

EPA's Lead and Copper Rule Improvements October 2024

Lead in drinking water irreparably harms children and adults. Lead is a highly toxic metal that can impact brain development in children, kidney function in adults, and interferes with the production of red blood cells that carry oxygen to all parts of your body. The federal government banned the installation of new lead pipes in 1986, yet up to 9 million homes and businesses are still connected to water mains through legacy lead pipes in neighborhoods across America. These remaining lead pipes are disproportionately concentrated in low-income communities and communities of color.

That is why it is so important to remove lead from our water systems. The Lead and Copper Rule Improvements (LCRI) strengthen nationwide requirements to protect children and adults from lead in drinking water. These advancements are commonsense, achievable, and built on actions already underway in states and cities around the country.

Key Provisions from Lead and Copper Rule Improvements

For the first time, the vast majority of water systems will be required to replace lead service lines within 10 years. By removing the greatest source of lead in drinking water nationwide, we can further the goal of safe drinking water for current and future generations.

Lead service line replacement within ten years is achievable. Cities like Benton Harbor, MI and Green Bay, WI replaced their lead service lines in less than 10 years. Other systems like Detroit, MI, Pittsburgh, PA, Denver, CO, Milwaukee, WI, and Saint Paul, MN have already started this work and are on pace to replace every lead service line within the next 10 years. For a limited number of drinking water systems, in limited circumstances, that cannot replace every lead pipe in 10 years, the rule establishes some additional time to get the job done.

The final rule supports ongoing efforts to locate existing lead pipes. Knowing where lead pipes are located is critical to replacing them efficiently and equitably. Under existing requirements, regulated water systems are completing initial inventories of their lead service lines in October 2024, and regularly update those inventories under the Lead and Copper Rule Improvements. Systems also must create a service line replacement plan that includes a strategy to prioritize replacement considering community-specific factors, such as populations disproportionately impacted by lead. Water systems are required to make their inventory and replacement plans available to the public.

The final rule strengthens tap sampling requirements. The LCRI makes key changes to drinking water sampling requirements, informed by best practices already being used by leading states like Michigan. For sites with lead service lines, water systems are required to collect and analyze the first-liter and fifth-liter and use the higher of the two values when determining compliance with the rule.

The rule lowers the threshold for taking action and eliminates the overly complex trigger level. The LCRI lowers the threshold for taking action, known as the lead action level, from 15 µg/L to 10 µg/L. When a water system's lead sampling exceeds this level, the system is required to inform the public and take action to reduce

lead exposure while working to expeditiously replace all lead pipes. For example, the water system would install or adjust corrosion control treatment to reduce lead that leaches into drinking water.

The final rule includes additional requirements to reduce exposure to lead in drinking water. Water systems with multiple exceedances of the lead action level are required to continue adjusting treatment, conduct additional community outreach, and make filters that are certified to reduce lead available to all consumers.

Communicating transparently and frequently. The Lead and Copper Rule Improvements require more frequent and proactive communications about lead pipes and plans for replacement. The rule also requires water systems to include clear health language about the dangers of lead in the Consumer Confidence Reports. The Consumer Confidence Reports will also provide information about testing for lead in schools and childcare facilities and will tell consumers where they can find the water system's lead service line replacement plan.

Federal Funding

The Bipartisan Infrastructure Law and funding programs like EPA's Water Infrastructure Improvements for the Nation Act (WIIN) grants, the Drinking Water State Revolving Funds (DWSRF), and Water Infrastructure Finance Innovation Act (WIFIA) loans provide billions of dollars for projects to reduce lead in drinking water. To complement this historic federal funding, EPA's technical assistance programs are helping more communities plan and apply for funding.

Alongside the LCRI, EPA is announcing \$2.6 billion in newly available drinking water infrastructure funding through the Bipartisan Infrastructure Law to support lead pipe replacement projects. Total funding through the Bipartisan Infrastructure Law that can be used for lead line replacements is over \$26 billion over five years and includes:

- \$15 billion over five years for lead service line replacement activities,
- \$11.7 billion over five years, including \$2.6 billion that was announced today, in general supplemental funding to the Drinking Water State Revolving Fund program, which can be used to remove lead pipes or address other pressing drinking water issues in communities.

Half of this funding will go to disadvantaged communities as grants (or principal forgiveness loans). The EPA's water technical assistance (WaterTA), including the **Get the Lead Out (GLO) Initiative**, helps disadvantaged communities identify lead services lines, develop replacement plans, and apply for funding. Communities seeking to access GLO Initiative resources can request assistance by completing the WaterTA request form on EPA's WaterTA website.

EPA is also announcing the availability of \$35 million in competitive grant funding for reducing lead in drinking water. Communities are invited to apply directly for grant funding through this program:

<https://www.epa.gov/dwcapacity/wiin-grant-reducing-lead-drinking-water>. Additional federal funding is available to support lead pipe replacement projects and EPA has developed a [website identifying available funding sources](#).

Cost and Benefits

The annual benefits of the Lead and Copper Rule Improvements are estimated to exceed the annual costs by more than ten-fold. Investments in removing lead pipes will create good-paying, local jobs. The Lead and Copper Rule Improvements will help protect millions of people across America from exposure to lead in drinking water.

EPA estimates that on average, each year after the LCRI is issued it will:

- Protect up to 900,000 infants from having low birthweight, which puts them at risk of longer and more expensive hospital stays after birth.
- Prevent Attention-Deficit Hyperactivity Disorder (ADHD) in up to 2,600 children).
- Reduce up to 1,500 cases of premature death from heart disease.
- Prevent up to 200,000 IQ points lost in children.

These results not only protect public health, but they are also expected to reduce healthcare costs and increase school attendance and economic productivity. The estimated annual benefits of the rule are up to 13 times greater than its estimated annual costs.

- EPA estimates benefits will be \$13 to \$25 billion per year.
- EPA estimates the costs to be \$1.5 to \$2 billion per year.

Whole of Government Approach

Through its 2021 [Lead Pipe and Paint Action Plan](#), the Biden-Harris Administration has made accelerating lead service line replacement a top priority. Under this whole of government approach, 10 federal agenciesⁱ are advancing more than 15 new actions ensuring the federal government is marshalling every resource to make rapid progress towards 100% lead pipe replacement. EPA's actions, including the LCRI, are setting the nation on the course to solve a legacy problem, a problem we can solve by getting the lead out.

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ⁱ EPA, Department of Labor (DOL), Department of Education (ED), Health and Human Services (HHS), Department of Agriculture (USDA), Department of Housing and Urban Development (HUD), Department of Interior (DOI), the Centers for Disease Control (CDC), the Treasury Department, and Executive Office of the President