



## **Frequently Asked Questions about Lead in Water from Pipes and Plumbing**

***In July 2021, Governor Phil Murphy signed legislation requiring all New Jersey water utilities to take an inventory of, and ultimately replace, all water services lines that are either partially or fully constructed of lead piping, including lead and galvanized steel service lines. Exposure to high levels of lead is a serious health risk. Lead builds up in the body over many years and can cause damage to the brain, red blood cells, and kidneys. The greatest risk is to young children, pregnant women, and unborn babies.***

***According to the United States Environmental Protection Agency (USEPA), the most common sources of lead in drinking water are lead service lines, lead solder on older copper plumbing and faucets and fixtures with some lead content. A service line is the pipe that brings water from the company-owned water main in the street to the plumbing in the home. In the HMUA service area, the service line includes a portion that is owned and maintained by the utility (from the street to the curb box or edge of pavement) as well as a portion that is owned and maintained by the property owner (from curb box or edge of pavement to house).***

***As part of our water treatment process, we utilize pH control and add corrosion control chemical (orthophosphate) which further helps minimize the amount of lead from household plumbing which could dissolve into the water. We also regularly sample for lead in compliance with state and federal regulations.***

***HMUA has 68 galvanized steel service lines, which are considered to be lead by NJDEP, but not by USEPA. All 68 service lines are galvanized on the customer side only. HMUA plans to replace all galvanized steel service lines by 2024, all at no direct cost to the property owner. The lead service line replacement program will help to further ensure public health and quality of life. This will require coordination between HMUA and property owners, including site investigations, for purposes of determining construction requirements for service line replacements.***

***Information on customer service line materials and health effects of lead is available on our website [www.hmua.com](http://www.hmua.com) under "Service Line Information".***

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

Lead is a common naturally occurring metallic element that can be found in air, soil, and water. It is also a powerful toxin that is harmful to human health. Lead was commonly used in gasoline and paint until the 1970s and is still sometimes found in products such as ceramics, batteries, ammunition, and cosmetics. Lead was used for centuries in plumbing because of its pliability and resistance to leaks; in fact, lead's chemical symbol, Pb, is

derived from the Latin word for plumbing. In 1986, U.S. Congress amended the Safe Drinking Water Act to prohibit the use of pipes, solder, or flux that were not "lead free." At the time "lead free" was defined as solder and flux with no more than .2% lead and pipes with no more than 8%. In 2014, the maximum allowable lead content was reduced from not more than 8% to not more than a weighted average of 0.25% of the wetted surface of pipes, pipe fittings, plumbing fittings, and fixtures.

### ***Why is lead a health risk?***

Lead is a toxic metal that can cause immediate health effects at high doses and long-term health effects if it builds up in the body over many years. Lead can cause brain and kidney damage in addition to effects on the blood and vitamin D metabolism. Pregnant women and young children are particularly vulnerable because the physical and behavioral effects of lead occur at lower exposure levels in children than in adults. In children, low levels of exposure have been linked to central and peripheral nervous system damage, learning disabilities, shorter stature, impaired hearing, and impaired formation and function of blood cells. While people are more commonly exposed to lead through paint, soil, and dust, U.S. EPA estimates infants who consume mostly mixed formula can receive 40 percent to 60 percent of their exposure to lead from drinking water.

### ***How do I know whether my drinking water contains lead?***

Because it is colorless and tasteless, lead is not readily apparent in water. In fact, the only way to know for certain whether your drinking water contains lead is to have your water tested by a certified laboratory. HMUA can provide laboratory information on local laboratories.

### ***How does lead get into drinking water?***

Lead is almost never present in aquifers, and would not be expected in the well water provided by the HMUA. However, in some older homes lead may be present in the pipe connecting the home to the water system – known as a service line – or in the home plumbing. Lead in service pipes, plumbing, or fixtures can dissolve, or particles can break off into water and end up at the tap.

### ***How much lead in water is too much?***

Lead can be harmful even at very low levels and can accumulate in our bodies over time, so wherever possible, steps should be taken to reduce or eliminate your household's exposure. While risks vary based on individual circumstances and the amount of water consumed, no concentration of lead is considered "safe." Households with pregnant women, infants, or young children are most vulnerable to the harmful effects of lead at low levels.

### ***What can I do to reduce or eliminate lead from my drinking water?***

The best way to remove risks of lead in water is to completely replace all sources of lead. But there are also steps you can take right away to reduce lead levels in your water.

