Voluntary School and Child Care Lead Testing and Reduction Grant Program – Best Management Practices Workshop & Roundtable

November 1, 2022

US EPA Office of Water,
Office of Ground Water and Drinking Water

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Zoom Orientation

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Use the navigation bar at the bottom of your screen to access controls in Zoom.

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Participant List

When you click on "Participants" in the navigation bar at the bottom of your screen, a list of meeting participants will show up in a pop-up box in Zoom.

Meeting Chat

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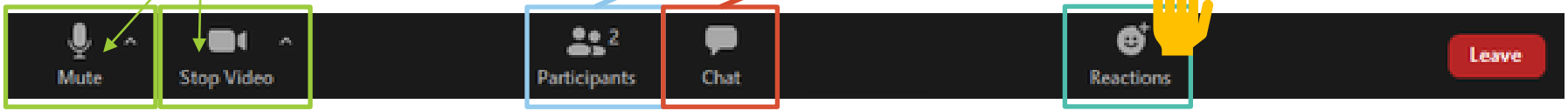
Select [Hand] if you have a question. We will call on you to unmute.



Agenda

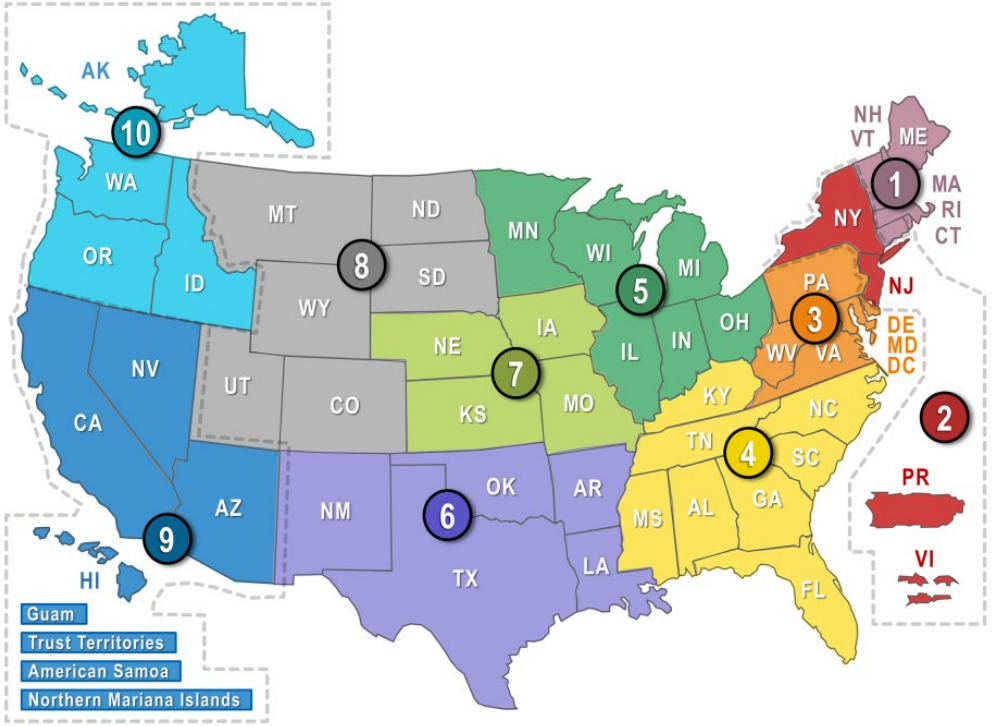
- ❑ Welcome
- ❑ Program Progress Overview & Resources
- ❑ 3Ts Program (Training, Testing, & Taking Action)
- ❑ May BMP Workshop Review and Recap
- ❑ Round Table Discussion and Q&A Session

