FILTERED NOT BOTTLED

plasticpollutioncoaltion



IMPLEMENTING IN-HOME WATER FILTER PROGRAMS

POLICY BRIEF

Best Practices for Removing Lead and Restoring Trust in Public Water

THE ISSUE

22 million people are affected by toxic lead pipes across the United States. Following the 2024 Lead and Copper Rule Improvements (LCRI), most water systems and local governments are mandated to replace lead service lines within the next decade. Policymakers face increasing pressure as well as constricted funding sources to ensure safe drinking water and restore trust in public tap water.

T**he LCRI mandates filters certified to remove lead be provided** to repeatedly impacted communities with three lead action level exceedances in five years and decreases that level to 10 ppb. However, a lack of clear guidelines on equitable filter distribution will leave many families still at risk. Black, brown, Indigenous, rural, and low-income populations are disproportionately affected by lead service lines. Additionally, given there is no safe level of lead exposure, communities should not have to wait for repeated exposure or for years, potentially decades, for lead pipe replacement to be provided with safe drinking water.

When communities abandon the tap, restoring use is a steep challenge, underscoring the need to conscientiously rebuild and sustain trust in public water systems for the long term.

In this interim period, local and state policymakers have a critical opportunity to proactively protect public health by implementing effective filter programs — before, during, and at least six months after replacement.

This brief provides policymakers with best practices, resources, community perspectives, and case studies for administering filter programs within their districts and states. It outlines strategies to protect public health, reduce plastic pollution, and rebuild trust in public water.



BENEFITS OF WATER FILTERS

- **A cost-effective public safety net:**

  Filters certified to remove contaminants of concern are a cost-effective, temporary solution to protect public health and support public infrastructure. Point-of-use filters can reduce 99% of lead in the water while also reducing other pollutants, such as PFAS. The potential public health benefits of filter programs that help significantly reduce exposure to lead and other pollutants—including preventing cognitive impairments, developmental delays, behavioral problems, reduced physical growth, and other long-term health issues—far outweigh the costs of implementation. Annual economic losses from lead exposure in the U.S. are estimated at over $50 billion from reduced cognitive potential.

- **Rebuilding trust:**

  Beyond reducing healthcare burdens, well designed filter programs—grounded in education, transparency, and cultural engagement—play a crucial role in rebuilding community trust in both tap water and local government. In fact, tap water drinkers are found to be more likely to support investment in drinking water infrastructure than bottled water drinkers. Once communities stop using the tap for drinking water, it is very difficult to restore usage, even after the source contaminants have been addressed. Public water systems cannot risk further disinvestment and the resulting reduced ability to address contaminants of concern, threatening public water system longevity.





- **Reducing plastic pollution:**

  Residents often turn to plastic bottled water when their water is unsafe. Bottled water has its own health risks, is costly, and erodes trust in public water systems.

  - Bottled water is hundreds to thousands of times more expensive than tap water. Safe drinking water is a public good and human right, and households should not be financially burdened with the costs of securing their own drinking water, in addition to supporting public water systems.

  - Plastic bottled water contains microplastics and chemicals that are hazardous to human health, including PFAS. Bottled water also does not have to pass the same safety tests as tap water.

  - Most plastic water bottles, like all plastics, are not recycled. They are often sent to landfills or incinerators—creating a costly waste issue for local municipalities —or are shipped overseas, dumped, or open-burned.

  - Supplying all communities impacted by lead pipes with single-use plastic bottled water for drinking for just six months would require an estimated 32 billion bottles. This creates a significant amount of plastic pollution, and has significant financial, health, and environmental costs.



BEST PRACTICES FOR EFFECTIVE FILTER PROGRAMS



- **Free filters and cartridges:**

  Filters should be rapidly and equitably provided to all impacted residents in communities with lead pipes with free replacement cartridges included at the required frequency (generally every six months) to maintain effective use. As children are particularly vulnerable to the risks of exposure to lead, in addition to filters in homes, certified filters should also replace fountains in schools and childcare centers and be installed and maintained at all taps used for drinking or cooking.

> ***Case Study:*** In Michigan, some residents are eligible for the Filter Safety Net Program or the Faucet and Filter Safety Net Program. These programs provide certain households with free filters upon request, and in some cases replacement cartridges and faucet replacements.

- **Direct distribution:**

  Directly distributing filters through the mail or by going door-to-door to households is most effective for achieving high community adoption. Relying solely on central distribution locations or requiring residents to request filters creates barriers to access, such as awareness, time, and transportation. Filters should also be distributed to renters and apartment complexes without prior approval from the property owner. Measures to reduce financial burdens or access barriers can contribute to higher filter compliance rates.

> ***Case Study:*** In Denver, Colorado, filters were mailed directly to customers and an 80% compliance rate was achieved. Replacement cartridges continue to be mailed every six months.

> ***Case Study:*** By contrast, Newark, New Jersey, experienced much lower rates of proper filter-use when relying on a combination of central distribution centers, door-to-door canvassing, and reduced community education.

