. Scientists are still studying the health effects of exposures for the vast majority of PFAS chemicals and future findings may change our understanding of PFAS impacts on human health.

What Products Contain PFAS?

NEWMOA developed fact sheets on the common product categories that are likely to contain PFAS:

- ***Textiles** such as clothing, bedding, rugs and carpeting, and upholstered furniture*
- ***Personal Care Products** such as sunscreen, cosmetics, and dental floss*
- ***Outdoor Gear** such as waterproof jackets, shoes, and ski and boat waxes*
- ***Foodware and Packaging** such as coated paper products and non-stick pans*

*Visit https://www.newmoa.org/pfas-in-consumer-products-factsheets/ for more information, including links to the four fact sheets

Most water/oil/stain resistant products contain PFAS.** Check labels, read ingredients, and be aware that PFAS are considered proprietary ingredients and manufacturers often do not disclose their use. **Avoid products with ingredients containing "fluoro" in the name, this denotes a type of PFAS.

Additional Concerns for Children

Children can experience heightened exposure to PFAS due to hand to mouth ingestion and close contact with carpeting/rugs causing inhalation of PFAS-containing dusts.

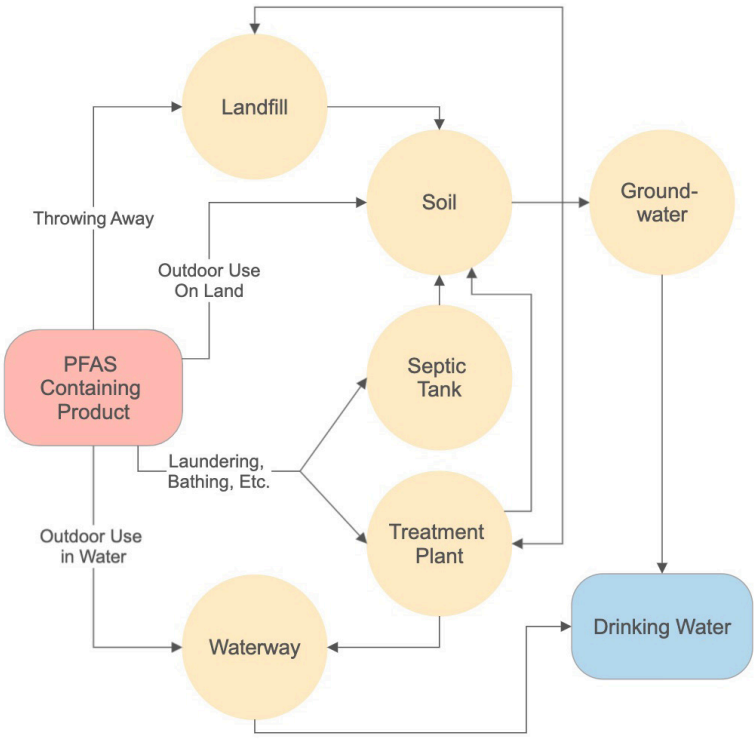
- *Developing children may be more sensitive to the effects of PFAS exposure*
- *Children may experience greater exposure since they consume more water and food per pound of body weight than adults*
- *Limiting PFAS-containing products in the home and frequent vacuuming with a HEPA filter to minimize dust can decrease exposure*

How Do Consumer Products Impact the Environment?

When PFAS-containing products are washed in the sink, laundered, or showered off our bodies, PFAS enter the wastewater discharged from the home. If you have a septic system, the wastewater is discharged below ground and can contaminate the groundwater. If your home is on a sewer system, the treatment plant cannot remove PFAS and it enters the environment.

When PFAS-containing products are thrown away, they end up in a landfill where they contribute to PFAS contamination in leachate. When it snows and rains, water enters the landfill where it moves through the waste and becomes what is known as leachate. Old landfills do not have liner systems and their leachate can contaminate groundwater. Newer landfills have liners and leachate collection systems. However, most leachate is sent to wastewater treatment plants.

PFAS in the environment can make their way into groundwater or surface water used for drinking water and humans and animals could be exposed to PFAS.



Want to limit PFAS exposure?
Reduce the number of PFAS-containing products you purchase!

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