PFAS Explained:

Scientific studies have shown that exposure to some PFAS in the environment may be linked to harmful health effects in humans and animals.

What are PFAS?
PFAS are manufactured chemicals that have been used in industry and consumer products since the 1940s. Because of their widespread use and their persistence in the environment, many PFAS are found in the blood of people and animals all over the world. There are thousands of different PFAS, some of which have been more widely used and studied than others.

Are PFAS safe?
Research is ongoing to determine how exposure to different PFAS can lead to a variety of health effects. Studies have shown that exposure to certain levels of PFAS may lead to:

- **Cancer Effects**
  Increased risk of some cancers, including prostate, kidney, and testicular cancers.

- **Weight Effects**
  Increased cholesterol levels and/or risk of obesity.

- **Immune Effects**
  Reduced ability of the body’s immune system to fight infections.

- **Developmental Effects**
  Low birth weight, accelerated puberty, bone variations, or behavioral changes.

- **Reproductive Effects**
  Decreased fertility or increased high blood pressure in pregnant women.

The more we learn about PFAS chemicals, the more we learn that certain PFAS can cause health risks even at very low levels. This is why anything we can do to reduce PFAS in water, soil, and air, can have a meaningful impact on health. EPA is taking action to reduce PFAS in water and in the environment. You can also take action if you remain concerned about your own risk.

Read on to learn where PFAS are coming from, how EPA is taking action on PFAS, and what actions you can take.
PFAS Explained:

Where are PFAS found?

Most people in the United States have been exposed to some PFAS. People can be exposed to PFAS by touching, drinking, eating, or breathing in materials containing PFAS. PFAS may be present in:

- **Drinking Water**: An important potential source of PFAS exposure.
- **Waste Sites**: Soil and water at or near landfills, disposal sites, and hazardous waste sites.
- **Fire Extinguishing Foam**: Used in training and emergency response events at airports and firefighting training facilities.
- **Facilities**: Chrome plating, electronics, and certain textile and paper manufacturers that produce or use PFAS.
- **Consumer Products**: Stain- or water-repellent, or non-stick products, paints, sealants, and some personal care products.
- **Food Packaging**: Grease-resistant paper, microwave popcorn bags, pizza boxes, and candy wrappers.
- **Biosolids**: Fertilizer from wastewater treatment plants used on agricultural lands can affect ground and surface water.
- **Food**: Fish caught from water contaminated by PFAS and dairy products from livestock exposed to PFAS.

Very little of the PFAS in water can get into your body through your skin, so, showering, bathing, and washing dishes in water containing PFAS are unlikely to significantly increase your risk.

EPA’s researchers and partners across the country are working hard to understand how much PFAS people are exposed to and how.

Keep reading to find out how EPA is taking action on PFAS.
EPA is taking action to address PFAS

In October 2021, EPA released its PFAS Strategic Roadmap, which highlights concrete actions the Agency will take across a range of environmental media and EPA program offices to protect people and the environment from PFAS contamination. The Roadmap is guided by three primary goals:

- **Research** Invest in research, development, and innovation
- **Restrict** Prevent PFAS from entering air, land, and water
- **Remediate** Broaden and accelerate the cleanup of PFAS contamination

Since the Roadmap’s release, EPA has taken a number of key actions including:

- Began distributing $10 billion in funding to address emerging contaminants under the Bipartisan Infrastructure Law (BIL).
- Issued health advisories for PFAS and proposed new, legally, enforceable Maximum Contaminant Levels (MCLs) for six PFAS substances known to occur in drinking water.
- Proposed to designate two PFAS as CERCLA hazardous substances.
- Laid the foundation for enhancing data on PFAS.

To learn more about the PFAS Strategic Roadmap and key actions taken by EPA scan the QR code.

Turn the page to learn what actions you can take.
PFAS Explained:

Actions you can take:
Protect your drinking water

1. Find out if PFAS are in your drinking water:
   - If you get your water from a public drinking water system, reach out to your local water utility to see if they do testing. Or, you can choose to test the water yourself.
   - If you get your water from a home drinking water well, you are responsible for conducting regular testing.
   - If you choose to test your water yourself, contact your state environmental or health agency for detailed advice or to obtain a list of state-certified laboratories using EPA-developed testing methods in drinking water.

2. Compare your results to your state standards for safe levels of PFAS in drinking water or to EPA’s Health Advisory Levels (HALs) for PFAS.

3. If you remain concerned about the level of PFAS in your drinking water:
   - Contact your state environmental and health agencies for recommendations.
   - Consider installing an in-home water treatment (e.g., filters) that are certified to lower the levels of PFAS in your water.
   - Consider using an alternate water source for activity when your family might swallow water.

EPA makes frequent updates to its PFAS website:

To learn more about PFAS, scan the QR code to the right or go to https://www.epa.gov/pfas.