

Lead in Drinking Water Basics

What is lead and why is it a health concern?

Lead is a naturally occurring element found in small amounts in the earth's crust. It is also a toxic, soft metal that can be found in paint, dust, air, soil, food, and water, and can be harmful to human health. There is no safe level of exposure to lead in drinking water. **Lead is persistent, and it can bioaccumulate in the body over time.** 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 increased risk of these adverse health effects. Adults can have increased risks of heart disease, high blood pressure, kidney, or nervous system problems.

How does lead get into drinking water?

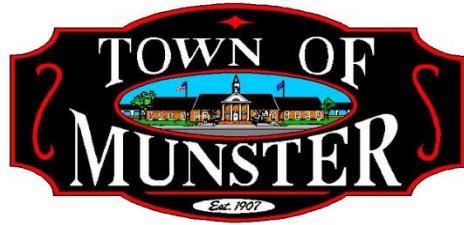
Lead can enter drinking water when plumbing materials that contain lead corrode. The most common sources of lead in drinking water are lead and galvanized pipes, faucets, and fixtures. In homes served by lead service lines, these pipes are typically the most significant source of lead in the water. Lead can attach to the inner surface of galvanized service lines and be released into drinking water over time. Service lines made of galvanized iron or steel that are (or were previously) downstream of lead service lines are classified as galvanized requiring replacement (GRR). Identifying and ultimately removing lead and GRR service lines is an important way to protect public health.

What is a water service line?

A water service line is the pipe that connects the water main to your home or building inlet. Service lines may be made of copper or other materials such as galvanized iron or steel, plastic, brass, or lead. If any portion of the pipe is made of lead, it is called a lead service line (LSL).

Is water the only source of lead in houses and buildings?

No. While water may be a source of exposure to lead in houses and buildings, lead-based paint, dust, contaminated soil, lead-glazed pottery, and some toys and jewelry may also contain lead. Lead-based paint and lead-containing toys pose a significant risk especially for young children. For more information on protecting your family from lead in your home, please visit: <https://www.epa.gov/lead/protect-your-family-sources-lead>.



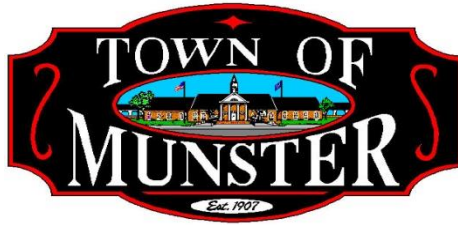
Consumer Tool for Identifying Point-of-Use and Pitcher Filters Certified to Reduce Lead in Drinking Water

[Consumer Tool for Identifying Point-of-Use and Pitcher Filters Certified to Reduce Lead in Drinking Water \(pdf\)](#) (722.39 KB, June 6, 2024, EPA/600/F-24/143)

Lead can enter drinking water when service pipes that contain lead corrode, especially where the water has high acidity or low mineral content that corrodes pipes and fixtures. Homes may also have internal plumbing materials containing lead. To reduce exposure to lead in drinking water, consumers can consider the use of a drinking water filter that has been evaluated by an accredited third-party certification body to reduce lead. This tool will help consumers select point-of-use (POU) and pitcher filters that have been evaluated by an accredited third-party certification body for drinking water lead (Pb) reduction to 5 parts per billion (ppb) or less and particulate reduction (Class I) capabilities against both NSF/ANSI Standards 53 and 42.

The 2021 [Lead and Copper Rule Revisions' \(LCRR\)](#) October 16, 2024, implementation date is approaching. The EPA issued the [final Lead and Copper Rule Improvements \(LCRI\)](#) on October 8, 2024. The [2024 LCRI](#) modified requirements and extended deadlines for most of the requirements in the 2021 LCRR. However, EPA retained selected provisions from the 2021 LCRR, including the October 16, 2024, compliance deadline, and incorporated them into the 2024 LCRI. These provisions are highlighted below and pertain to water systems' completion of initial service line inventories, providing required public education to impacted customers and conducting the required public notification.

