



## Lead and Copper Rule

### Frequently Asked Questions

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#### Questions Related to Lead Sources

##### **What is lead?**

Lead is a naturally occurring metal that is harmful if inhaled or swallowed. Lead can be found in air, soil, dust, food, and water.

##### **How does lead end up in water?**

In older homes and buildings, lead pipes or plumbing fixtures might have been used. Over time, these pipes can corrode, releasing lead particles into the water supply. Even though lead pipes are no longer used in new construction, many older buildings still have them.

Lead solder was commonly used to join copper pipes until the late 1980s when regulations limited its use. Service lines are pipes that connect homes to water mains. These service lines may be made of lead in older communities. Corrosion of these service lines can release lead into the water supply.

Lead does not come from the groundwater and/or surface water sources that supplies your residence. However, the temperature, pH level, and mineral content of source water can potentially exacerbate the leaching of lead from pipes, fixtures, and solder.

##### **Is my home likely to have lead plumbing?**

The lead ban went into effect in Oklahoma in 1988, so plumbing installed before then is at risk of containing lead in the lines, solder, or fixtures. You can check the recorded material of your **service line** by entering your address into our interactive Service Line Material Map.

<https://gis.cityofmoore.com/portal/apps/experiencebuilder/experience/?id=30eaf2f2b1f74345946e804da476eaf9>

##### **What if the city doesn't supply water to my property and I have another local source of water, am I still at risk of being exposed to lead?**

If your property does not use city water and instead relies on a well or another local source, there is still a risk of lead contamination. This can come from the well components, the pump, and the pipes leading into your home, especially if they are made of or soldered with lead.

##### **What if I live in an apartment complex, am I still at risk of being exposed to lead?**

Living in an apartment complex does not exempt you from the risk of lead exposure. If the building is older and has not had its plumbing updated, lead pipes or solder might be present. Furthermore, the complexity of plumbing systems in large buildings can make it difficult to control water quality.

##### **How is drinking water tested for lead contamination?**

The Environmental Protection Agency (EPA) and the Oklahoma Department of Environmental Quality (ODEQ) mandates regular sampling to test drinking water for lead. Samples are collected from various homes within the community, with a focus on those that are most likely to have higher lead levels. Samples are collected from inside faucets that are most frequently used for consumption such as kitchen or bathroom sinks. These samples are analyzed in certified laboratories to measure the concentration of lead. Utilities are required to report these findings to both the state and the public.

### **At what level does lead contaminated water need to be reported?**

If the concentration of lead exceeds the EPA's action level of 15 parts per billion, then the utility must notify the public and take corrective actions to reduce the lead levels. Fifteen (15) ppb is the equivalent dissolving a small drop of dye into a large swimming pool.

### **What are other methods of lead exposure?**

Lead exposure can occur through paint, industrial emissions, soil contaminated by past emissions or leaded gas, and certain imported products or foods.

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## **Questions Related to Routine Lead Sampling**

### **Why was my home chosen to sample for lead?**

The Environmental Protection Agency (EPA) and the Oklahoma Department of Environmental Quality (ODEQ) require cities to identify homes that are at a high risk of lead contamination. These homes are ranked based on various criteria such as homes with known lead plumbing or lead solder, or with a higher chance of lead materials based on construction year. From this pool of high-risk homes, a few are selected for lead sampling by the city. It is important to note that being chosen for lead sampling does not necessarily mean that your home contains lead. If your home has lead service lines, you will be informed about it in annual letters starting in 2024.

### **How is sampling performed?**

A sample kit is provided with instructions for the resident to follow. The city arranges to pick up the sample and send it to a laboratory for analysis. Analysis results are provided to the resident. You may contact the city to confirm that the sample kit was provided by a city employee or authorized contractor. Authorized personnel will NOT request to enter a resident's home.

### **What can I do if my house was not chosen for lead sampling?**

In order to be chosen for lead sampling, your house must be lead-containing or potentially lead-containing. As service lines are replaced, sample sites will be chosen based on representation throughout the community.

If your house was not chosen as a sample site, you can contact a certified lab for water testing. Below is a link to the ODEQ list of accredited labs in Oklahoma. These labs are approved for water testing and can conduct a lead sample.

<https://labaccreditation.deq.ok.gov/labaccreditation/Default.aspx>

### **My drinking water tested positive for lead contamination, what do I do next?**

If your drinking water tests positive for lead, take immediate steps to reduce your exposure. Run the water tap for 2 -5 minutes before use. Use bottled water or a water filter, such as a Brita filter to remove lead for drinking and cooking. Boiling water does NOT reduce the level of lead in your water. Please see **"What can I do to reduce my exposure to lead?"** questions below.