Program Progress & Resource Materials

Ying Tan

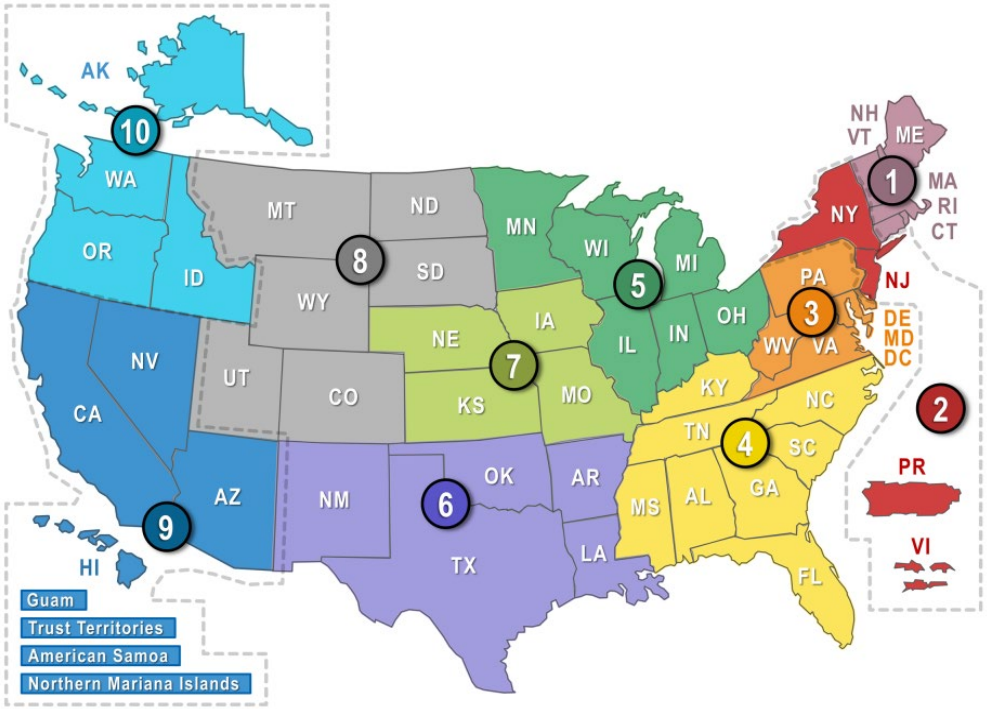
State Program Funds Allocated

Fiscal Year	Amount Allocated (Million)
18-19	$43
20	$26
21	$26.5
22 & 23	$36* & $35*



*Estimated allocation amount

Program Funds Awarded



Regions	Awarded Amount (Million)*
1	$8.4
2	$3.5
3	$7.2
4	$13
5	$13
6	$9.6
7	$4.1
8	$4.8
9	$10.8
10	$3.7
Total	**$78.1**

*FY18 – 21 funds awarded to the states

Program Progress

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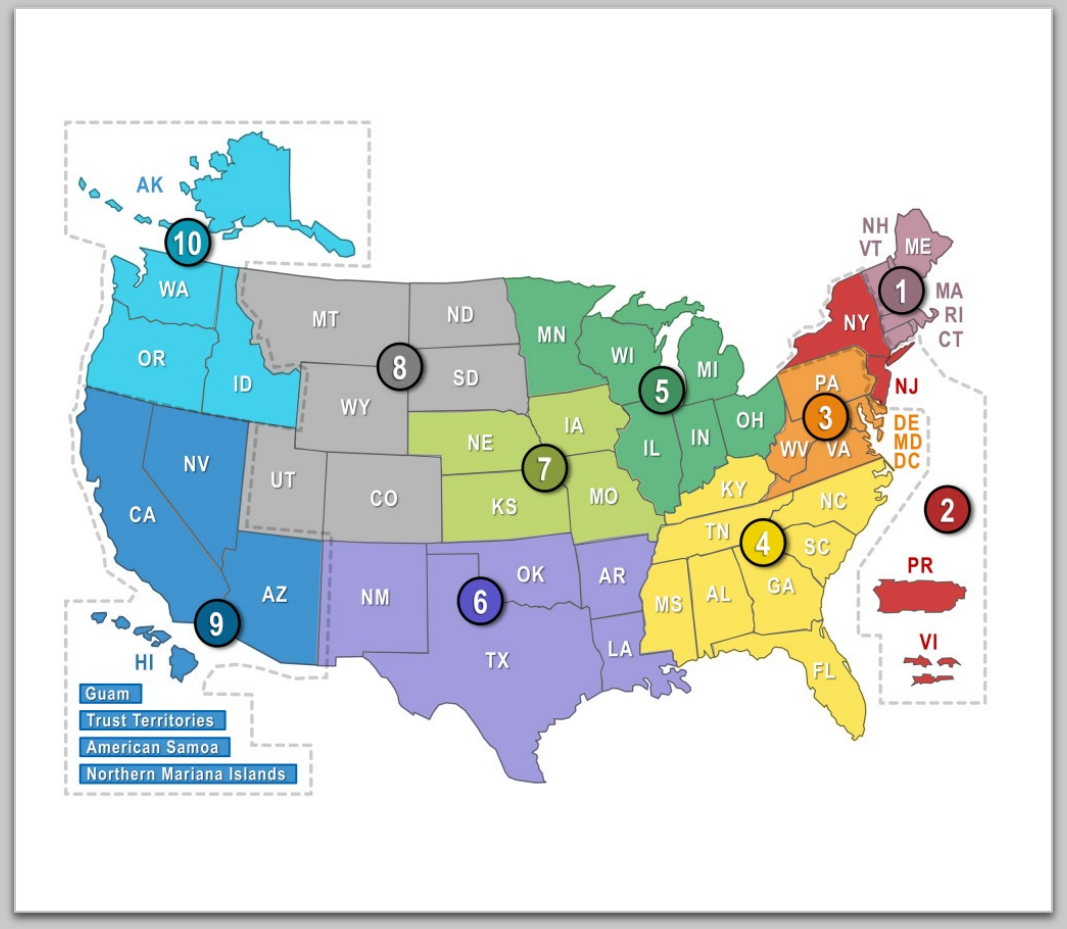
	Total Number of Facilities Tested	Total Estimated Population Benefited From Testing
FY 20	3,000	N/A
FY 21	6,000	1,000,000
FY 22	3,000	500,000

