

Service Line Materials

The materials of your water service line matter.
Learn what you can do to keep your drinking water safe.

Meet the three points of your service line

The service line is your pipe. It carries clean water into your property from a water main. The service line is a part of your property's plumbing, even though it's underground.



The property owner owns the service line!
It **does not** belong to the City.

- ① Material between main and curb stop.
- ② Material between curb stop and meter.
- ③ Material at meter.

Different materials at three different points? In some cases, a section was replaced in the property's history. The remaining section could have been left intact. This is called a **partial service line replacement**. For this reason, we're required to identify the material at **three points in order to categorize an overall service line material**.

Possible Pipe Materials



Lead

Lead was used in the past because it is soft and can be bent. Lead service line installation decreased after the 1950s as harmful health effects became clear.



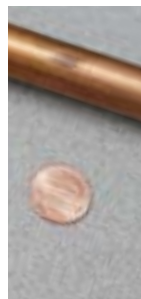
Galvanized

Galvanized steel or iron pipes can corrode. Over decades, any lead from a property's plumbing can accumulate on the corroded walls of galvanized pipes.



NON-LEAD: Plastic

Plastic is typically a less expensive option. It is not associated with increased risk of lead.



NON-LEAD: Copper

Copper is used in most service line replacement. Copper service lines are considered safe because they are not associated with increased health risks.



Unknown material

Hundreds of thousands of properties in Philadelphia have an unknown material in a buried section of the service line.

If the overall category for your line is "unknown," you should act as though it may contain lead.

This guidance is a precaution for your health and safety.

Lead Plumbing Basics

Lead can dissolve from your property's plumbing materials into water. This process is called corrosion.

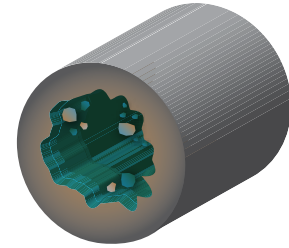
Your service line material can corrode over time.

When water sits unused in lead or galvanized pipes for a period of 6 or more hours, the pipe can corrode or wear away. Lead service lines or lead solder can dissolve into the clean water we deliver to your property. Dissolved lead is not visible.

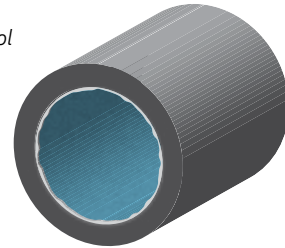
The good news? Philadelphia's treatment helps protect your pipes from corroding.

Zinc Orthophosphate, added during treatment, forms a protective coating on the inside of pipes.

For over 25 years, Philadelphia has successfully used this process to reduce the amount of lead that can dissolve from plumbing into water. However, different building plumbing systems and usage patterns can affect how well corrosion control works.



Service line with no corrosion control



Service line with successful corrosion control

Finding other sources of lead



Lead can be hidden in older plumbing work, including:

- Pipes
- Faucets
- Plumbing fixtures
- Solder and pipe fittings

Even some plumbing equipment previously labeled as "lead-free" could still contain small amounts of lead.

It's important to look at all sources to prevent exposure to lead. **Peeling paint and lead-dust are the most common sources of exposure.** Other sources include soil, imported or older toys and jewelry, glazes or decorations on dishware, and other products. Reducing exposure to lead can improve health outcomes, especially for children.

Are you interested in getting your tap water tested?

We offer testing for residential customers with service lines categorized as lead. Call (215) 685-6300 to let us know if you are interested in a tap water test.

Health effects of lead

There is no safe level of exposure. Exposure to lead in drinking water can cause serious health effects in all age groups. Infants and children can have decreases in IQ and attention span. Lead exposure can lead to new learning and behavior problems or exacerbate existing learning and behavior problems. The children of women who are exposed to lead before or during pregnancy can have an increased risk of these adverse health effects. Adults can have increased risks of heart disease, high blood pressure, kidney, or nervous system problems.

 Philadelphia's Department of Public Health recommends a blood test for lead for all children aged 1–6.

Service Line Map

Our online map shares current records about the materials in your property's service line.

Why we created the Service Line Map

Old lead service lines are a challenge across the country.

