

FY 2024 Results for EPA Lead (Pb) Strategy Performance Measures and Milestones

GOAL 1: REDUCE COMMUNITY EXPOSURES TO LEAD SOURCES	
Objective A: Reduce Exposure to Lead in Homes and Child-Occupied Facilities with Lead-Based Paint and Other Hazards	
<i>FY 2024 Measures</i>	<i>FY 2024 Results</i>
<p><u>From October 1, 2023 to September 30, 2024</u>: host national and community-based Lead Awareness Curriculum sessions – Train-the-Trainer for 1,000 community leaders and Understanding Lead sessions for 400 community members. (Contingent on travel and EPM funding)</p> <p><u>From October 1, 2024 to September 30, 2025</u>: host national and community-based Lead Awareness Curriculum sessions – Train-the-Trainer for 1,000 community leaders and Understanding Lead sessions for 400 community members. (Contingent on travel and EPM funding)</p> <p><u>From October 1, 2025 to September 30, 2026</u>: host national and community-based Lead Awareness Curriculum sessions – Train-the-Trainer for 1,000 community leaders and Understanding Lead sessions for 400 community members. (Contingent on travel and EPM funding)</p>	<p><u>From October 1, 2023 to September 30, 2024</u>: hosted Train-the-Trainer sessions for 791 community leaders and Understanding Lead sessions for 1,562 community members.</p>
<i>FY 2024 Milestones</i>	<i>FY 2024 Results</i>
<p><u>By September 2024</u>: update the Heavy Metals in Cultural Products: Outreach and Educational Resources Toolkit as new resources and educational materials are made available, and continue outreach to inform stakeholders of the toolkit’s availability.</p>	<p>Complete. <u>In FY 2024</u>, updated the Heavy Metals in Cultural Products: Outreach and Educational Resources Toolkit as new resources and educational materials became available, and will continue to do so as well as inform stakeholders of the toolkit’s availability.</p>
<p><u>By August 2023</u>, propose, and <u>by October 2024</u>, take final action on the dust-lead hazard standards (DLHS) and dust-lead clearance levels (DLCL) rule.</p>	<p>Complete. <u>On October 24, 2024</u>, announced final action on the dust-lead hazard standards (referred to as the dust-lead reportable levels (DLRL) after publication) and dust-lead clearance rule (referred to as the dust-lead action levels (DLAL) after publication), which will reduce the lead exposures of up to nearly 1.2 million people every year, of which 178,000 to 326,000 are children under the age of six.</p>

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Objective B: Reduce Exposure to Lead from Drinking Water

<i>FY 2024 Measures</i>	<i>FY 2024 Results</i>
Track and report total funds to disadvantaged communities for projects that support reduction of lead in drinking water .	In FY 2024: provided \$1.08 billion to disadvantaged communities to fund projects that support the reduction of lead in drinking water .
Track and report total lead service line replacements funded .	In FY 2024: funded 89,000 lead service line replacements .
<i>FY 2024 Milestone</i>	<i>FY 2024 Results</i>
By the end of 2023, propose, and by October 2024: take final action on the Lead and Copper Rule Improvements to strengthen the regulatory framework and address lead in drinking water.	Complete. On December 6, 2023, proposed, and on October 7, 2024, the Administrator signed the final Lead and Copper Rule Improvements (LCRI) requiring drinking water systems across the country to identify and replace lead pipes within 10 years. Alongside the LCRI, EPA announced \$2.6 billion in newly available drinking water infrastructure funding through the Bipartisan Infrastructure Law to support lead pipe inventory and replacement projects.