Data Source: FY 20 & 21 annual and FY 22 quarterly progress reports submitted for October 2021 - July 2022. Approximate values, subject to change with new information.

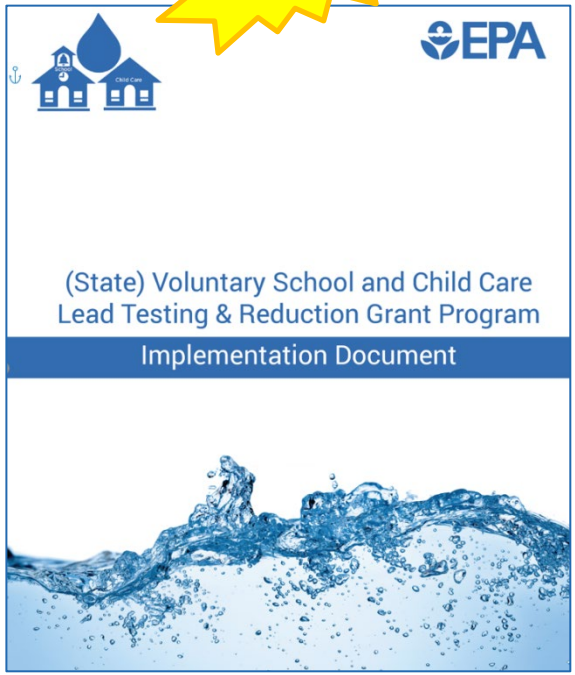
Program Progress

- Program Summary Data: https://www.epa.gov/ground-water-and-drinking-water/school-and-child-care-lead-testing-and-reduction-grant-program
- EPA Regional and State Contacts: https://www.epa.gov/dwcapacity/voluntary-school-and-child-care-lead-testing-and-reduction-state-grant-program-contacts

