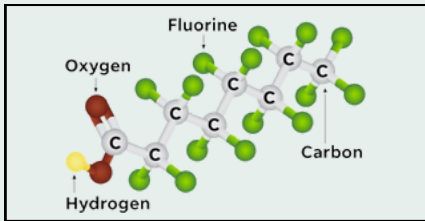


PFAS:

UNDERSTANDING THE PROBLEM



Above: Typical molecular structure of PFAS

Why Do PFAS Persist?

PFAS contain strong carbon-fluorine (C-F) bonds that make many PFAS highly resistant to degradation. This chemical stability is why PFAS can persist in the environment for very long periods and are often called “forever chemicals” ([Hu and Scott, 2024](#)).

Why Are PFAS A Concern?



PERSISTENT

Don't break down easily.



MOBILE

Move through air, soil, and water.



BIOACCUMULATE

Some can build up in people, fish, and wildlife.

PFAS can be released into the environment from many sources, including:

- Landfills and Waste Sites
- Industrial Facilities
- Consumer Products
- Firefighting Foam and Training

Once released, PFAS can move through and into our streams and rivers, where they can persist and affect aquatic ecosystems and wildlife.

What are PFAS?

PFAS, or *per- and polyfluoroalkyl substances*, are a large class of **human-made chemicals** often called “**forever chemicals**” because many persist in the environment for a very long time. PFAS have been used to make products resist grease, oil, water, stains, and heat. *However, PFAS do NOT readily break down naturally and may harm human health.* PFAS can move through air, soil, and water, allowing them to spread far from their original source. Some PFAS can also bioaccumulate, meaning they can build up over time in the bodies of people, fish, and wildlife.

Common uses of PFAS include:



packaging/
wrappers



water



non-stick cookware



firefighting foam



stain-resistant
carpet & fabric

PFAS are widely detected in freshwater fish across the U.S. In the Great Lakes, eating a single contaminated fish can be comparable to drinking PFAS-contaminated water for a month. PFAS bind to fish tissue and cannot be removed by cooking or trimming, so follow fish consumption advisories.

Exposure to PFAS has been associated with impacts on:

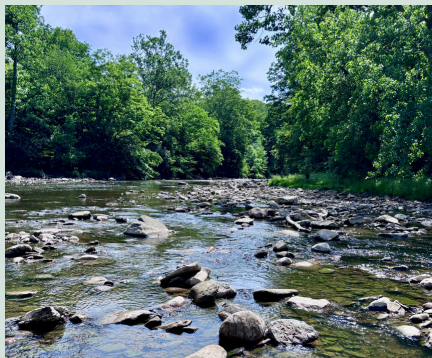
- *Development and birth weight*
- *Liver and thyroid function*
- *Certain cancers*
- *Reproductive health*
- *Immune system & vaccine response*

Sources: [Barbo et al., 2023](#); [U.S. EPA, 2024](#); [NIEHS, 2026](#)



What Can We Do?

Everyone can take action to reduce PFAS exposure and prevent pollution.



Tinker's Creek Watershed Partners

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Know Your Water

- Learn if PFAS have been detected in your drinking water ([Ohio EPA](https://www.epa.gov/ohio)).
- If you have a private well, consider testing for PFAS.
- Follow guidance from your water provider and public health agencies.

Choose PFAS-Free Alternatives

- Use stainless steel, cast iron, or ceramic instead of nonstick cookware.
- Choose PFAS-free cosmetics, dental floss, and other personal care items.
- Look for PFAS-free alternatives for water-resistant clothing, shoes, tents, and gear.

Looking for PFAS-Free Products?

PFAS Central is a free online resource with a searchable list of products identified as made without intentionally added PFAS.

Scan the QR code or visit:

pfascentral.org/pfas-free-products



Prevent Pollution at the Source

- Properly dispose of hazardous chemicals and never put them down the drain.
- Support businesses, industries, and communities in preventing PFAS releases.

Join a TCWP stream cleanup or organize a group and use our Stream Cleanup Kit. Learn more at tinkerscreek.org/get-involved

Together, we can protect Clean Water and Healthy Habitats for years to come!

Learn more at <https://tinkerscreek.org/take-action/learn-and-explore/learninghub/>