If you have any further questions, please visit the CDC's website: <https://www.cdc.gov/lead-prevention/prevention/drinking-water.html>

### **Is there a safe level of lead concentration in drinking water?**

According to the Environmental Protection Agency (EPA), no amount of lead in drinking water is considered safe, especially for vulnerable populations such as children and pregnant women. The EPA has set the action level for lead in drinking water at 15 parts per billion (ppb), but the goal is to reduce lead concentrations to as low as reasonably possible because any exposure to lead is potentially harmful.

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## Questions Related to Inspections

### **Why is the city conducting service line inspections?**

These inspections are being completed to comply with a new state and federal regulation that requires all drinking water utilities in the United States to investigate and determine the material of the service lines in their water systems. Not all service lines will be inspected. An inspection is not required for locations with documentation of service line material.

### **Are they digging in the yard?**

Most inspections will require digging. Crews are tasked with locating and confirming the material of the service line on both the city and customer sides. Inspectors will be working in and around the meter box typically 2 feet to 4 feet away from the box; however, if the line material cannot be determined there, a small dig may be required further in the yard. All excavation efforts will be repaired back to the original condition.

### **Do I need to be home or present for the inspection and do I need to know when the inspectors are coming?**

No. Crews will be working at the property's meter box. Crews do not need to interact with property owners, nor will they need to enter your home or disrupt water service to your house.

### **What type(s) of test(s) will be performed during the service line inspection?**

Crews will conduct a visual inspection to confirm the material of the service line. Additional tests may be conducted to further identify metallic metal plumbing materials. These tests include scratch or magnet tests and lead swab kits, per EPA and ODEQ guidelines.

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## Questions Related to Lead Service Lines and Plumbing

### **What is a service line and who owns it?**

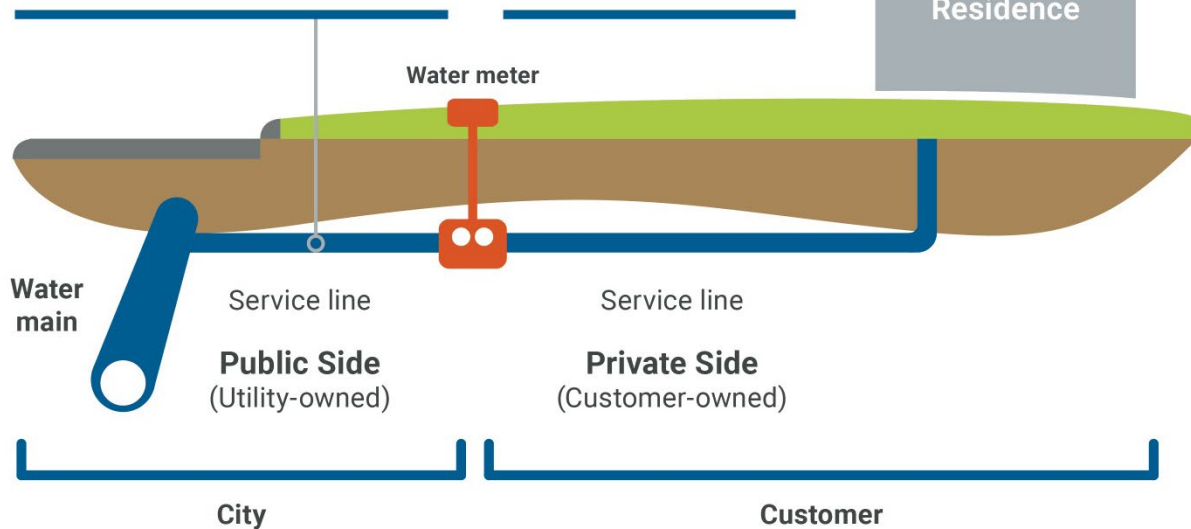
A service line is a pipe that conveys water between the water mains in the streets into individual homes and buildings. The city owns the service lines from the water main up to the meter, and the property owner owns the service lines from the meter into the building.

### What is a service line?

A service line is an underground pipe that connects a private residence to the public water supply. It carries water from the main line to the home, providing water for drinking, bathing and other household needs.

### Who owns it?

The city takes care of the part leading up to the water meter, and you, as the homeowner, are responsible for the section from the meter to your home.