Objective C: Reduce Exposure to Lead in Soils

<i>FY 2024 Measures</i>	<i>FY 2024 Results</i>
By September 30, 2026: complete 225 Superfund cleanup projects that address lead as a contaminant (averaging 45 each year).	In FY 2024: completed 63 Superfund cleanup projects that addressed lead as a contaminant.
Report annually the number of brownfields cleanups that addressed lead contamination, as reported by grant recipients.	In FY 2024: brownfields grants recipients completed 63 brownfields cleanups that addressed lead contamination.
<i>FY 2024 Milestone</i>	<i>FY 2024 Results</i>
By December 2023: evaluate and revise the Residential Soil Lead Guidance for Contaminated Sites to protect communities by further reducing the potential for exposure to lead in soil.	Complete. On January 17, 2024, released the Updated Soil Lead Guidance for CERCLA Sites and RCRA Corrective Action Facilities . The guidance lowered recommended screening levels strengthened guidance for investigating and cleaning up lead-contaminated soil in residential areas where children live and play. This update will help EPA site teams make site-specific cleanup decisions to protect nearby communities. EPA

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makes cleanup decisions specific to each site, using site-specific factors, including risk factors and community input that can vary from site to site.

Objective D: Reduce Exposure to Lead Associated with Emissions to Ambient Air

<i>FY 2024 Milestones</i>	<i>FY 2024 Results</i>
<p>Projected completion of the current lead NAAQS review in 2026.</p>	<p>In Progress. In February 2024, released the Integrated Science Assessment for Lead as part of the lead national ambient air quality standards (NAAQS) review. This technical document, in conjunction with additional technical and policy assessments, will provide the scientific foundation for EPA's decisions in the currently underway review of the lead NAAQS.</p>
<p>Anticipated completion of rulemakings for important lead emissions sources over the next two years:</p> <ul style="list-style-type: none"> ○ In Winter 2023: secondary lead smelters (NSPS). ○ In 2024: primary copper smelters, integrated iron and steel manufacturing. 	<p>Complete:</p> <ul style="list-style-type: none"> ○ In November 2023, finalized amendments to the New Source Performance Standards (NSPS) for Secondary Lead Smelters. The new requirements include performance tests and emissions limits that will strengthen control of harmful lead and other air toxics. ○ In May 2024, finalized amendments to the National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Primary Copper Smelting Major Sources and the Primary Copper Smelting Area Sources NESHAP. When fully implemented, EPA projects this final rule will reduce emissions of hazardous air pollutant (HAP) metals, primarily lead and arsenic, by about 8 tons per year. ○ In March 2024, published the final NESHAP for integrated iron and steel manufacturing facilities. When fully implemented, EPA projects this final rule will reduce emissions of HAP metals, including lead, by about 64 tons per year.

Objective E: Reduce Exposure to Lead Through Enforcement and Compliance Assurance

<i>FY 2024 Measures</i>	<i>FY 2024 Results</i>
<p><u>Each year</u>: direct enforcement resources to at least one community with environmental justice concerns in each Region, to help address the exposures to lead in that community and take appropriate enforcement</p>	<p>All 10 EPA Regions directed enforcement resources to communities with environmental justice concerns to help address exposures to lead. These efforts include outreach to renovators and apartment owners; lead awareness outreach to communities and tenants; compliance inspections</p>

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action.

and follow-up enforcement actions to ensure changes in behavior; penalties for non-compliance including criminal convictions and fines, civil penalties, large abatement projects; national and local public service announcements to warn residents of the hazards of exposure to lead-based paint; blood lead level testing in impacted communities; and training for renovators. Examples of recent outcomes include:

- **Region 1 ordered Cargill Falls Mill, LLC to abate lead-based paint and/or lead dust hazards** in 50 apartments in a former cotton mill in Putnam, CT, built in 1850. Lead dust hazards were identified in units with children under six years old. This was the first EPA RCRA 7003 action addressing lead-based paint hazards in residential properties in nine years.
- **Region 2 and the Department of Justice reached a judicial settlement with Legacy Builders/Developers Corp for violations of EPA's Renovation, Repair and Painting (RRP) Rule** at hundreds of apartments in New York City, many in areas with environmental justice concerns. Legacy Builders will pay \$168,000 and has agreed to conduct lead paint safety education sessions for tenants. They will also provide a worker training session, and distribute facts sheets on RRP certification requirements for contractors to landlords and property managers.
- **Region 8 issued numerous lead and copper rule enforcement actions to public water systems** in Wyoming, including systems in communities with environmental justice concerns. Many of these systems have returned to compliance.
- **Region 9 participated in the SoCal Urban Lead Symposium**, hosted by EPA and the California Department of Substances Control. The symposium brought together staff and leaders of environmental and public health agencies, community organizations, and other stakeholders whose work touches environmental justice concerns related to lead in the Los Angeles area. The symposium included discussions of health risks, challenges, and available grant funding.
- **Region 10 provided Community Lead Awareness Sessions** to 96 community leaders and 59 community members in Idaho, Alaska, and Oregon.

