

# Contaminants in Drinking Water: Lead, PFAS, and Other Heavy Metals

Clean and safe drinking water is the foundation of good health. Unfortunately, drinking water can sometimes be contaminated with toxic substances such as lead, PFAS, and other heavy metals. These contaminants are hard to detect because you cannot often taste or smell them, and it is not easy to see them if they are mixed with other things. Drinking contaminated water can result in negative health effects, so it is important to understand each of these contaminants and the steps you can take to protect yourself and your loved ones.

## What is lead?

Lead is a naturally occurring metal that can be found in water, soil, and air. Before the 1980s, it was often used in plumbing, paints, batteries, and gasoline.

### *How can lead impact health?*

Lead can cause serious health problems, especially in children and people who are pregnant. Even low levels of lead in the body can cause behavioral problems and hyperactivity, learning problems and lower IQ, slowed physical growth and development, hearing problems, and anemia (which is when the body has fewer red blood cells than it should).

## What are PFAS?

PFAS (per- and polyfluoroalkyl substances) are a group of manufactured chemicals that have been used in a variety of industries, including firefighting, textiles, and food packaging.

### *How can PFAS impact health?*

PFAS can seep into the water supply and cause health problems including:

- Decrease fertility (harder to get pregnant)
- Increase chances of getting high blood pressure during pregnancy
- Increase chances of babies born with low birth weight
- Increase chances of getting certain cancers
- Lower the body's ability to fight germs and sickness

## What are heavy metals?

Heavy metals are a group of metals that are toxic to people in certain quantities. They include aluminum, arsenic, cadmium, calcium, chromium, cobalt, copper, iron, magnesium, manganese, nickel, strontium, vanadium, and zinc. Heavy metals can be found in water, soil, and air, and often come from industrial sources.

### *How can heavy metals impact health?*

Heavy metals can cause a range of health problems depending on the metal and how much gets into the body. These health problems include brain damage, kidney damage, and cancer.

## Steps to protect yourself and your loved ones

It is important to be aware of the contaminants that can be found in drinking water and take steps to protect yourself and your loved ones. These steps can include using a water filtration system, testing your water regularly, and being aware of potential sources of contamination in your area.

For more information on drinking water contaminants visit the websites below or for technical assistance, contact the Great Lakes Inter-Tribal Epidemiology Center (GLITEC) at 715-588-3324 or connect with your local health department.

### Sources:

Great Lakes Inter-Tribal Council, Inc. GLITEC's Free Drinking Water Testing Program. <https://www.glitec.org/programs/epidemiology-and-education/great-lakes-inter-tribal-epidemiology-center/lead-testing/overview>. Published 2022. Updated 2023. Accessed June 2023.

The National Institute for Occupational Safety and Health. Lead & Other Heavy Metals – Reproductive Health. <https://www.cdc.gov/niosh/topics/repro/heavymetals.html#:~:text=Working%20with%20lead%20or%20other%20heavy%20metals%20could,to%20reduce%20your%20exposure%20for%20a%20healthier%20pregnancy>. Updated May 2023. Accessed June 2023.

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