### What is the new regulation for lead service lines?

Lead is regulated in drinking water through the Lead and Copper Rule. The [Environmental Protection Agency](#) and the [Oklahoma Department of Environmental Quality](#) released updated standards to protect communities from the risks of lead exposure from drinking water. These new standards, called the Lead and Copper Rule Revisions and Lead and Copper Rule Improvements, mandate that all drinking water utilities in the United States, including Oklahoma, must investigate if lead service lines are present in their water distribution systems and plan for service line replacements. For more information, please refer to the [EPA Lead and Copper Fact Sheet](#).

While copper is regulated with the same rule, copper does not carry the same level of health risk as lead and is not a focus of the new rule updates. This new regulation's sole purpose is to increase protection of communities from the risks of lead exposure from drinking water flowing through lead pipes. The City of Moore has no record of lead pipes and is conducting these inspections to verify the service line material for connections that were built prior to the federal lead ban.

### If crews find a lead service line, who will fix it?

The city is committed to replacing any lead service lines in our water system as part of its Lead Service Line Replacement plan. If crews discover a lead service line, the city will take responsibility for replacing the city-owned portion of the service line from the main to the meter.

The customer will be responsible for replacing the customer-owned portion that runs from the meter to the building. If both the city and customer-owned portions need replacement, the city will offer to organize the replacement of the customer line during city-owned replacement, but the customer is financially responsible for their portion.

### If lead is found in the service line does that mean there is lead in my water?

No. It is possible to receive safe drinking water through a lead service line. The city will conduct water monitoring at locations where lead lines are found and test for lead in the water inside the home. The city currently conducts routine water monitoring for lead, and historical results show levels of lead meet safe drinking water standards.

### **If I replace the service line, will I be reimbursed?**

Unfortunately, no. The homeowner is responsible for the private side of the service line. However, if you inform the City of Moore Public Utilities in advance that you plan to replace the private side of the service line, we will give priority to replacing the public side of your service line. You can inform the City that you plan on replacing your service line at **405-793-5080**.

### **How do I find out if my home has lead lines?**

First, locate your plumbing lines. They can occasionally be seen at the pipe entering the water heater, in the attic, in the basement, or in other utility areas where pipes are exposed. A certified plumber can help perform an inspection to locate plumbing lines and identify the material. Your service line, which connects your home to the water meter, is buried and will require excavation to expose a portion of the line.

Lead is a dull, soft, non-magnetic material that turns a shiny silver color when scratched. A scratch test is a simple, quick method for identifying the service line material entering a home or building. If the scratched area turns out to be roughly the color of a penny, it is likely copper. But if it turns shiny silver, it may be lead or galvanized iron. To distinguish between lead and galvanized iron, you can place a magnet on the pipe. If the magnet sticks to the pipe, it is likely iron and not lead.

Once you've identified the material of your premise plumbing and/or service line, please let us know the results. Call 405-793-5080 or visit <https://www.cityofmoore.com/affidavit>

Example of Copper Pipe:



Example of Lead Pipe:



Example of Galvanized Pipe:



### **Where can I find test kits or lead swabs to identify service line materials feeding water to my property? (Authorized vendors or entities)**

Scratch and magnet tests are considered the most reliable test. Lead test kits should only be used to verify your findings. Lead test kits can be purchased from many hardware stores or online retailers. Additionally, some local health departments offer these testing supplies for free or at a reduced cost.

### **What if I live in an apartment complex?**

It is the landlord's responsibility to maintain pipes and drainage. If you are concerned about the material of the pipes, you can ask your landlord if they can perform a scratch test or have a plumber verify your line materials.

## Questions Related to Reducing Lead Exposure

### Can water filters remove lead?

Filters certified under NSF/ANSI Standard 53 for total lead removal, NSF/ANSI Standard 58 for reverse osmosis, and NSF/ANSI Standard 42 for fine particulates (Class I) are effective at reducing lead in drinking water. Always follow the manufacturer's instructions for installation and maintenance to ensure the filter's effectiveness. Contact NSF International at 800-NSF-8010 or visit [www.nsf.org](http://www.nsf.org) for information on performance standards for water filters. An image of the NSF label can be found below.

NSF - <https://www.nsf.org/certified-products-systems>



NSF Certification Symbol

### Does boiling water make it free of lead or safe for consumption?

It is a common misconception that boiling water can remove lead, but it does not. Boiling water can actually increase the concentration of lead in the water since it causes some of the water to evaporate while the lead remains. The most effective way to reduce the risk of lead exposure from drinking water is to use a water filter that is certified to remove lead or to opt for bottled water for drinking and cooking.