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On October 21, 2024, during National Lead Poisoning Prevention Week (NLPPW), EPA and HUD presented a webinar, [Know Your Rights! An Overview of Federal Lead-based Paint Regulations](#). The webinar provided leasees and owners of pre-1978 housing with information about lead-based paint and the lead-based paint disclosure rule and the renovation, repair and painting rules, including how to report violations.

As part of NLPPW, EPA highlighted a few examples of [CERCLA enforcement actions](#) completed from October 2023 to September 2024. These examples showed the various stages of the enforcement process and how EPA works to have potentially responsible parties perform the site cleanup and/or recovers costs from them after a cleanup takes place so that taxpayers do not pay.

Additionally, EPA promoted Lead-based paint safety information through [online social media campaigns](#) to over 161,000 individuals in underserved communities.

Each year: [publicly report on national statistics related to lead cleanups and inspections](#), including whether the inspections occurred in communities with environmental justice concerns.

[As part of NLLPW, highlighted significant federal enforcement actions addressing violations pertaining to lead, that were completed from October 2023 through September 2024.](#)

In February 2024, [announced the signing of two complementary agreements](#) with the Department of Housing and Urban Development (HUD) to support commitments in EPA's Lead Strategy, Lead and Paint Action Plan, and the *FY 2022-2026 EPA Strategic Plan*, which seek to protect children's health by reducing lead exposures locally with a focus on underserved communities and promote environmental justice through a whole of government approach.

- The first MOU expanded on a 1997 agreement between EPA and HUD to coordinate [Lead Paint Compliance and Enforcement efforts addressing lead-based paint hazards in housing](#). This MOU strengthened partnerships and pools resources to reduce childhood lead exposures by creating a clear framework for consultation, information-sharing, and mutual assistance in civil enforcement and improving coordination and communication between EPA and HUD

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to maximize the effectiveness and efficiency of their monitoring and enforcement efforts.

- The second MOU, signed by EPA, HUD and the Centers for Disease Control (CDC) launched a **pilot program in EPA’s Region 3’s geographic areas of responsibility**, to facilitate information sharing about communities with children who are testing with elevated blood lead levels or higher lead exposure risks, to help them focus their respective and collaborative efforts working in communities with the greatest risks.

EPA is working with states and other federal agencies, including the U.S. Food and Drug Administration (FDA) and Customs and Border Protection (CBP), to enforce Section 1417 of the Safe Drinking Water Act (SDWA) and the “Lead Free” Rule which requires pipes, plumbing fittings, and fixtures providing water for human consumption to meet the statutory definition of lead free. EPA issued a **Compliance Advisory to put manufacturers and importers who introduce these plumbing products into commerce on notice of the certification requirement**.

On October 8, 2024, EPA published a **Compliance Advisory to alert the regulated community of new requirements under the 2021 Lead and Copper Rule Revisions (LCRR)**. All Public Water systems subject to the LCRR are required to develop an initial inventory of all their service lines and notify all persons who are served by a lead service line, galvanized line requiring replacement or an unknown service line.

EPA purchased a new XACT 625i, an ambient continuous multi-metals monitor, to assist state, local, and tribal enforcement programs in targeting facilities that emit lead into the air. The tool was recently used to assist the Environmental Protection Commission of Hillsborough County, FL in a lead monitoring project to characterize the air quality outside a secondary lead smelter facility to determine whether lead and toxic metals concentrations are above the acute, intermediate, and chronic health benchmarks and measure concentrations on non-scheduled sampling days.

