

LEAD IN DRINKING WATER

Understanding Lead and Your Drinking Water

Where Does Lead Come From?

Water leaving Batavia's Water Treatment plant does not contain lead. However, through corrosion of household plumbing materials, lead can leach into the water before it gets to your faucet. According to the Environmental Protection Agency (EPA), homes built before 1986 are more likely to have lead in the plumbing system. Common sources of lead in plumbing materials are:

1. Lead service lines

The service line connects your home to the City's water main. The City owns the portion of the line between the water main and the shutoff valve located in the parkway. The property owner is responsible for the line between the shutoff valve and the house.

In homes built through the 1940's, the portion of the line between the water main and the shutoff valve located in the parkway was typically constructed of lead pipe. During the 1950's and newer homes, lead pipe was replaced by copper pipe.

The homeowner portion of the service line built through the end of the 1940's were typically galvanized steel, but were also occasionally made from lead. Most homes after WW II were built with copper or galvanized pipe. A homeowner can look at the pipe material prior to the water meter to determine the type of pipe. Lead pipe will have a grey color whereas copper pipe is dark orange in color.

If the water main has ever been replaced on your block, the service line from the water main to the shutoff valve in the parkway was replaced with copper pipe. However, the homeowner's portion of the service line, from the house to the shutoff valve, varies and may be made of copper, galvanized steel or lead pipe.

2. Lead solder

Solder is used to connect copper piping. In 1987, lead solder was banned from use in household plumbing. If your house was built before 1987, your copper plumbing may have lead solder.

3. Brass faucets, valves and fittings

Almost all faucets, valves and fittings have brass components. Until 2014, brass faucets and fittings sold in the U.S. and labeled "lead-free" could contain up to 8 percent lead. Effective January 2014, *The Reduction of Lead in Drinking Water Act* specifies that these materials may not contain more than 0.25 percent lead.

What are the Health Impacts of Lead?

Lead can impact almost every organ and system in your body. Exposure to high lead levels can severely impair mental function and damage the kidneys. Pregnant/nursing women and children under the age of six are most vulnerable. Additional information is available from Centers for Disease Control and Prevention at <http://www.cdc.gov/nceh/lead/>. **According to the EPA, the most likely exposure to lead is swallowing lead paint chips or breathing in lead paint dust.**

What Does the City of Batavia Do to Minimize Lead Exposure in Drinking Water?

The City of Batavia complies with the Lead and Copper Rule (LCR) issued by the Environmental Protection Agency in 1991. The City has complied on a continuous basis since the rule was promulgated in the early to mid-1990's. This rule requires water utilities, at risk for lead and copper in the water, to add an approved chemical to control lead and copper levels in drinking water. The Batavia Water Treatment Facility adds blended ortho-phosphate during the treatment process. This deposits a thin layer of phosphate on the inside of pipes to prevent the drinking water from directly touching the metal. Samples to test for compliance are taken from faucets in homes and businesses to ensure that drinking water reaching the consumer is safe. The LCR uses what is known as an "Action Level" of 15 parts per billion (ppb) at the 90th percentile. The 90th percentile in Batavia's water has been below the Action Level for lead since November 1992.

What Can Residents Do to Minimize Lead Exposure in Drinking Water?

Use only cold water for drinking, cooking and making baby formula (cold water is less likely than hot water to leach metal from pipes and fittings) Any time there has not been water use for several hours, residents should flush their pipes until the water gets as cold as it gets. If there has been recent heavy water use, such as showering or laundry, this could take as little as five to thirty seconds. Otherwise it could take two minutes or longer. The goal is to get to fresh water that has not been sitting in your household pipes or service line for a long period, and every house is different!

How Will I Know If Lead is in My Drinking Water?

If you are concerned, you can have your water tested for lead. Testing costs about \$40.00. Since you cannot see, taste, or smell lead dissolved in water, testing is the only sure way of telling whether there are harmful quantities of lead in your drinking water. The Water Department can assist with your water testing..

Should I Drink Bottled Water Instead of Tap Water?

No - not if you have access to treated tap water in Batavia. Tap water is highly regulated, and is more sustainable and environmentally friendly than bottled water.

Maintenance on Lead Water Service Line? Don't Forget to Flush!

Some water services in Batavia are older and constructed of lead pipe. If we perform work on the system, our City employees may advise you of the type of line you have in your home. Blended phosphate is added to the water during the treatment process – this chemical creates a coating on the inside of pipelines to prevent metals, such as lead and copper, from leaching into the water. If the City performs maintenance affecting your water service line, we will advise you to take the following steps as recommended by the American Water Works Association (AWWA) to minimize your exposure to any lead that may have been released.

Flush all your faucets using these steps:

1. Remove faucet aerators from all cold water taps in the home.
2. Beginning in the lowest level of the home, fully open the cold water taps throughout the home.
3. Let the water run for a least 30 minutes at the last tap you opened (top floor)
4. Turn off each tap starting with the taps in the highest level of the home. Be sure to run water in bathtubs and showers as well as faucets.
5. Do not consume tap water, open hot water faucets, or use icemaker or filtered water dispenser until after flushing is complete.

You may also wish to use a home filter for water to be used for drinking and cooking, particularly if you are pregnant or have children under age six.

Where Can I Get More Information?

Water Filter Information

<http://www.nsf.org/newsroom/consumer-guide-to-nsf-international-certified-lead-filtration-devices>

Related Documents:

Communicating About Lead Service Lines: A Guide for Water Systems Addressing Service Line Repair and Replacement

[finaleadservicelinecommguide.pdf](#)

Where Can I Get More Information?

Check out the EPA's website on lead in drinking water at: <http://water.epa.gov/drink/info/lead/index.cfm>

Related Documents:

[Typical Water Service Detail](#)

[Labs for Lead Analysis](#)