The 2024 LCRI builds on the 2021 LCRR and the original 1991 Lead and Copper Rule. As explained in the EPA's final LCRI announced on October 8, 2024, and in earlier publications like the EPA's [April 2024 LCRR Implementation Fact Sheet](#), the Agency has retained the 2021 LCRR's October 16, 2024, compliance date for the initial service line inventory, public education for known or potential service lines containing lead, public notification of a lead action level exceedance, and associated reporting requirements.



Compliance Deadlines

The EPA will monitor compliance, conduct inspections, and take enforcement, as appropriate, to address the requirements below.

Initial Service Line Inventory

By October 16, 2024, a water system must submit an initial service line inventory or demonstrate the absence of lead service lines. Failure to meet the deadline will result in a violation of the Lead and Copper Rule and the water system may be subject to enforcement actions. Failure to submit its initial inventory by the deadline requires the water system to publicly notify residents. Additionally, water systems are required to include location identifiers in the publicly accessible inventory.

Public Education for Known or Potential Lead Service Lines

Within 30 days of submitting the initial service line inventory, a water system must notify residents of known or potential lead service lines, galvanized requiring replacement, and lead status unknown service lines in its distribution system. Water systems serving more than 50,000 people must make the inventory publicly accessible and available online.

Lead Action Level Exceedance Tier 1 Public Notification

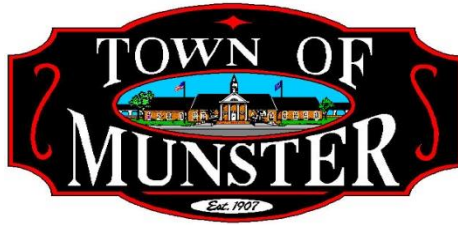
Starting October 16, 2024, water systems are required to provide Tier 1 Public Notification of a system's lead action level exceedance to people served by the water system no later than 24 hours after the system learns of the exceedance.

Reporting Requirements

All water systems must comply with associated reporting requirements.

EPA's Enforcement Obligations

Under [section 1413 of the Safe Drinking Water Act \(SDWA\)](#) the EPA approves a state, Tribe, or territory that applies for and meets the requirements to have primary enforcement responsibility (i.e., primacy) for the public water system supervision (PWSS) program. Whenever the EPA promulgates new or revised National Primary Drinking Water Regulations (NPDWRs), primacy agencies must apply for primary enforcement authority for those new regulations. Until a state, Tribe, or territory



obtains primacy or interim primacy for a new or revised NPDWR, the EPA serves as the primacy agency for the NPDWR.

[Section 1445 of the SDWA](#) authorizes the EPA to conduct inspections and issue information requests to determine whether water systems are complying with SDWA requirements. Under [SDWA section 1414](#), the EPA serves as the primary enforcement authority until a state, Tribe or territory obtains primacy for a new or revised NPDWR, such as LCRR and LCRI. After a state, Tribe or territory receives primacy for revised NPDWRs, the EPA retains independent enforcement authority under SDWA section 1414.

To assure improved public health protection from the 2024 Lead and Copper Rule Improvements (LCRI), noncompliance with the key underlying service line inventory, public education, and public notification provisions in LCRR summarized above, must be addressed by water systems without delay. The EPA intends to continue its close coordination with states, Tribes, and territories as the Agency assesses water systems' compliance. The EPA intends to take prompt, meaningful enforcement actions to address noncompliance with the retained requirements from the 2021 LCRR that occurs following the October 16, 2024, deadline. The EPA's enforcement role is essential in ensuring public health protection, especially when serving as the primacy agency until a state, Tribe or territory obtains primacy for the new Lead and Copper Rule.

https://www.epa.gov/system/files/documents/2024-07/fact-sheet-for-notification-of-known-or-potential-lsls_0.pdf

Questions about whether your lines are lead and to request testing can be directed to the email address: **leadlines@munster.org**