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- EPA conducted many [compliance monitoring activities and inspections](#) (on and off-site) and investigations to ensure compliance with the laws and regulations associated with lead exposure and contamination.
- EPA conducted [monitoring activities in numerous communities to assess compliance with EPA's lead-based paint rules](#), including the Renovation, Repair, and Painting (RRP) Rule, the Lead Activities (Abatement) Rule, and the Lead Disclosure Rule. Over a third of these activities were in areas with environmental justice concerns.
 - EPA also conducted numerous [compliance monitoring activities at many military installations](#). This work ensures that our service members and their families are protected from exposure to lead-based paint in their homes at military bases.

EPA entered into an [administrative order on consent with ACCEL Schools Ohio LLC](#) to address asbestos and lead-based paint hazards at Youngstown Academy of Excellence, Niles Preparatory Academy, and STEAM Academy of Warren. Among other requirements, the order requires ACCEL to conduct asbestos inspections and lead risk assessments at all three schools and develop and submit for EPA's approval an abatement plan for any hazards identified pursuant to the inspections and risk assessments.

EPA finalized a [settlement agreement with Vareco, LLC](#) in the amount of \$125,000 for violations of the RRP Rule requirements with this private investment firm. The VareCo performed renovations at six multi-unit rental housing properties in and around Denver, Colorado, all built prior to 1978 and subject to the RRP Rule. VareCo failed to obtain initial firm certification from the EPA prior to performing renovations on target housing, failed to assign a certified renovator to each renovation, failed to retain all documentation necessary to demonstrate compliance with lead-safe work practices for renovations, and failed to obtain written acknowledgement of receipt of the Renovate Right pamphlet prior to renovations.

EPA [resolved Clean Air Act \(CAA\) violations with EnerSys Energy Products Inc.](#), a subsidiary of the world's largest industrial battery manufacturer. The company's facilities emit lead, a hazardous air pollutant, as part of their manufacturing process and failed to report to

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EPA when the facility's emission control equipment operated outside of the appropriate pressure range. As a result, the company is required to pay a \$430,500 civil penalty and spend an estimated \$250,000 in compliance costs.

Using Superfund authority, EPA has secured the **cleanup of lead in thousands of residential yards**, immediately reducing the risk of lead exposure to those living, working, and playing in and around nearby homes. Additionally, EPA engaged in numerous lead cleanups pursuant to CERCLA enforcement agreements and has a number of ongoing CERCLA enforcement-based cleanups that are addressing lead.

In November 2023, as a result of a criminal investigation by EPA, Angel Elliot Dalfin, owner of Vin7, LLC, was **sentenced for lying about residential lead hazards**, ordered to pay \$115,000 in restitution to property owners and to serve five years' probation, which included eight months of home confinement with electronic monitoring and 600 hours of community service at Habitat for Humanity. Vin7, LLC, sold 23 properties in Buffalo, NY, all of which were built prior to 1978 and in environmental justice areas. Dalfin falsely stated that the lead-based paint hazards at the properties were unknown. The false statements were material to Dalfin's compliance with the Residential Lead-Based Paint Hazard Reduction Act of 1992.

EPA continues efforts to increase the compliance of property management companies with RRP and Real Estate Notification and Lead Disclosure Rule (LDR) to **protect our military families living in privatized military housing**. In FY 2024, the lead-based paint investigations resulted in administrative case resolutions, noncompliance notifications, and formal advisory letters with Frontier Contractors, Dynamic Renovation Contractors LLC, A. & L. Aluminum Mfg. Co., Inc., KJP LLC, and RC Roofing & Renovations.com, all in Region 8; E&J Painting, LLC (Swann Painting) in Region 7; Fresh Start NY Cleaning Corp. in Region 2; and Squire Contracting, LLC in Region 1. Additional cases are pending in multiple regions. Violations included failure to obtain EPA lead-safe firm certification, failure to maintain records documenting compliance, and failure to comply with pre-renovation education requirements.

