

TESTING DRINKING WATER FOR LEAD AT TRIBAL SCHOOLS AND CHILD CARE FACILITIES



**Summer 2023 RTOC Region 9 Meeting
August 9, 2023**

**Report by
Diella Packman, School Lead Reduction Project Manager**

Funding by Environmental Protection Agency



Overview

Foundational Information

Lead Regulation Details and History

About the 3Ts

Funding Information

Potential Challenges and Solutions

ITCA's Plan: How to Participate

Progress of Project

Summary



Foundational Information



Lead is a metal that occurs naturally in the earth's crust. The softness, malleability, low melting point, resistance to corrosion (making it ideal for water pipes), low cost and easy workability has made lead a very useful metal.



Lead-based paint



In the air



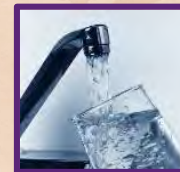
In the soil



Lead Industry



In consumer products



In water





Foundational Information

There is no safe level of lead especially for children. Children are more sensitive to the damaging effects due to their developing bodies.

Lead exposure in children can result in:

- Reduced IQ and attention span
- Learning disabilities
- Poor classroom performance
- Behavioral problems
- Impaired growth and hearing loss





Lead Regulation Details and History

How Lead in Drinking Water is Regulated?

The Lead Ban (1986): A requirement that only “lead-free” materials be used in new plumbing and in plumbing repairs.

The Lead Contamination Control Act (LCCA) (1988): The LCCA aimed at the identification and reduction of lead in drinking water at schools and childcare facilities, including the recall of drinking water coolers with lead-lined tanks.

The Lead and Copper Rule (1991): A regulation by the EPA to control the amount of lead and copper in water supplied by public water systems. Action level set at 15 ppb of lead.

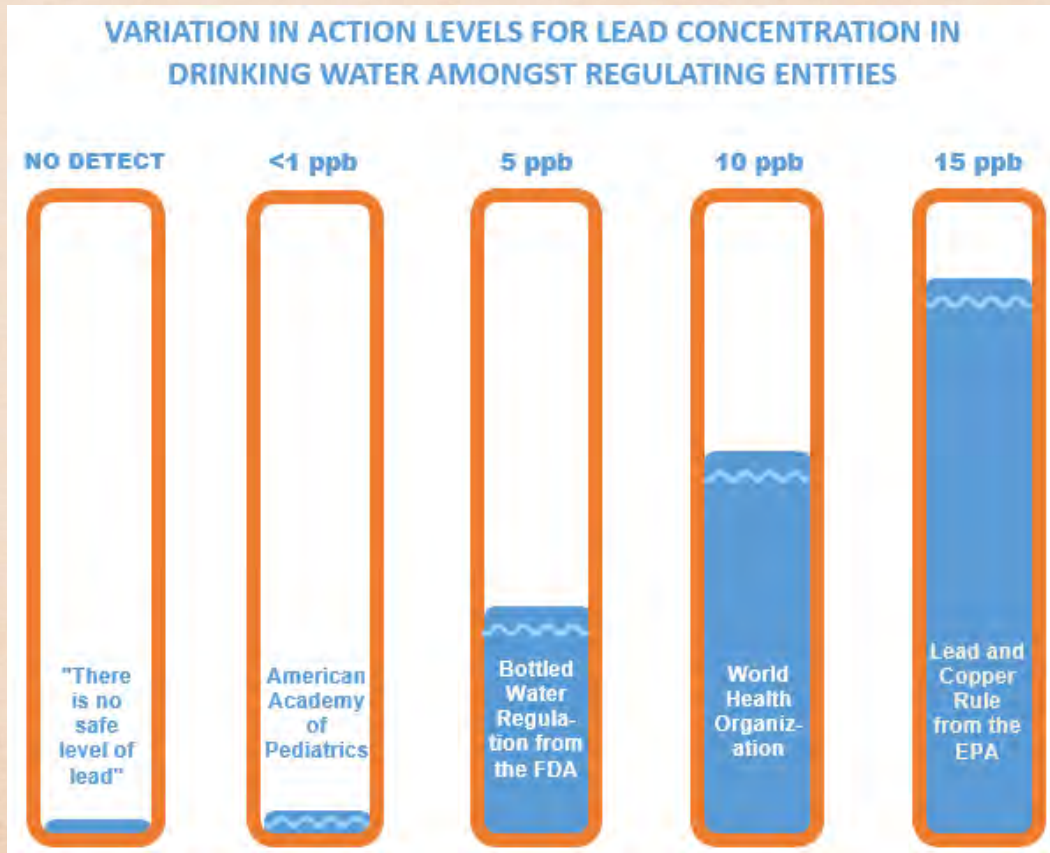
The Reduction Of Lead In Drinking Water Act (2011): This act further reduces lead and redefines “lead-free” under the Safe Drinking Water Act (SDWA).

