

Clean Water for US Kids

Program Overview



The Clean Water for US Kids program exists to identify and eliminate lead in drinking and cooking water in places where children learn, live, and play. Lead in water can vary from tap to tap, and no amount of lead in water is safe. RTI International's citizen science approach allows schools, child care centers, and households to test at every tap used for drinking and cooking.

Why Test for Lead in Water?

Lead enters the bloodstream when a person is exposed to lead from drinking water or another source, such as dust from lead-based paint or contaminated soil. Children are more vulnerable than adults to the health effects of lead because their bodies absorb lead more easily and their organs and systems are still developing. Early childhood exposure to lead can cause irreversible cognitive decline and behavioral difficulties.

Lead can be found in water piping and plumbing materials. Lead can leach into water from piping and plumbing on the way to your tap—with water conditions, pipe deterioration, and use affecting the amount of lead. Testing every cooking or drinking water tap is important because lead levels can vary from tap to tap.

The Clean Water for US Kids program enables feasible and affordable testing at every tap in child care centers, schools, and homes.

If lead is found, there are no-cost and low-cost solutions to reduce the amount of lead. This program helps find and fix taps so that children can drink lead-free water no matter where they are.

What Is Our Citizen Science Approach?

The Clean Water for US Kids program uses a novel citizen science approach to water testing. Citizen scientists collaborate with professional scientists in research activities—including data collection, risk communication, and risk mitigation.

Citizen science empowers participants and communities to understand and take action on important issues. Using a community-based approach to testing and fixing lead in drinking water ensures that administrators, staff members, parents, and kids can help take collective action to make improvements now and in the future.

Thanks to grant funding from the US Environmental Protection Agency (EPA), several states have partnered with the *Clean Water for US Kids* program to make free testing available to schools and child care centers.

The Clean Water for US Kids program

- **1. Trains** participants as citizen scientists to collect and ship water samples
- **2. Tests** all drinking and cooking taps at participating child care centers, schools, and homes
- **Takes action** to address identified problems, with recommendations based on tap-specific results
- Communicates findings and solutions to staff, parents, and children.

The RTI International <u>Trace Metals Laboratory</u> analyzes water samples for lead in drinking water. We use state-of-the-science laboratory equipment that allows us to detect lead in drinking water at levels as low as 0.1 parts per billion (ppb), also known as micrograms per liter (μ g/L). We are certified in many states to use EPA Method 200.8 to measure lead and other metals.

What Actions Can I Take to Remove Lead From Water?

Your laboratory results will be a good starting point for removing lead from water. When we send those results, we will include straightforward recommendations about affordable water quality improvements and practical tips for communicating your results with others. We will also provide basic information about installation and maintenance costs for a <u>list of filters</u> certified to remove lead. You can then decide how to best implement our recommendations based on your budget. The actions depend on the level of lead and may include the following:

- No-cost methods, such as using only cold water or discontinuing use of the tap if sufficient other drinking water faucets are available
- Low-cost methods, such as replacing an old faucet with a new stainless steel one or installing and maintaining a water filter certified to remove lead
- **Replacing lead service lines** when found; we recommend asking local agencies about possible financial support.

With your help, we can eliminate childhood exposure to lead in drinking and cooking water.

Accomplishments

As of October 2021, the *Clean Water for US Kids* program has tested the water at every drinking and cooking tap in 3,963 child care centers; 93% of centers had at least one tap with lead detected in the water.

We have worked with federal agencies, state governments, nonprofit organizations, and communities—with funding from various contracts and grants.

Awards Received

- 2020 Environmental Business Journal Business Achievement Award for Project Merit
- Harvard University 2020 Roy Family Award for Environmental Partnership
- Mutual of America Community Partnership Award 2021 Honorable Mention Recipient

Additional Resources

For more information, visit the *Clean Water for US Kids* program portal at https://www.cleanwaterforuskids.org.

- Clean Water for Carolina Kids
- Clean Water for Georgia Kids
- Clean Water for US Homes
- PREDICT Healthy Homes Study



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More Information

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