GOAL 2: IDENTIFY COMMUNITIES WITH HIGH LEAD EXPOSURES AND IMPROVE THEIR HEALTH OUTCOMES

<i>FY 2024 Milestone</i>	<i>FY 2024 Results</i>
<p>By September 2024, produce a U.S. national-scale analysis and several state-specific analyses identifying lead exposure hotspots, based on research in Michigan and other available data, to be broadly communicated through presentations and papers.</p>	<p>Complete. In FY 2024, published a U.S. national-scale analysis identifying high lead exposure risk locations, in collaboration with HUD and CDC/ATSDR, and several state-specific analyses (e.g., Michigan, Tennessee, West Virginia). Communicated these findings to state and local agencies/organizations and the public (e.g., National Environmental Health Association conference session on lead mapping Federal updates). Published an Ohio lead exposure analysis paper based on the Michigan research and presented it to the Society of Environmental Toxicology and Chemistry conference. Created new EPA website summarizing this collective work.</p>
	<p>Through the Pediatric Environmental Health Specialty Units (PEHSUs), 30,000 healthcare professionals received educational information in the form of lectures, grand rounds, continuing education courses, and factsheets. Lead has historically been and continues to be among the top environmental exposure concerns on which PEHSUs are consulted and for which PEHSUs educate and conduct outreach through collaborations with communities and local and state public health authorities.</p>

GOAL 3: COMMUNICATE MORE EFFECTIVELY WITH STAKEHOLDERS

<i>FY 2024 Measure</i>	<i>FY 2024 Results</i>
<p>OCSPP EPA’s Lead-Based Paint Program is a co-author of the Protect Your Family pamphlet, with HUD and CPSC. The pamphlet explains the dangers of lead in the home and how to protect families from lead-based paint hazards. To ensure this critical information is meaningfully accessible to persons with limited English proficiency, the brochure is available in 12 languages: English, Arabic, Chinese Simplified and Traditional, French, Korean, Polish, Russian, Somali, Spanish, Tagalog, and Vietnamese. This key document is required by law to be provided in pre-1978 house purchase and rentals to consumers. EPA commits to</p>	<p>Complete. EPA has reviewed the information in the Protect Your Family pamphlet and identified updates needed due to new requirements in the reconsideration of the dust-lead hazard standards and dust-lead clearance levels rulemaking and recommendations from the Children’s Health Protection Advisory Committee.</p>

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<p>reviewing the information annually for possible updating as new requirements are developed.</p>	
<p><i>FY 2024 Milestones</i></p>	<p><i>FY 2024 Results</i></p>
<p><u>By October 2024:</u> update the Protect Your Family pamphlet with finalized dust-lead hazard standards (DLHS) and dust-lead clearance levels (DLCL) rule information.</p>	<p>In Progress. Updates to the English and Spanish Protect Your Family pamphlet, with the finalized dust-lead reportable levels (DLRL) and dust-lead action levels (DLAL) rule information, are underway and expected by December 2025.</p>
<p><u>By December 2024:</u> publish updated Protect Your Family pamphlet in Arabic, Chinese Simplified and Traditional, French, Korean, Polish, Russian, Somali, Spanish, Tagalog, and Vietnamese.</p>	<p>In Progress. Updates to the Arabic, Chinese Simplified and Traditional, French, Korean, Polish, Russian, Somali, Spanish, Tagalog and Vietnamese Protect Your Family pamphlets, and translation of the pamphlet into Haitian Creole and Portuguese, are underway and expected by March 2026.</p>
<p><u>Other Accomplishments</u></p>	<p>Through interagency collaboration with the President’s Task Force on Environmental Risks and Safety Risks to Children, published the Progress Report on the Federal Lead Action Plan – a comprehensive update on the government’s progress toward reducing childhood lead exposures since releasing the Federal Lead Action Plan in 2018.</p> <p>Supported outreach to the public health community by bringing EPA participation and experts to the CDC Childhood Lead Poisoning Prevention Program (CLPPP) Annual Recipients Meeting in December 2023, as well as CDC’s Lead Exposure and Prevention Advisory Committee (LEPAC) Meeting in October 2023.</p>

