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Understanding the United States Environmental Protection Agency's Lead and Copper Rule

BACKGROUND

In 1991, the United States Environmental Protection Agency (EPA) published the *Lead and Copper Rule* (LCR) to protect public water consumers from exposure to lead and copper in drinking water. Plumbing materials are a primary source of these metals. The LCR sets limits on lead and copper concentrations in drinking water and requires water providers to take action if levels get too high. The LCR has been updated several times, most recently in 2021 with the *Lead and Copper Rule Revisions* (LCCR). The EPA intends to finalize the *Lead and Copper Rule Improvements* (LCRI) in October 2024.

WATER SYSTEMS THAT MUST FOLLOW THE RULE

- *Community water systems*: These are public water systems that provide water to at least 15 homes or businesses, or regularly serve 25 people who live there all year.
- *Non-transient, non-community water systems*: These systems regularly supply water to at least 25 of the same people at least 6 months out of the year, but not the entire year.

HIGHLIGHTS OF THE EPA LEAD AND COPPER RULE

- **LCR (EPA 1991)**:
 - Water system operators need to test tap water for lead and copper to make sure it's safe.
 - If the lead levels are too high, the operators need to take steps to lower them.
- **LCRR (EPA 2021)**: Water system operators need to—
 - Find and list all the service line material by 16 October 2024. *Note*: Service lines connect the structure (e.g., home or business) to the water main.
 - Make a plan to replace any lead service lines (LSLs) they find.
 - Keep checking and updating their list of pipes until all lead service lines have been removed.
 - Provide consumers with detailed information about the health effects of lead and copper in their water.
 - Test water at schools and childcare centers.
- **LCRI, Proposed (EPA 2024)**
 - Water system operators need to—
 - Find and list all service line and connector material.

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- Replace any LSLs, galvanized requiring replacement (GRR) service lines, and lead connectors within 10 years after the LCRI is published.
- Validate non-lead service lines.
- Improve tap water sampling using best practices.
- Improve communication with consumers regarding their water quality and their water system operator's efforts to deliver safe water.
- The lead action level will be reduced from 15 parts per billion (ppb) to 10 ppb).

NOTIFICATIONS AND OUTREACH

Water system operators must—

- Notify consumers served by an identified LSL, GRR, or “lead status unknown” service line. Notification must occur within 30 days after completion of the initial inventory and be repeated annually until all LSLs have been replaced. [The EPA provides specific information and guidance](#) for these notifications.
- Notify consumers with LSL, GRR or lead status unknown service lines in the vicinity of work being done on the main service line about the activities and actions they can take to protect themselves. See below for tips to consumers.
- Annually, provide information about the health risks from lead in drinking water to all elementary schools, licensed childcare facilities, and secondary schools supplied by the water system.

TIPS FOR CONSUMERS TO REDUCE EXPOSURE TO LEAD AND COPPER FROM THEIR WATER

- Only use cold water for drinking, cooking, or making baby formula.
- Run the cold water from the faucet for 2 minutes or longer anytime the water has sat unused for several hours.
- Use a water filter treatment device that is ANSI/NSF Standard 53-certified specifically for lead removal.
- Regularly clean the screen on your faucet, known as the aerator. Lead particles can be caught in the aerator and released into your water.

ADDITIONAL RESOURCES

- Lead and copper in drinking water:
 - [Lead and Copper Rule](#), EPA
 - [Basic Information about Lead in Drinking Water](#), EPA
 - [Copper in Drinking Water](#), National Library of Medicine
- Lead and copper health effects:
 - [Lead Information for Military Families](#), DHA Public Health
 - [ToxFAQs for Copper](#), Agency for Toxic Substances and Disease Registry (ATSDR)
 - [ToxFAQs for Lead](#), ATSDR

REFERENCES

- EPA. 2024. [2021 LCRR Implementation Fact Sheet \(epa.gov\)](#)
- EPA. 2021. [Revised Lead and Copper Rule | US EPA](#)
- EPA. 1991. [Lead and Copper Rule | US EPA](#)