

Lead in Drinking Water

Understanding Lead and Your Drinking Water

Where Does Lead Come From?

Water leaving the treatment plant in Evanston does not contain lead, nor does the Village of Skokie's water mains. Through corrosion of household plumbing materials, lead can leach into the water before it gets to your faucet. According to the United States 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 include:

1. Lead service lines

A service line connects your home to Skokie's water main. Skokie 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 from and including the shutoff valve to the house. In homes built prior to 1960, the service line was constructed of lead pipe. Between 1960 and 1980 plumbers began using copper rather than lead, but some lead pipe was still installed. Generally speaking, the service line to homes built after 1980 were constructed of copper. A homeowner can look at the pipe that connects to the water meter to determine the type of pipe. This pipe usually comes up through the floor. Lead pipe will have a grey color, whereas copper pipe is dark orange in color.

If the water main has been replaced on your block since the early 1970s, the service line from the water main to the shutoff valve in the parkway was replaced with copper pipe. The homeowner's portion of the service line from the house to the shutoff valve will still be lead pipe unless you or a prior owner had that line replaced.

2. Lead solder

Solder is used to connect metal piping. In 1987, lead solder was banned from use in household plumbing. If your house was built before 1987, your plumbing system 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 Village of Skokie Do to Minimize Lead Exposure in Drinking Water?

The Village of Skokie is supplied treated water from the City of Evanston. The Village of Skokie complies with the Lead and Copper Rule (LCR) issued by the Environmental Protection Agency in 1991. This rule requires 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 Evanston Water Treatment Facility adds blended 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. Water 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 Skokie’s water has been below the Action Level for lead since 1992. More information on the Lead and Copper Rule can be found at

<http://water.epa.gov/lawsregs/rulesregs/sdwa/lcr/index.cfm>.

Does Replacing My Water Meter Increase the Lead in the Drinking Water?

No, not in Skokie. All properties in Skokie already have water meters with valves on either side. Replacing a water meter in Skokie will not create any increased lead levels.

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

The best way to minimize lead exposure is to eliminate the risk. This can be accomplished by replacing the lead-bearing plumbing components in your plumbing system including fixtures, pipes and the water service line. Until your plumbing system is lead free, you can minimize exposure by taking the following precautions:

- 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 run their cold water faucet until the water gets as cold as is typical for that faucet. 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 time period, and every house is different.
- Install a lead filter on the principle potable water faucets used in your home, particularly if you are pregnant or have children under age six.

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

If you are concerned, you can have your water tested for lead by an independent water testing laboratory. Testing costs between \$20 and \$100. 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. Click here for a list of independent water testing laboratories.

Should I Drink Bottled Water Instead of Tap Water?

No - not if you have access to treated tap water in Skokie. Lake Michigan is a great source of drinking water and the water undergoes treatment overseen by qualified water plant operators and laboratory personnel. Tap water is highly regulated, and is more sustainable and environmentally friendly than bottled water.

Maintenance on Water Service Line? Don't Forget to Run the Water!

Most water services in Skokie are older and constructed of lead pipe. 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. After any repair or other work is done to the water service to your home, please 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, run the cold water full force at all taps, making sure the drain is clear.
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, run hot water faucets, or use an icemaker or filtered water dispenser until after flushing is complete. If you have a filtered water dispenser, replace the filter after flushing.

Where Can I Get More Information?

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

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