# **Lead and Drinking Water**

# What You Need to Know



#### What is lead and where is it found?

Lead is a naturally occurring element found in the earth's crust. Lead can be found in all parts of our environment – air, soil, water, and even inside our homes.

Federal and state regulatory standards have helped to reduce the amount of lead in air, drinking water, soil, consumer products, food, and occupational settings.

### How does lead get into my drinking water?

Lead can enter drinking water through corrosion of plumbing materials, especially when the water has high acidity or low mineral content that corrodes pipes and fixtures. Homes built before 1986 are at a higher risk to have lead pipes, fixtures, and solder; however, newer homes can also be at risk, due partly to lead in faucets manufactured prior to 2014. The amount of lead in water depends on the type and amount of minerals in the water, how long the water stays in the pipes, amount of wear in the pipes and faucets, water's acidity, and its temperature.

## What are health concerns from lead exposure?

Children and pregnant women are especially vulnerable to the effects from lead exposure. Lead exposure can cause premature birth, reduce birth weight, and delay physical, mental, and nervous system development in babies and young children. Lead exposure can cause learning disabilities and problems with hearing, speech, and behavior in children. In adults, lead exposure can cause serious damage to the brain, nervous system, kidneys, and red blood cells. Lifetime exposure to high levels of lead can potentially cause stroke or kidney disease.

#### How do I know if there is lead in my water supply?

You cannot see, smell, or taste lead in drinking water. If you suspect that your home's plumbing or faucets could contain lead or lead-based solder, you should have your water tested. Testing your water for lead is the only way to know if it is there.

If you are on a municipal water system, your water is tested for lead and other potential contaminants. A Consumer Confidence Report that includes testing results is sent annually to water users. You can obtain a copy of your report by contacting your water supplier. If the lead is above 15 parts per billion (ppb) in municipal water supply, the supplier is required to inform the public.

Contact a testing lab before having your water tested to confirm that they can test for lead, and obtain specific instructions for how you will collect, store, and transport the sample(s) you get from your home. There is a cost for having drinking water tested. A list of laboratories that test for lead can be found at: https://www.michigan.gov/documents/lead/Lead/Copper Lab Certs 6.1.18 633434 7.pdf.

#### What can I do to reduce lead in my drinking water?

If your water test indicates your tap water has lead levels above the EPA's action level of 15 ppb, there are several things you can consider to reduce the risk of lead exposure in your drinking water:

- Replace faucets. 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.
- Flush your cold-water pipes by running the water for approximately five minutes. The longer the water
  has been sitting in the pipes, the more lead it may contain. You can fill containers for later use, after the
  flushing process.
- You may choose to install a water filter that is certified to NSF/ANSI Standard 53 for lead reduction.
   The U.S. Environmental Protection Agency (EPA) also recommends that the filter be certified for NSF/ANSI Standard 42 for particulate reduction (Class 1). If a water filter is installed, replace cartridges at least as often as recommended by the manufacturer.
- **Do not boil water** to remove lead. Boiling will not remove the lead.
- **Use cold filtered water or bottled water** for drinking, cooking, making baby formula, and brushing teeth for children under age 18 years and pregnant women. Commercially prepared bottled water that meets federal and state drinking water standards are recommended.
- **Clean aerators.** Aerators are small attachments at the tops of faucets which regulate flow of water. They can accumulate small particles of lead in their screens. Remove and sanitize monthly.

#### Who do I contact for more information?

The local water authority is always your first source for testing and identifying lead contamination in your tap water. For more detailed information on Lead contamination please visit:

- Centers for Disease Control and Prevention <a href="https://www.cdc.gov/nceh/lead/">https://www.cdc.gov/nceh/lead/</a>
- United States Environmental Protection Agency <a href="https://www.epa.gov/lead">https://www.epa.gov/lead</a>
- Michigan Department of Environment, Great Lakes, and Energy <a href="https://www.michigan.gov/egle/0,9429,7-135-3313">https://www.michigan.gov/egle/0,9429,7-135-3313</a> 3675 76638---,00.html
- NSF International <a href="http://www.nsf.org/consumer-resources/water-quality/drinking-water/lead-in-drinking-water">http://www.nsf.org/consumer-resources/water-quality/drinking-water/lead-in-drinking-water</a>