REVISED Lead & Copper Rule (2021): Amended original LCR by supporting testing in schools and childcare facilities, publically available Lead Service Lines inventories, a trigger level of 10ppb, and quicker notification times.





What is an Action Level?



Action Levels for Public Water Systems, as enforced by primacy agencies in ITCA Project Area:

Navajo Nation- 15 ppb

EPA- 15 ppb

Nevada- 15 ppb

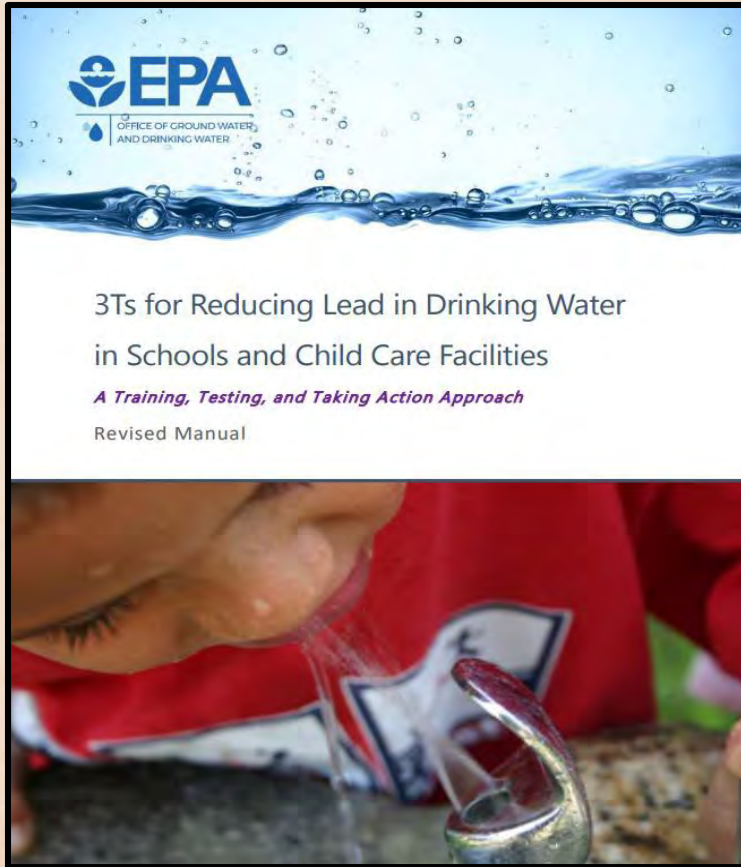
Arizona- 15 ppb

California- 15 ppb

New Mexico- 15 ppb



The 3Ts for Reducing Lead in Drinking Water in Tribal Schools and Childcare Facilities



- **Training** school and childcare officials to raise awareness of the 3Ts program and summarize the potential causes and health effects of lead in drinking water.
- **Testing** drinking water in schools and childcare facilities to identify potential lead problems.
- **Taking Action** to reduce lead in drinking water through remediation assistance.

← 3Ts Manual



How the 3Ts Toolkit Can Help You



Module 1
Communicating the 3Ts



Module 2
Learning About Lead in Drinking Water



Module 3
Planning Your 3Ts Program



Module 4
Developing a Sampling Plan



Module 5
Conducting Sampling & Interpreting Results



Module 6
Remediation & Establishing Routine Practices



Module 7
Recordkeeping

<https://www.epa.gov/ground-water-and-drinking-water/3ts-reducing-lead-drinking-water>