1. Run the Tap Before Use – Lead levels are likely at their highest when water has been sitting in the pipe for several hours. Clear this water from your pipes by running the cold water for 3-5 minutes before using. This allows you to draw fresh

water from the main. In efforts to conserve water, you can use this initial water on house plants or to flush toilets.

2. Clean Aerators – Aerators are small attachments at the tips of faucets which regulate the flow of water. They can accumulate small particles of lead in their screens. It's a good idea to remove your aerators at least monthly and clean them out.
3. Use Cold Water for Cooking and Drinking – Always cook and prepare baby formula with cold water, because hot water dissolves lead more quickly, resulting in higher levels in water.
4. Filter the Water – Many home water filters are effective at removing lead. If you purchase a filter, make sure it is certified for lead removal and that you maintain it properly. Find out more on filter certification at [www.nsf.org](http://www.nsf.org).

***Are there special steps I should take to protect my developing baby, infant, or young children?*** Households with pregnant women, infants, or young children should be especially aware of the potential for lead exposure through drinking water. If you suspect there may be lead in your home plumbing, consider having your water tested. If lead is detected, consider purchasing a filter certified for lead removal or using an alternate source of water until the problem is corrected. Babies and young children are most vulnerable to the harmful effects of lead at low levels. U.S. EPA estimates infants who consume mostly mixed formula can receive 40 percent to 60 percent of their exposure to lead from drinking water.

***Is it safe to shower in water that contains lead?***

Because lead is not absorbed through the skin, bathing or showering in water containing lead is not considered a health risk.

***What does the HMUA do to protect my household from lead?***

In order to prevent lead from dissolving into water from lead service lines or home plumbing, the HMUA adjusts the water's chemistry to provide corrosion control. We sample water at homes considered to be high risk in order to ensure our corrosion control remains effective. Although corrosion control can reduce risks, the best way to assure your home is safe from lead exposure through water is to remove the potential sources of lead.

***How do I know if my home has a lead service line or lead plumbing?***

You can contact the HMUA to inspect both your service line and other materials in contact with your drinking water at no cost. Please call 908-852-3622 to schedule an appointment.

You may be able to determine on your own if your service line is made of lead. Service lines typically enter the home in the basement or crawl space. REFER TO GALVANIZED SERVICE LINES FAQ.

***I'm in a new house. Am I at risk?***

HMUA has an inventory of service line materials on the utility side and customer side available on our website at [www.hmua.com](http://www.hmua.com) under "Service Line Information". HMUA has no lead service lines, but does have some galvanized service lines on the customer

side. If you are concerned, contact the HMUA at 908-852-3622 to schedule an inspection.

***Do all home filters and other water treatment devices remove lead?***

No. If you purchase a water filter or home treatment device, make sure it is independently certified for lead removal and that you maintain it properly. Find out more on filter certification at [www.nsf.org](http://www.nsf.org).

***Can my pets drink water with lead?***

Lead can impact animals the same way it does humans. Because domestic animals consume a relatively high volume of water relative to their body weight, pet owners with lead in their home plumbing may want to take precautions.

***Is water the only source of lead in homes and businesses?***

No. In fact, lead in drinking water generally represents only about 20% of total exposure, according to the U.S. Centers for Disease Control and Prevention. However, drinking water can account for more than half of lead exposure in children because of their lower body weight. Additionally, because no level of lead is considered safe, completely eliminating potential sources of lead is strongly advised.

***Does the HMUA test for lead?***

Yes. HMUA is required by the NJDEP to test for lead every year. The most recent sampling period was during the summer of 2021 and the 90<sup>th</sup> percentile value was 3.0 ppb which meets NJDEP and USEPA requirements of not being greater than 15 ppb.

***What is the HMUA doing to assist residents with replacement of lead water service lines?***

HMUA is in the planning phase of a service line replacement project to replace all galvanized customer service lines at no direct cost to the customer. We anticipate that, in most cases, the work will be completed using directional drilling to the maximum extent possible to minimize disruption to yards. If you have a basement, the basement wall will be core drilled to allow the new water service line to enter at approximately the same location as the existing water service line. If your home is built on a slab, a small section of the slab will be saw cut and removed for installation of the new water service line. To help us coordinate this construction effort, please schedule an appointment for us 908-852-3622 to investigate the layout of the current service line into your home.

***Where can I find more information?***

Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available by calling the Safe Drinking Hotline at 1-800-426-4791 or by visiting [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead). You can also review the HMUA's Annual Water Quality Reported posted at [www.hmua.com](http://www.hmua.com). If you would like to discuss the issue with a local contact, call us at 908-852-3622 or email [custserv@hmua.com](mailto:custserv@hmua.com).