

# FREQUENTLY ASKED QUESTIONS

## Lead Service Line Replacement

Every Ohioan deserves clean, safe and affordable drinking water.

Yet, we know lead pipes continue to threaten the safety of their drinking water, despite advances in water treatment technologies. Below you will find answers to commonly asked questions about lead service lines. You will also understand the history and scale of the problem, as well as how you can protect your family from exposure to lead in water.

### What are lead services lines?

If your tap water is provided by a water utility, a service line connects your house's plumbing system to the water utility's main water line under the street. In some cases, this service line can be made out of lead.

### How widespread are lead service lines?

Across the country, over 9 million homes still get their drinking water through a lead pipe. In Ohio, there are an estimated 650,000 lead service lines.

### Why do we need to remove lead service lines from the water delivery system?

As long as we have lead service lines, there is a risk for lead contamination in our drinking water, with our children the most vulnerable to lead poisoning. To protect the health of our children, we must remove lead from our drinking water delivery system. Doing so will help ensure future generations and communities can contribute to a thriving Ohio economy.

### What are the health impacts of lead exposure?

Lead is one of the most widely studied neurotoxins. EPA, CDC and health experts agree: no amount of lead is safe. Exposure to lead, even at low levels, can cause serious health effects in all age groups. Infants and children exposed to lead may have impaired brain development, including decreases in IQ and attention span and increases in learning and behavioral problems. Exposure during adulthood increases the risk of cardiovascular disease, high blood pressure, heart disease, hypertension, as well as kidney and nervous system problems.

### What are the primary sources of lead?

Approximately 3,500 children in Ohio had elevated levels of lead in their blood in 2019. The primary sources of lead exposure among infants and young children are from lead-based paint and lead in water—driven largely by consumption of lead dust and infant formula mixed with contaminated water. For children not living in a home with lead-based paint or lead pipes, lead-contaminated food is a major source. While we need to reduce all sources of lead, there is a clear need and consensus to address lead pipes in our drinking water systems.



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### Weren't lead pipes banned in the 80s?

Yes. In 1986, Congress prohibited the use of pipes, solder, or flux that were not "lead free" in public water systems, but allowed for already-installed plumbing to stay in use. They also prohibited the use of plumbing that was not "lead free" in buildings providing water for human consumption. However, the definition of "lead free" at the time still allowed up to 8% lead content in pipes, and up to 0.2% lead content in solder and flux.

In 1996, Congress prohibited introducing into commerce any pipe or plumbing fitting or fixture that is not lead free. In 2011, Congress revised the definition of "lead free" for plumbing products from 8% to 0.25%, including pipes, fittings, and fixtures.

Despite these updates to law, the legacy of lead remains in many communities' drinking water service lines. Replacement rates vary from community to community, depending on the prioritization of the issue and the available resources of each community to deal with this critical public health threat.

### How do I know if my service line is made of lead?

If your home is in a community developed prior to 1986, it is possible both the private and public portion of the water line serving your home is made of lead. To learn about your water line's material, you should contact the agency responsible for maintaining the water infrastructure in your community. This may be the water utility or a city service department. Water utilities are charged with keeping a map or inventory of all likely lead service lines in the community, including which lines have already been replaced. Some Ohio cities, including Cincinnati, Columbus, and Cleveland, have interactive maps or databases online.

### How does lead get into water from the pipes?

Most water utilities use orthophosphates as an anti-corrosive agent. The addition of these chemicals reduces lead that leaches into the water from the pipes. However, they are not one-hundred percent effective, and they exacerbate other water pollution issues like phosphorus in water. Even with treatment, lead pipes can unpredictably release particulates of lead into drinking water.

As long as lead remains in the pipes and plumbing, there is risk of it leaching from the pipes when water is not treated properly or the water source or water treatment system significantly changes. In fact, the United States has a long history of lead-tainted water, ranging from one of the most infamous instances in Lowell, Massachusetts in the 1890s to Washington, DC in the early 2000s to Flint, Michigan in 2014.

In Sebring, Ohio, lead contaminated the water for five months without residents being aware. The tragedy in Sebring led to the passage of HB 512, requiring faster public notification of elevated lead in water and stricter regulation around corrosion control treatment.

### Is it safe to replace only part of the lead service line?

No. "Partial replacements" of lead service lines (whether the lead portion is on the public or private side) places residents at risk for greater lead exposure. It's also a missed opportunity to achieve the long-term benefits and cost savings of doing it right the first time by replacing the full line.

### Who's responsible for the cost of replacing lead service lines, whether public or private?

In Ohio, the homeowner or property owner is responsible for replacing the private portion of the service line—the portion running from the home to the city right-of-way. The city or water utility is typically responsible for the portion of the service line running from the city right-of-way to the water main. The joint responsibility poses a logistical challenge for ensuring both the private and public portion of the lines are replaced at the same time.

The default approach for many cities has been to replace the public portion of the line during infrastructure repairs while leaving the portion on private property untouched unless the resident pays. Some cities in Ohio, however, are avoiding this situation by working with property owners to replace both the private and public side of the line simultaneously.

### If I have a lead service line, what can I do to protect myself/my family?

Flush and filter the water you use for cooking and drinking until you can replace your lead service line. Flushing means allowing the water to run for several minutes so you are not capturing water that has been sitting in the lines for some time.

Before drinking, flush your home's pipes by running the tap for several minutes, taking a shower, doing laundry, or starting a load of dishes.

Filtering should occur using a point-of-use filter, filtering the water as it comes out of the faucet or refrigerator. You may also use water pitcher filters as well. You should be certain to find a filter that specifically treats lead, meeting the NSF 53 standard for lead reduction.



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