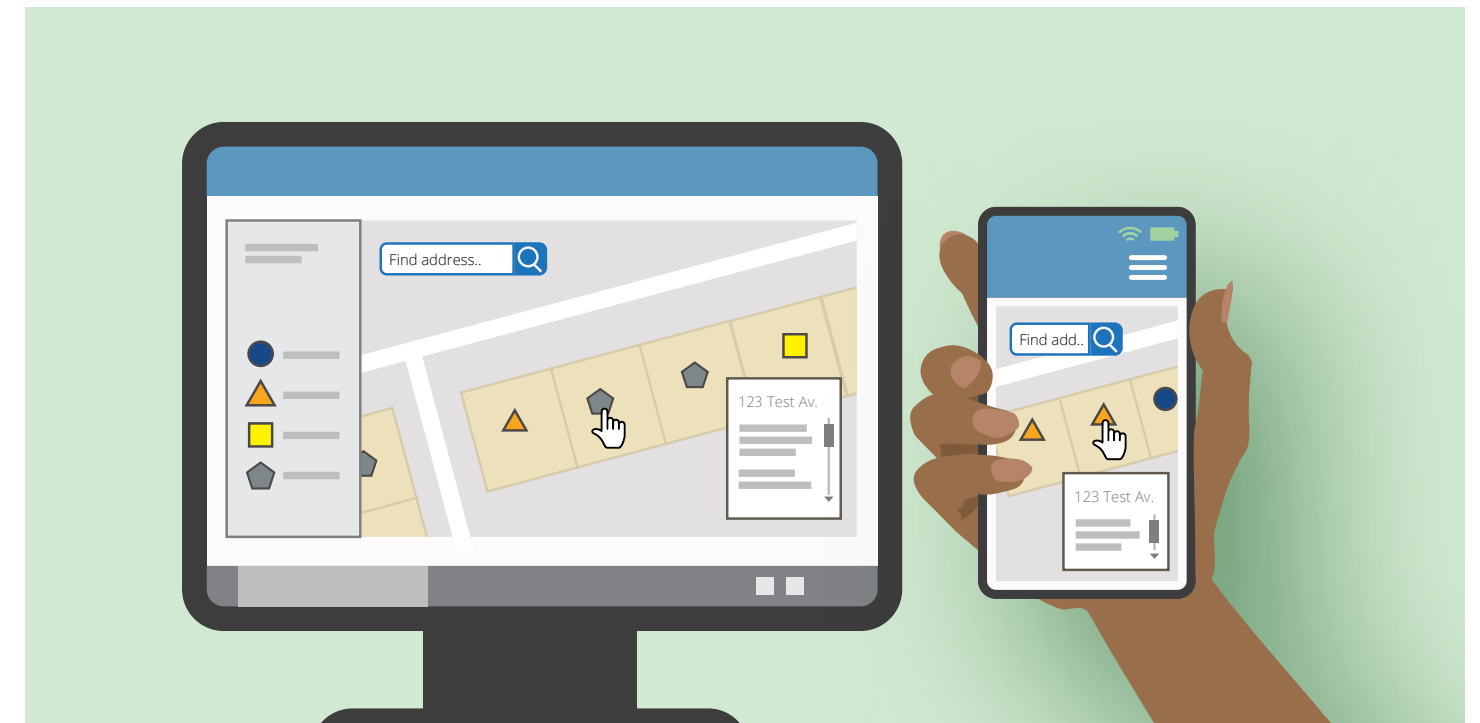
Even though these lines don't belong to the City of Philadelphia, we support the removal of water service lines that contain lead.

To meet this challenge, cities need to understand the number and location of these lines. The map and records are an important step to plan for future lead service line replacement efforts.



IT'S THE LAW:

We're required by Federal and State law to make these records available to the public.



Updating the map

We are launching the first version of this map in late 2024.

The map will require regular updates.

When you look up a property, you'll see a pop-up box displaying the current records.

You can report updated information about your service line back to us.

Use the form on the map web site, or email us at:

ServiceLineMap@phila.gov

Explore the map:

water.phila.gov/service-line-map

Where do the service line records in the map come from?

The information is compiled from multiple sources. Sources include historical records, field inspections, permits, and tests of the material at one point of the line during meter upgrades. However, no materials identification method is 100% accurate.

Further work may be required to confirm and verify the materials at more points along a service line.

How to reduce exposure to lead from plumbing

DAILY FLUSHING: EASY & EFFECTIVE

Flush your pipes: Get rid of the water sitting in plumbing.

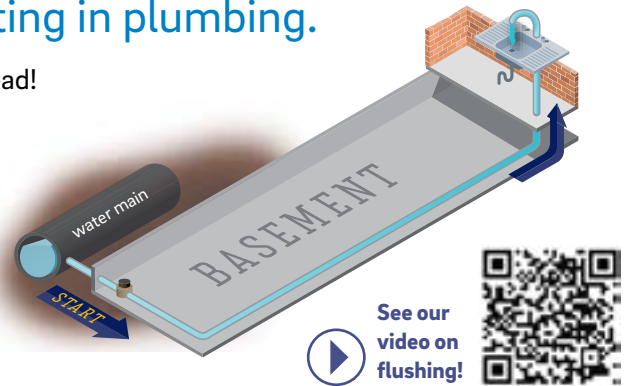
Studies and testing in Philadelphia prove this really works to reduce lead!


Instructions:


1. Turn on your cold tap. Open it all the way.
2. Run cold water from the faucet for **3–5 minutes**.

When to do it:

If you haven't used water for 6 hours or more—usually first thing in the morning when you wake up or when you come home after work or school.



 **Have a lead (or galvanized) service line?**
Flush your pipes every day.

 **Pennies for peace of mind**
Flushing is **not** expensive. It only costs a penny or two.

OTHER TIPS

Only use cold.



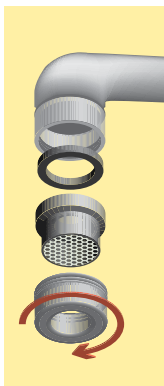
Use only **cold water** for cooking and drinking, including preparing baby formula. Hot water can help metals dissolve into water.

You can use a filter...

...**But it must be certified to reduce lead.** You must follow all instructions from the manufacturer. Use filters certified for lead reduction by the National Sanitation Foundation (NSF).

Good to know:
Boiling water does NOT remove lead!

Clean the faucet screens regularly.



Aerators, also called faucet screens, can trap lead. Then they can release lead like a tea bag in water over time. Disassemble and soak screens in vinegar, and then scrub the screens with a toothbrush.

Replace a service line.

You can replace a lead service line, and PWD will help!

If you don't want to contact a plumber directly, apply for our Homeowners Emergency Loan Program (HELP).

A zero-interest loan can cover the cost of replacement.

- Learn more & apply: water.phila.gov/HELP



Above: A plumber replaces a service line



Get useful tips for people with lead service lines or plumbing

Sign up for our latest emails and updates about lead plumbing, delivered right to your inbox. water.phila.gov/lead-updates or Text "PWD LEAD" to 468-311