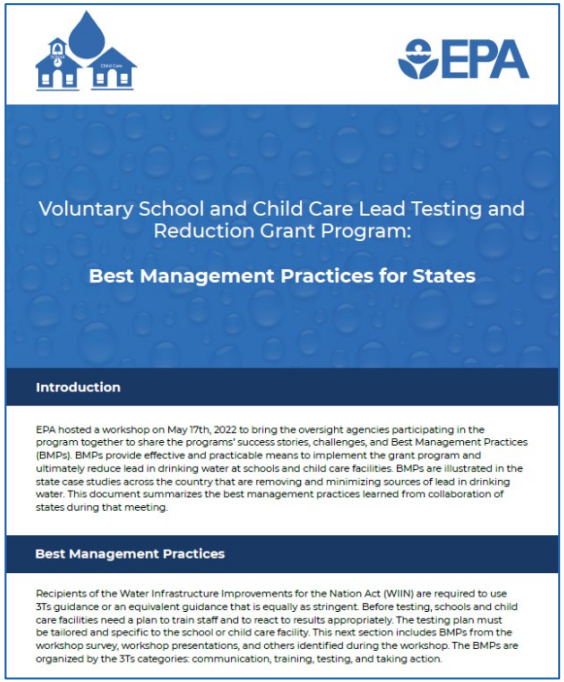


Resource Documents

Coming Soon



Revised Implementation Document for States



BMP Document

Coming Soon

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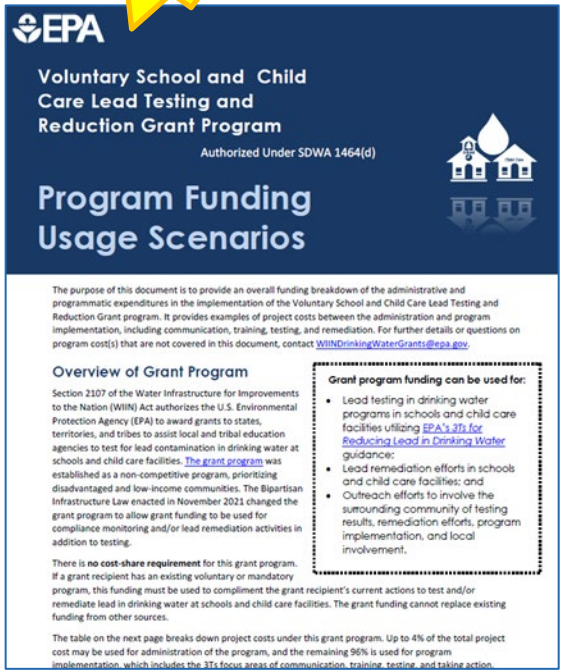

Funding Use Scenarios

3Ts Product Highlights

Cindy Mack

3Ts for Reducing Lead in Drinking Water in Schools and Child Care Facilities

TRAINING – TESTING – TAKING ACTION

3Ts Manual (English and Spanish)

Training *school and child care officials to raise awareness of lead in drinking water.*

Testing *drinking water in schools and child care facilities to identify potential lead problems.*

Taking action *to reduce lead in drinking water.*

3Ts 7-Module Toolkit

View School-specific Resources

View Child Care-specific Resources

View Additional Resources

EPA 3Ts Webpage: https://www.epa.gov/safewater/3Ts

3Ts - TRAINING – TESTING – TAKING ACTION

Tools and Outreach Materials

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3Ts Tools

1) Ensuring Drinking Water Quality in Child Care Facilities During and After Extended Closures
2) Ensuring Drinking Water Quality in Schools During and After Extended Closures
3) Parent Communication Template Letter
4) Webinar: EPA & USDA Grants and Loans
5) Data eTrackers – Tracks Inventory, testing results, and Actions
6) Toolkit (Manual)
7) **Sampling Collection Field Guide**
8) **Sampling video (7 mins.)**
9) **Sampling Comic Poster for Child Care Facilities**
10) **Plan eBuilder for Child Care**
11) **Plan eBuilder for Schools**