- **Education:**

  High filter compliance rates depend heavily on consistent, diverse, and culturally significant education and public outreach. Providing educational materials and training on filter efficacy and maintenance is a critical step to ensure customers can access, trust, and properly use their filters.

  > ***Case Study:*** In Newark, New Jersey, a lack of robust education led to over 25% of surveyed customers reporting they improperly used or maintained their faucet filter, with 64% reportedly misusing their pitcher filters.

  > ***Case Study:*** In Denver, Colorado, the City formally partnered with local leaders and trusted community groups to help facilitate repeated and culturally relevant outreach and education that was translated into community languages. Denver also followed a prioritization model to ensure highest risk populations received the materials including pregnant people and families with young children, and ensured tenants were part of the filter program. In their survey results, 97% of households with formula-fed infants reported using their filter.

  Educational materials must be translated into relevant languages, and should be sent regularly with replacement cartridges. Policymakers and government staff implementing filter programs can utilize various communication tools to reach community members with repeated education, including hosting or participating in local events, canvassing door-to-door with trusted community partners, social media and web presence, virtual and in-person training opportunities, and the inclusion of filtration messaging throughout the many other lead action level exceedance and lead service line replacement (LSLR) notification requirements.

  Additionally, beyond crises of lead contamination, it is vital that water systems provide clear and consistent transparency on the quality of local tap water and the frequency of testing. Tap water is much more regulated than bottled water, but this is not well known by the public. Increasing positive public relations for tap water requires positioning the water system as a community partner, open to the public's questions and operating in the public interest.

- **Community engagement and collaboration:**

  Communities may not always trust messaging or in-home outreach from public officials. Therefore, water systems should partner with various local organizations to support conducting collaborative outreach efforts. This may involve including trusted community members in door-to-door outreach, having organizations distribute education materials, and supporting training sessions at local community centers and businesses. Working with community partners and leaders ensures trusted messengers help deliver messages on filter efficacy and rebuild trust in local government and tap water. Follow these principles for equitable and effective LSLR.

- **Creative funding:**

  Despite ongoing changes in federal funding that have created significant uncertainty for local and state governments, there are still opportunities to fund filter programs, particularly as a critical interim solution while the higher costs of lead service line replacement may cause further delay. Opportunities include partnerships with filter companies at discounted rates, utilizing funds from the Drinking Water State Revolving Fund (DWSRF) or The Water Infrastructure Finance and Innovation Act of 2014 (WIFIA) and established WIFIA program, or enlisting outside entities such as Medicaid managed care insurance companies to fund filters.

> ***Case Study:*** Cook County, Illinois, partnered with CountyCare, a Medicaid managed care insurance company (MCO) to mail coupons redeemable for a filter pitcher and replacement cartridge to households meeting certain requirements.

WHAT'S AT STAKE

Residents who are left on their own to find safe water, are unaware of tap water contamination, or unsure of how to use a filter properly, are at risk of irreversible health consequences from lead exposure. Young children and pregnant people are especially vulnerable to the harmful impacts of lead.



COMMUNITY STORIES

Partnering with Trusted Messengers 📍 Ohio

Junction Coalition is an organization of residents in Toledo, Ohio, that partnered with the City of Toledo on its education efforts for lead pipe replacement. When the city first started its outreach, not all citizens received the message. Moreover, some residents were wary of allowing city representatives into their homes, and some were fearful that city visits meant their water was going to be shut off.

Relationships between the city and community "took time to develop," said Alexis Smith, Junction Coalition Member, and the organization aided in strengthening these communications. Advocates prompted the city to hold town halls and broadcast information on multiple media platforms to reach residents that had been previously difficult to engage. Additionally, advocates accompanied city workers in door-to-door outreach. Alexis Smith, a member of the Junction Coalition, noted that "neighbors were much more open to giving access and consent because they were met by a friendly face of a trusted institution within the community," better ensuring that residents would be properly "informed and able to protect their families from the risk of lead exposure through drinking water." Recognizing that trusted community leaders play a critical role in rebuilding trust, Smith affirmed the "community not only has a right to know what's happening in and around their community, but they also get to be a part of the solution."