Lead and Copper Rule vs 3Ts for Reducing Lead in Drinking Water



Sampling under the LCR vs 3Ts

Lead and Copper Rule (LCR)	3Ts for Reducing Lead in Drinking Water
<p>Required for: all community and non-transient non-community water systems.</p>	<p>Voluntary Program: to assist schools with training, testing, and taking action.</p>
<p>Sampling Protocol: The LCR takes a system-wide approach. If the 90th percentile lead level concentration of tap samples exceeds the 15 µg/L action level, water systems must take additional actions. The sampling protocol under the LCR includes a 1-L first draw sample after a stagnation period of 6 hours.</p>	<p>Sampling Protocol: Only schools and childcare facilities that own and/or operate a public water system must meet the requirements of the LCR. Under the 3Ts, EPA recommends sampling and follow-up actions be taken at each individual outlet. The 3Ts consists of a 2-step sampling protocol, which includes two 250-mL samples: (1) first draw after an 8 to 18 hour stagnation, and (2) a flush sample after 30 seconds.</p>
<p>Follow-Up Actions: Water systems are required to undertake treatment actions, depending upon system size and corrosion control treatment status. These include corrosion control, public education, water quality monitoring, and lead service line replacement.</p>	<p>Follow-Up Actions: The initial sample and the follow-up flush sample will help determine the source of the lead (e.g., the fixture or behind the wall). Then remediation measures can be implemented as appropriate to address that outlet. This includes removing fixtures and repairing/replacing water coolers, to minimize exposure.</p>



Funding Allocation and Press Release

Lead Testing in School And Child Care Program Drinking Water Grant Program



– 2016 WIIN Act §2107 amended SDWA §1464(d)

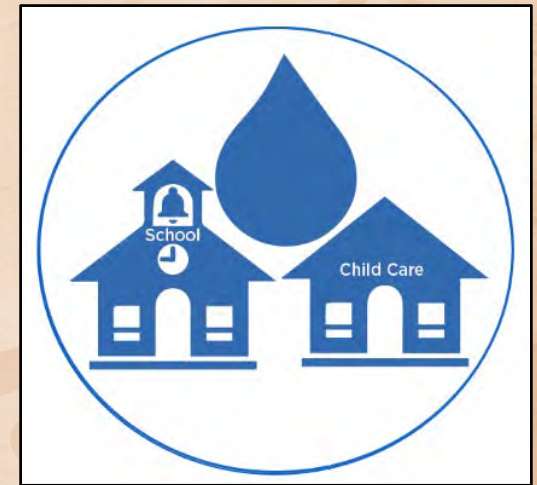
- **All 50 states and DC, Puerto Rico, US Virgin Islands, and American Samoa are participating**
 - **Approximately \$69.7 million in funding** → Grants to states, 3rd round in 2021
 - **The tribal allotment - \$4.3 million** → 1st grants in late 2021
- **The goals of this program include:**
 - **Reducing children exposure to lead in drinking water**
 - **Utilize the 3Ts model or model no less stringent to establish best practices**
 - **Enhance community, parent, and teacher cooperation and trust**
 - **Develop strategies to provide funding for schools unable to pay for remediation**



Funding Allocation and Press Release

Grantees will develop or expand existing programs to provide technical assistance to eligible Tribal Education Agencies (TEAs) to test for lead contamination in drinking water.

- Public schools on tribal land
- Head Start Centers
- Other schools on tribal land
- Child Care facilities on tribal land



2-year project implementation

- Outreach to support TEAs to assess lead levels
- Provide technical assistance to TEAs to support 3Ts program implementation
- Support sampling procedures
- Provide resources to communicate results to enhance community, parent, teacher trust



Funding Allocation and Press Release



FOR IMMEDIATE RELEASE
DECEMBER 3, 2021

CONTACT: MARIA DADGAR
(602) 258-4822

Inter Tribal Council of Arizona Receives EPA Grant to Help Tribal Communities Protect Children from Lead in Drinking Water

Phoenix, Arizona – December 3, 2021 – The Inter Tribal Council of Arizona, Inc. (ITCA), a consortium of 21 federally recognized Indian Tribes in Arizona, recently received a \$1,581,000 grant from the U.S. Environmental Protection Agency (EPA) to help protect children by identifying sources of lead in drinking water in schools or child care facilities. The funding will help protect children and helps advance the federal action plan to reduce childhood lead exposure. The ITCA project will serve schools or child care facilities at federally-recognized tribes located in New Mexico (in EPA Region 6), as well as those located in Arizona, California, Nevada, and the Navajo Nation (in EPA Region 9). The project will also build on previous lead-testing programs at Tribal schools in these areas.

“Water is sacred in all forms and especially with regard to the drinking water we provide to our children,” stated Maria Dadgar, Executive Director of the Inter Tribal Council of Arizona. “We look forward to working with Tribal schools and child care facilities to assist with developing programs for monitoring their facilities’ drinking water plumbing. This will include providing technical assistance to support addressing older plumbing fixtures and in general, work toward improving the quality of their drinking water.”

The funding was awarded under the Water Infrastructure Improvements for the Nation (WIIN) Act for states, territories, and tribes to test for lead in schools and childcare facilities. The Voluntary Lead Testing in Schools and Child Care Drinking Water grant program continues to help protect children’s health and make progress under the Federal Action Plan to Reduce Childhood Lead Exposures.