GOAL 4: SUPPORT AND CONDUCT CRITICAL RESEARCH TO INFORM EFFORTS TO REDUCE LEAD EXPOSURES AND RELATED HEALTH RISKS

<i>FY 2024 Measures</i>	<i>FY 2024 Results</i>
<p>By September 30, 2026: develop tools and informational resources for lead service line (LSL) identification technologies to assist small and underserved water systems to efficiently complete LSL inventories.</p>	<p>Published five tools and informational resources for corrosion control, filter use, and LSL identification:</p> <ul style="list-style-type: none"> ○ Devine, C., Garcia-Bakarich, L., Platten, W., Jajeh, K., & Triantafyllidou, S. (2024), Review of historical plumbing codes for lead service line inventories in the United States. <i>Water Practice & Technology</i>, 19 (9): 3867–3881. https://doi.org/10.2166/wpt.2024.212. ○ Devine, C., Mello, K., DeSantis, M., Schock, M., Tully, J. & Edwards, M (2024). Calcium Phosphate Precipitation as an Unintended Consequence of Phosphate Dosing to High-pH Water. <i>Environmental Engineering Science</i>, 41(5):171-179. https://doi.org/10.1089/ees.2023.0190. ○ Tang, M., Lytle, D., Achtemeier, R., & Tully, J. (2023). Reviewing performance of NSF/ANSI 53 certified water filters for lead removal. <i>Water Research</i>, 120425. https://doi.org/10.1016/j.watres. ○ Triantafyllidou, S., Wasserstrom, L., Nelson, J., Webb, D., Formal, C., Doré, E., & Lytle, D. (2023). Lead in synthetic and municipal drinking water varies by field versus laboratory analysis. <i>Science of The Total Environment</i>, 891, 163873. https://doi.org/10.1016/j.scitotenv.2023.163873. ○ Tully, J., Schock, M., Shilling, S., Bosscher, V., Lytle, D., Harmon, S., & Bennett-Stamper, C., An evaluation of properly operated NSF/ANSI-53 Pb certified drinking water filters in Benton Harbor, MI (2024). <i>Journal Water & Health</i>, 22 (2): 296–308. https://doi.org/10.2166/wh.2024.231.
<p>Each year: updates to these LSL identification technology resources will be shared at the EPA Drinking Water Workshop: Small Systems Challenges and Solutions.</p>	<p>Completed through presentations at the EPA Small Systems Challenges and Solutions Workshop, held in Cincinnati, Ohio, September 17-19, 2024. Relevant sessions covered lead regulations, community engagement and risk communication, Bipartisan Infrastructure Law technical assistance, lead service line identification and replacement, and lead chemistry and corrosion control. EPA provided an interactive training</p>

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	<p>on the final day to share laboratory methods and techniques for identifying and assessing lead plumbing materials and lead in water.</p>
<p><u>Other Accomplishments</u></p>	<p>In <u>February 2024</u>, published the President’s Task Force on Environmental Risks and Safety Risks to Children’s priority activities for 2024-2028, a roadmap outlining research activities and other key initiatives in four priority areas, including lead exposures. Each section details short- and long-term actions addressing data gaps; regulations and policies; communication and engagement; and interagency coordination.</p> <p>On <u>October 30, 2023</u>, signed a letter of commitment to UNICEF’s Children’s Environmental Health Collaborative to prioritize children’s environmental health, conduct research on specific environmental impacts to children to include lead, provide technical assistance on children’s health topics such as lead, and participate in joint approaches and partnerships on children’s health issues.</p> <p>In June 2024, EPA requested recommendations from the Children’s Health Protection Advisory Committee on developing lead resources and tools for low- and middle-income countries to support EPA’s commitment to UNICEF’s Global Environmental Health Collaborative.</p>