

Lead in Drinking Water

What is lead?

Lead is a natural metal that can be found in the ground. Over the years, it has been used in many things, including batteries, gasoline, make-up, paint, ceramics, solder, water pipes, and faucets. You likely won't be able to smell or taste lead in your water. Pieces of lead may break off in your pipes or faucet and end up in your glass, but it is unlikely they will be big enough to see. The only way to know if you have lead in your drinking water is by having it tested in a lab. Lead can cause health problems when it is swallowed.

What health problems can lead cause?

When lead is swallowed, it can cause health problems. Swallowing lead can be a serious issue for children because their bodies and nervous systems are still developing. Too much lead can cause problems with:

- Learning
- Behavior
- Speech
- Hearing
- Growth rates
- Development of the nervous system

Talk with your healthcare provider if you have concerns about exposure to lead from drinking water or other sources. The only way to know if you have a recent or ongoing exposure to lead is to get a blood lead test. Your healthcare provider can do a simple blood test to see if you and your loved ones are being exposed.

If you are being exposed, removing the source of the lead if possible is the best way to prevent future exposures. Good nutrition is another way to protect your family from lead. Include calcium, iron, and vitamin C in your family's diet. This can keep lead from being absorbed in the body.

How does lead get into my drinking water?

Lead water pipes can sometimes be found in older homes. Drinking water faucets manufactured before 2014 were allowed to contain up to eight percent (8%) lead. The lead found in drinking water is soluble or particulate. Soluble lead is lead that is dissolved in water. Particulate lead is small pieces of lead from lead-containing material. Either type of lead can get into your drinking water when pipes or faucets containing lead begin to break down or dissolve.

How much lead is permitted to be in my drinking water?

The Michigan Department of Environment, Great Lakes, and Energy (EGLE) and the U.S. Environmental Protection Agency (EPA) limits how much lead and other chemicals can be in municipal drinking water. Currently, the action level is 15 parts per billion (ppb) for lead in drinking water. When at least 10 percent of tested homes on the same public water supply have lead above 15 parts per billion (ppb) in the water, the water supplier acts to lower the amount of lead in the water.

Although actions are not required if the amount of lead in the water is below the action level, no amount of lead should be in drinking water. Even small amounts of lead can be harmful to a person's health, especially in children under six years old.

How do I know if lead is in my drinking water?

- Testing your water with a certified lab is the only way to know if lead is in your drinking water.
- If you want to test your drinking water for lead, you can contact a lab certified by EGLE and ask for a testing kit. This test usually costs about \$30. Visit Michigan.gov/EGLElab to learn more.

How can I reduce lead in my drinking water?

Flush your pipes before using your water.

If you have not used your water for several hours, flushing your pipes may reduce the amount of soluble (dissolved) lead in your drinking water. To flush the pipes in your home, do any of the following for at least five minutes:

- Turn a faucet on all the way.
- Take a shower.
- Run a load of laundry.
- Run your dishwasher.

Before using the water from any specific faucet for drinking or cooking, run the water again until it goes from room temperature to cold. This flushes out any water that had been sitting in that sink's pipes and faucet.

Using a filter can reduce lead in drinking water.

Both particulate and soluble lead can be safely removed from drinking water by using a water filter certified to reduce lead in drinking water. Look for filters that are tested and certified to NSF/ANSI Standard 53 for lead reduction. Follow the manufacturer's instructions to install the filter and maintain it.

Use cold filtered or flushed water for:

- Drinking, cooking, or rinsing food.
- Mixing powdered infant formula.
- Brushing your teeth.

Do not use hot water for drinking or cooking.

- Do not cook with or drink water from the hot water tap. Lead dissolves more easily into hot water.

Clean your aerator.

- Aerators (the mesh screens on your sink faucet) can trap pieces of particulate lead.
- Clean your drinking water faucet aerator at least every six months.
- If there is construction or repairs to the public water system or pipes near your home, clean your drinking water faucet aerator every month until the work is done.

Replace plumbing, pipes, and faucets that may add lead into your drinking water.

- Older faucets, fittings, and valves sold before 2014 may contain up to eight percent (8%) lead, even if marked "lead-free." Replace faucets with those made in 2014 or later and are certified to contain 0.25% lead or less.

When can I use water that is not flushed or filtered?

If you have lead in your drinking water, you can use water that is not flushed or filtered for:

- Showering or bathing (avoid swallowing the water).
- Washing your hands, dishes, and clothes.
- Cleaning.

For More Information

Michigan Department of Health and Human Services
800-648-6942

Ask for the Drinking Water Investigation Unit

List of Michigan Local Health Departments

Malph.org/Resources/Directory

Mi Lead Safe Website

Michigan.gov/MiLeadSafe

Michigan Department of Environment,
Great Lakes, and Energy

800-662-9278

Laboratory Services

Michigan.gov/EGLElab and choose

"Drinking Water Laboratory"