Importance of Bilingual Education 📍 Wisconsin

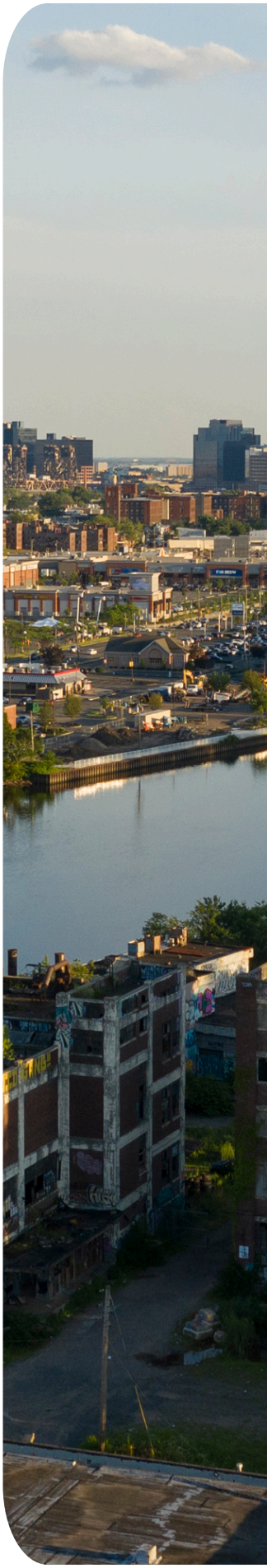
Wisconsin EcoLatinos is a non-profit organization in South Central Wisconsin working to empower the Latino community to take action against environmental hazards and engage in resilience efforts.

Throughout 2025, the organization distributed dozens of water filters to community members alongside educational materials in English and Spanish. Damayanti Rodriquez-Ramos, Program Coordinator, reflected that "participants expressed gratitude for receiving information in Spanish, saying it made them feel seen and cared [for]." The organization held bilingual distribution and education sessions at schools, fairs, and other community events, ensuring content was adapted to their different audiences, culturally relevant, and accessible. Attendees were "especially thankful for the free filters, explaining they wouldn't have been able to afford them otherwise." Noting the importance of bilingual education, Rodriguez-Ramos affirmed that "language shouldn't be a barrier to clean water or environmental knowledge."

Lessons Learned on Filter Distribution 📍 New Jersey

In 2016, Newark, New Jersey, reported record-high levels of lead in the drinking water, with contamination rising to some of the worst in the country by 2018 and 2019. As a founding member of Newark Education Workers Caucus (NEW Caucus), Yvette Jordan was part of a lawsuit—led by NEW Caucus and the Natural Resources Defense Council—against the city and its officials for their mishandling of the crisis. As part of the settlement, free water filters and replacement cartridges were promised to residents.

However, distribution was uneven and inconsistent, which caused tension and deepened distrust. Jordan reflected: "Newark residents cheered when filters were distributed during the lead crisis. Unfortunately, their distribution was sporadic and did not encourage a greater level of trust in the community. Over time, community-based organizations associated with clean water helped to ameliorate this feeling by lending a supportive hand, distributing water and filters where the City did not." Her experience underscores the importance of effective, barrier-free distribution alongside consistent, culturally responsive education. Together, these efforts are essential for rebuilding trust and ensuring filters are used effectively to protect public health.



RESOURCES

For more information, we recommend the following resources:

Relevant information and case examples for implementing filter programs:

- **Denver Case Study Brief:** Denver Water Filter Program — brief case study on the efficacy of the filter program implemented in Denver, CO, authored by the Harvard T.H. Chan School of Public Health.
- **Filter Program Case Studies:** a series of six case studies of filter programs across the country with included recommendations for other communities, authored by the Protect Kids From Lead Coalition.
- **EPA Fact Sheet: Investment in Water:** information on available sources of funding for protecting access to safe water.
- **EPA's Lead and Copper Rule Improvements Fact Sheet:** strengthened requirements for lead pipe replacement finalized by the EPA in October 2024.
- **EPA Filter Guide:** Consumer Tool for Identifying Point-of-Use and Pitcher Filters Certified to Reduce Lead in Drinking Water (also available in Spanish)
- **The Perils of PVC Plastic Pipes:** report from Beyond Plastics, Environmental Health Sciences, & Plastic Pollution Coalition on health risks associated with service lines made of PVC. Lead pipes should be replaced with recycled copper, not toxic polyvinyl chloride pipes.

Communications materials:

- **Advocacy Toolkit: Protect Your Community from Toxic Lead and Plastic in Drinking Water:** an informative packet for mobilizing communities on filtered water.
- Community factsheets in **English** and **Spanish**: accessible visuals and language on filtering out the lead and avoiding plastic bottled water.





ABOUT PLASTIC POLLUTION COALITION

Plastic Pollution Coalition (PPC) is a non-profit communications and advocacy organization that collaborates with an expansive global alliance of organizations, businesses, and individuals to create a more just, equitable, regenerative world free of plastic pollution and its toxic impacts. PPC is a project of Earth Island Institute.

Our Filtered Not Bottled campaign champions water equity by advocating for the distribution of filters, not single-use plastic water bottles, during times of water crisis. Learn more about the Filtered Not Bottled campaign here.

CONTACT

We welcome states and municipalities to contact us with questions or opportunities to support the ideation and implementation of filter programs. Our team can serve as a resource for offering best practices and helping facilitate community partnerships in the context of different communities in the Great Lakes and Northeast.

Madison Dennis, Project Manager
madison.dennis@plasticpollutioncoalition.org

Rachel Bustamante, Northeast Policy Coordinator
rachel.bustamante@plasticpollutioncoaliton.org

Sofia Johansson, Great Lakes Campaign Coordinator
sofia.johansson@plasticpollutioncoalition.org

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