The grant supports EPA’s action plan for reducing lead in school drinking water—Training, Testing, and Taking Action, or the 3 Ts. This toolkit helps prepare schools, child care facilities, and grantees to build a voluntary implementation program to reduce lead levels in drinking water with detailed training modules and materials. Learn more about the 3 Ts here.

<https://www.epa.gov/ground-water-and-drinking-water/3ts-reducing-lead-drinking-water>

EPA’s Children’s Health program highlights how children can be more vulnerable to pollutants than adults, which can lead to greater exposure and/or unique windows of susceptibility during development. This is especially true of lead—an exposure that would have little effect on an adult can have a significant effect on a child. In fetuses, infants and children, low levels of exposure have been linked to damage to the central and peripheral nervous system, learning disabilities, shorter stature, impaired hearing, and impaired formation and function of blood cells. Lead in drinking water is one of the main ways children can be exposed to lead.

Learn more about and EPA’s WIIN grant programs at <https://www.epa.gov/dwcapacity/wiin-grant-lead-testing-school-and-child-care-program-drinking-water>

Aki-Chin Indian Community

Cocopah Indian Tribe

Colorado River Indian Tribes

Fort McDowell Yavapai Nation

Fort Mojave Indian Tribe

Gila River Indian Community

Havasupai Tribe

Hopi Tribe

Hualapai Tribe

Kaliha Band of Pima Indians

Pisacopa Yavapai Tribe

Pueblo of Zuni

Quechan Tribe

Salt River Pima-Maricopa Indian Community

San Carlos Apache Tribe

San Juan Southern Paiute Tribe

Tahono Chiricahua Nation

Tanila Apache Tribe

White Mountain Apache Tribe

Yavapai-Apache Nation

Yavapai-Prescott Indian Tribe

Press Release for ITCA receiving EPA’s WIIN Grant

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Funding Allocation and Press Release

Allocation of the Tribal Consortia Grants

2107 | Lead Testing in School and Child Care Program Drinking Water Tribal Grant Program Allocation

Consortia	Facility Count	Allocation %	Allocation \$	Final Rounded
Inter-Tribal Council of Arizona	320	36.74%	\$1,581,263	\$1,581,000
United South and Eastern Tribes	220	25.26%	\$1,087,118	\$1,087,000
Rocky Mountain Tribal Leaders Council	109	12.51%	\$538,618	\$539,000
Great Lakes Inter-Tribal Council	100	11.48%	\$494,145	\$494,000
Northwest Portland Area Indian Health Board	90	10.33%	\$444,730	\$445,000
Inter-Tribal Council of Michigan	32	3.67%	\$158,126	\$158,000
TOTAL	871	100.00%	\$4,304,000	\$4,304,000
Exact Funding	\$ 4,304,000.00			



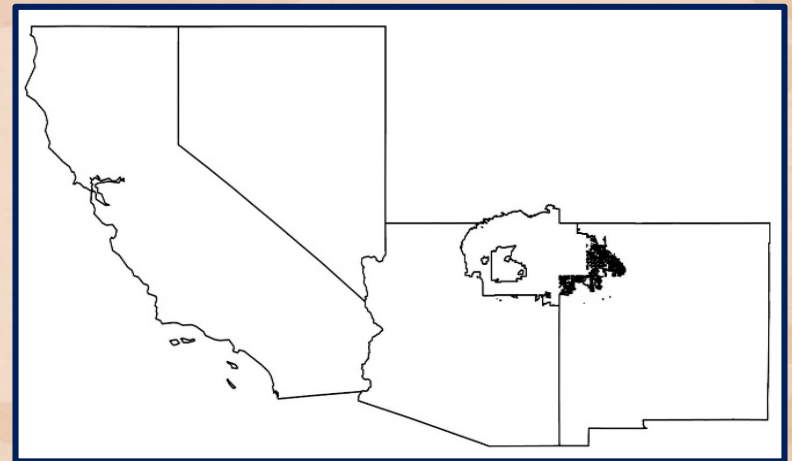
ITCA's 3Ts for Reducing Lead in Drinking Water at Tribal School and Childcare Facilities

The overall service area that ITCA proposes includes all Indian reservations located in:

- (1) Tribes located in EPA Region 9
- (2) Tribes located in New Mexico

Service area includes a total of 188 federally-recognized tribes

Service Area:





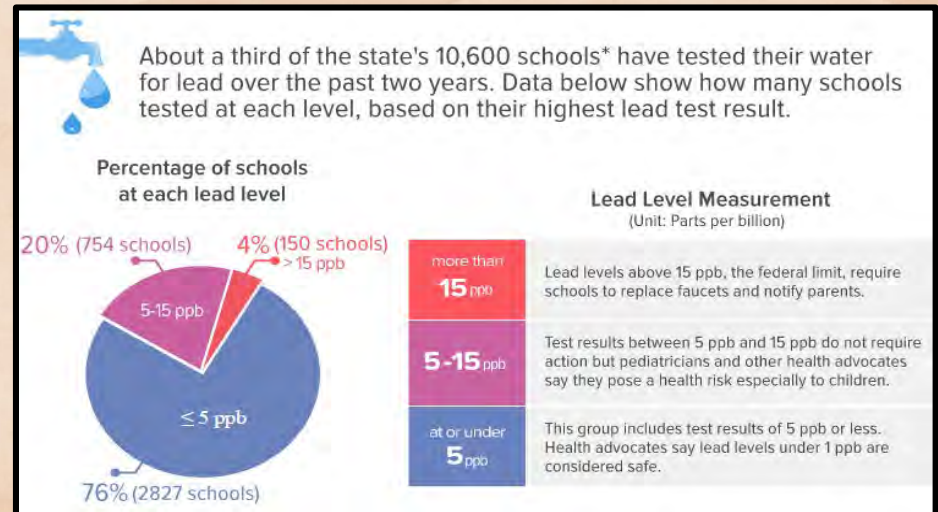
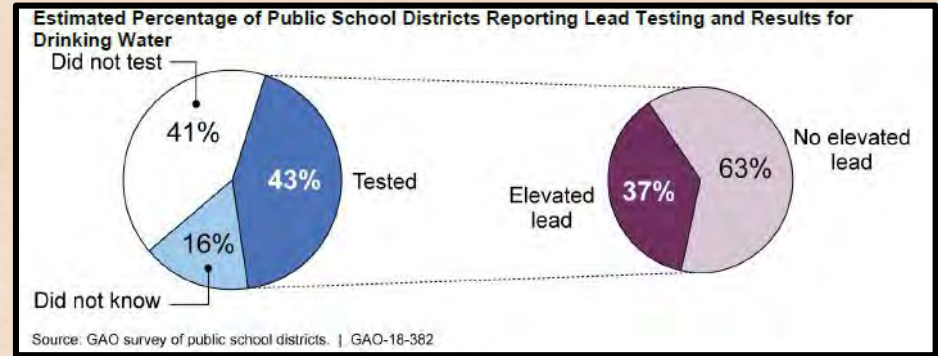
Potential Challenges

Challenges previously cited:

- Lack of volunteers
- High action levels
- Lack of communication within the project
- Remediation guidance

ITCA's Solutions:

- Hiring an Outreach Coordinator and utilizing irregular means of outreach
- Giving Tribes the autonomy to choose their action level as low as <1 ppb
- Providing communication tools and online services
- The new revisions to the grant allow ITCA to potentially contribute financially towards the remediation of water pipes/fixtures at Tribal schools





Taking Action is Now Fundable!

The **2021 Bipartisan Infrastructure Law (BIL)** amended the grant program to *the Voluntary School and Child Care Lead Testing and Reduction Grant Program* and allowed grant funding for lead remediation in addition to testing. This law included a historic \$50 billion to strengthen the nation's drinking water and wastewater systems.





How to Participate in the ITCA Tribal Project

Process for Participation:

The following are steps that tribal communities, schools, and childcare facilities can take to participate in the project services:

1. Contact ITCA (see contact info at the end of this presentation)
2. Select participation goals (training, water testing, taking action)
3. Obtain concurrence from governing body (local education administration, board, or council)
4. Schedule staff training and site visit from ITCA Project representatives





Our Progress

- ✓ Built our project team to three full-time employees, two subject matter experts, and an outreach consultant,
- ✓ Completed Work Plan
- ✓ Contracted a laboratory
- ✓ Website
- ✓ Outreach materials in progress
- ✓ Constructed a database of all Tribal Education Agencies (TEAs) in our service area
- ✓ Consistently outreaching to Tribal governments and leaders through presentations and meetings
- ✓ Building a social media/messaging campaign to Tribal Leaders, TEAs, Tribal Agencies, Tribal Utilities, and Tribal Community members
- ✓ Finalizing our training schedule to prepare for volunteering Tribes and schools

Thank you! Questions?



ITCA National Tribal Water Systems Programs

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