### What can I do to reduce my exposure to lead?

#### Do:

-Run your faucet to ensure that the water that comes out is not stagnant. If it hasn't been used for several hours, run the water for three to five minutes {or longer if appropriate given construction practices in the communities served., make sure to check local guidelines in order to reference flushing protocols.} to clear the water that sat stagnant in the line. (To conserve water, consider catching the flushed tap water for plants or some other household use such as mopping floors.)



-Always use cold water for drinking, cooking, and preparing baby formula. Never cook with or drink water from the hot water tap. Never use water from the hot water tap to make formula.

-Periodically remove and clean the faucet screen/aerator. While removed, run the water to eliminate debris.

-Identify and replace plumbing fixtures containing lead. Brass faucets, fittings and valves may leach lead into drinking water. All brass plumbing fixtures purchased before 2014 should be replaced. Products purchased after that date meet lead-free requirements.

-Have a licensed electrician check your wiring. Your home electrical system may be attached to your service line or elsewhere in your plumbing. If this connection is electrified, it can accelerate corrosion. Check with a licensed electrician to correct ground faults and evaluate your local electric code to determine if your wiring can be grounded elsewhere.

-Consider investing in a home water treatment device or alternative water source. When purchasing a water treatment device, make sure it is certified under NSF/ANSI 53 to remove lead. Search for certified products at NSF International or Water Quality Association. An image of the NSF label can be found in “**Can water filters remove lead?**” above.

NSF - <https://www.nsf.org/certified-products-systems>

Water Quality Association - <https://find.wqa.org/find-products#/>



WQA Certification Symbol

**Do Not:**

-DO NOT boil water to remove lead. Boiling water will not reduce lead.

-DO NOT attempt to change electrical wiring yourself because improper bonding or grounding can cause electrical shock and fire hazards.

## Questions Related to Health

### **Is it safe to use water contaminated with lead for other purposes such as showering, laundry, and irrigation besides cooking and drinking?**

While lead-contaminated water can pose a risk if ingested, it is generally safe for other household uses such as showering, laundry, and irrigation. Lead does not easily penetrate the skin and isn't readily absorbed during typical household activities. However, it's crucial to avoid using contaminated water for preparing baby formula or any other use where it might be ingested, especially by children or pregnant women. It's important to prioritize actions to reduce or eliminate lead from your water supply to ensure overall safety.

### **Is the city water source safe for consumption?**

Our Public Water System (PWS) meets all water standards set by the Oklahoma Department of Environmental Quality (ODEQ).

### **What are the health issues caused by lead exposure?**

There is no safe level of lead in drinking water. Exposure to lead in drinking water can cause serious health effects in all age groups, especially pregnant women, infants (both formula-fed and breastfed), and young children. Some of the health effects to infants and children include decreases in IQ and attention span.

Lead exposure can also result in new or worsened learning and behavior problems. The children of persons who are exposed to lead before or during pregnancy may be at increased risk of these harmful health effects. Adults have increased risks of heart disease, high blood pressure, kidney or nervous system problems. Contact your health care provider for more information about your risks.

### **Can lead be harmful to my pets?**

Yes, just like humans, animal health is also affected due to lead contamination. Follow the same protocol listed above to reduce potential lead exposure for your pets.

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## Questions Related to Service Line Letters

### **Why did I receive a letter about my service line material?**

The city developed an inventory of its service lines. Based on this inventory, the city was able to identify lines containing lead and lines containing unknown material that could potentially be lead based on construction before the lead-ban in 1988. Customers with these service lines received letters. You will be receiving these letters annually.

### **What do I need to do to change my service line?**

Contact a plumber. Contact the city to allow us to coordinate replacement of the city-side of the line at the same time, if it also requires replacement. Call 405-793-5080 or visit <https://www.cityofmoore.com/affidavit>

### **I received a letter stating I have a lead (or galvanized) service line, do I need to replace it?**

The Environmental Protection Agency (EPA) emphasizes that there is no safe level of lead exposure and advises against partial lead service line replacement. Lead pipes can corrode, releasing lead particles into the water supply. Galvanized pipes that have ever been downstream of any lead pipe can absorb and release lead into the drinking water.

The City is tracking EPA's proposed rule, the LCRI, which would require water systems to replace all lead service lines by 2037. The City will be replacing the public-side (water main to the meter) of all lead service lines in accordance with state and federal safe drinking water regulations.



While you are not required to replace the private-side of your service line (meter to building), it is highly recommended, and the City will make an effort to coordinate replacements with customers where both sides of the service line require replacement.