

Lead and Your Water Supply

Frequently Asked Questions

Lead in drinking water has been an increasingly important topic especially with the recent situation in Flint, Michigan.

As a result, we have compiled a list of our most frequently asked questions regarding lead and your drinking water. If your questions aren't answered below, feel free to give us a call at 847-377-7500 or send us an email at publicworks@lakecountyil.gov.

What is lead?

Lead is a naturally occurring blue-gray metal that is all around us. It is toxic and has no nutritional value. Lead was used for many years in paints, plumbing, batteries, and other products found in and around homes.

How does lead enter the water supply?

Lead enters the water through the corrosion of pipes, solder, fixtures, faucets (brass), and fittings. The amount of lead in your water depends on the types and amounts of minerals in the water, how long the water stays in the pipes, the amount of wear in the pipes, the water's acidity and its temperature.

The EPA states that homes built before 1986 are more likely to have lead pipes, fixtures and solder. Homeowners should investigate to determine if they have a lead service line and fixtures.

Lead service line means a service line made of lead that connects the public water distribution system to the building.

What are the health effects of high lead levels in my drinking water?

Most studies show that exposure to lead-contaminated water alone would not likely elevate blood lead levels in most adults. Risk will vary, however, depending on the individual, the circumstances, and the amount of water consumed. For example, infants who drink formula prepared with lead-contaminated water may be at a higher risk because of the large volume of water they consume relative to their body size.

How can I find out if there is lead in my drinking water?

The only way to know whether your tap water contains lead is to have it tested. You cannot see, taste, or smell lead in drinking water. Therefore, you must ask your water provider whether your water has lead in it. For homes served by public water systems, data on lead in

tap water may be available from your local water authority. If your water provider does not post this information online, you should call and find out. The EPA recommends testing your water for lead by a certified laboratory. If you are a resident of Lake County, you can get your water tested by the Lake County Environmental Laboratory. For more information, contact Stefanie Ladao at 847-377-7744.

Should I be concerned about lead in my water?

Lake County Public Works provides quality water to our customers. In fact the IEPA has reduced lead monitoring for most of our water system from every six months to every three years as a result of no sampling violations. The public water distribution system has no lead water lines. However, homeowners may have lead lines on their property.

Since 2008 all of our water systems have been tested at least twice for lead at locations approved by the IEPA. A homeowner's residence is typically the designated sampling location. Over 95% of the samples tested have shown lead concentration at or below the action level of 15 parts per billion.

If a household was used as a testing site, a copy of the result is mailed to the homeowner. To-date, Lake County Public Works has had no violations for lead exceedance in any community. Annual water quality test results for your community can be found in our Consumer Confidence Reports at <http://lakecountylvil.gov/342/Water-Quality>.

How often does Lake County Public Works test the drinking water for lead?

Each community must collect samples for lead. The total number of samples required during each monitoring period is dependent on the population and past results. The IEPA has reduced the lead monitoring for most of Lake County Public Works water systems from every six months to every three years.

What additional measures are being taken to ensure that Lake County Public Works customers have safe drinking water?

Lake County adds polyphosphate to required water systems, which sequesters lead from the water supply and limits corrosion of pipes. Our operators monitor this polyphosphate dosage every day. We also have a hydrant flushing program that ensures that the lines are flushed to remove potential buildup of particulates.

What are polyphosphates?

Phosphate chemicals are among the few recognized substances that can be used to safely and effectively provide corrosion treatment to water systems.

Polyphosphates are water purification chemicals that are employed to correct problems caused by inorganic groundwater contaminants (iron, manganese, calcium, etc.) and also to preserve water quality in distribution systems.

It is safe to drink the water that contains polyphosphate. Polyphosphate additives are either food quality grade or certified to ANSI/NSF Standard #60 Drinking Water Treatment Chemicals as approved for use in potable drinking water.

In the treatment of potable (drinking) water, polyphosphates are used to:

- Prevent "red" (from iron) and "black" (from manganese) water coloring/residue.
- Reduce soluble lead and copper in potable water
- Clean or dissolve mineral scale in water distribution lines
- Prevent and/or retard scale formation (from minerals depositing) and corrosion (from low pH and/or dissimilar metals) in the water distribution system

Does boiling water remove lead?

Boiling water does not remove lead. Because some of the water evaporates during the boiling process, the lead concentration of the water can actually increase slightly as the water is boiled.

What can I do to reduce my exposure to lead?

If your service line has lead, the homeowner should consider replacing the service line with a different pipe material. In the interim, a homeowner may consider using a water filter that is attached to a tap to lower lead to acceptable levels. The filter should conform to the NSF International standard for reducing lead. An up-to-date listing of filters that meet the NSF standard for lead can be found at www.nsf.org.

If your service line DOES NOT have lead, the lead in your tap water may be coming from fixtures, pipes, or elsewhere inside your home. Until you eliminate the source, you should take the following steps any time you wish to use tap water for drinking or cooking, especially when the water has been off and sitting in the pipes for **more than 6 hours**:

- a. **Before** using any tap water for drinking or cooking, flush your water system by running the kitchen tap (or any other tap you take drinking or cooking water from) on **COLD** for **1–2 minutes**;
- b. Then, fill a clean container with water from this tap. This water will be suitable for drinking, cooking, preparation of baby formula, or other consumption. To conserve water, collect multiple containers of water at once (after you have fully flushed the water from the tap as described).

Where can I get more information on lead?

For more information, visit www.epa.gov/lead or call the EPA's Safe Drinking Water Hotline at 1-800-426-4791.