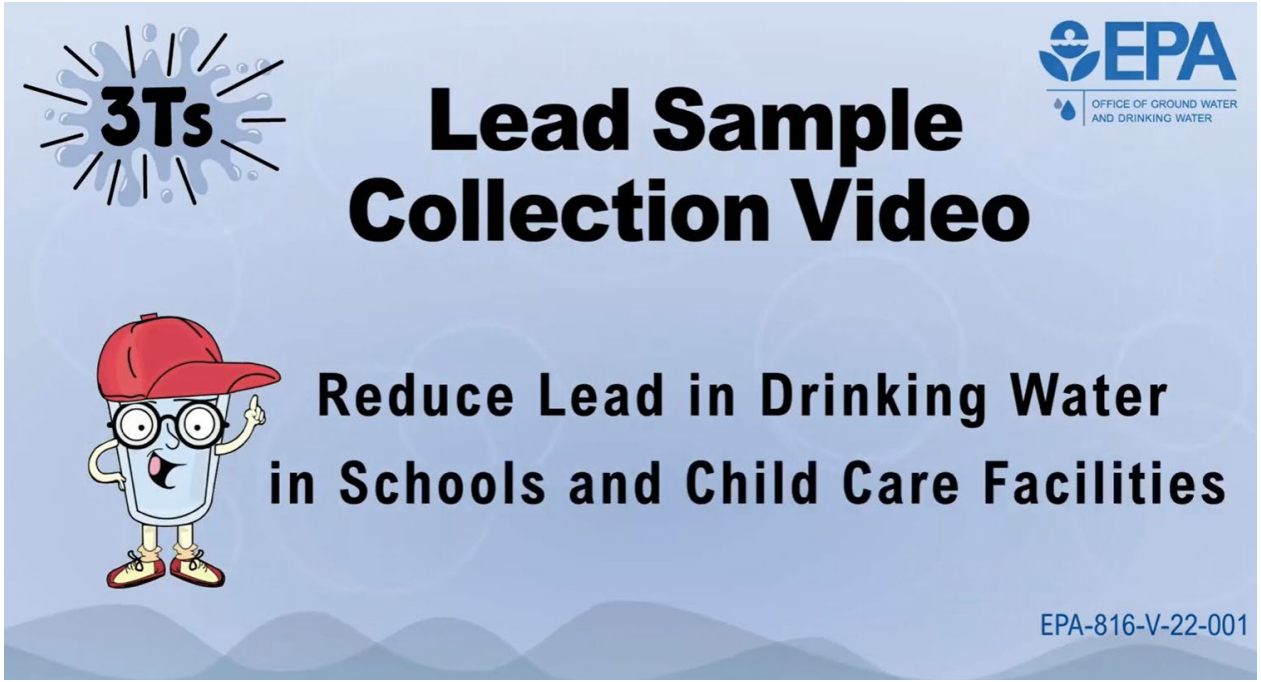
Published in August 2022

In development

1) Factsheet: Common Drinking Water Plumbing Materials
2) Factsheet: Interpreting Sample Results
3) Factsheet: Federal Agency Funding

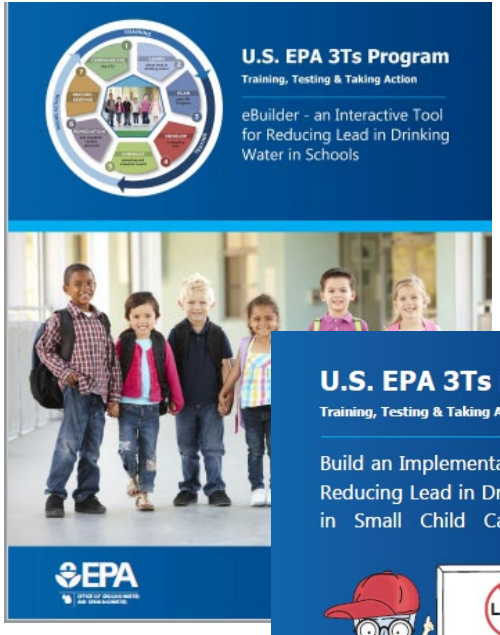
EPA 3Ts Webpage: https://www.epa.gov/safewater/3Ts

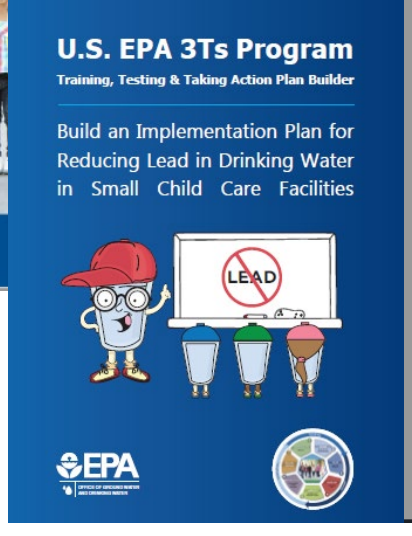
3Ts Lead Sample Collection Video



https://www.youtube.com/embed/1P5HfyRctIo

Plan eBuilders





First: Download the Plan Builder!

Before beginning, to ensure inputs are saved, download the Plan Builder as a PDF file and save it to your computer or shared network location. The Plan Builder is designed to be used with a desktop PDF viewer such as Adobe Acrobat or Adobe Reader.

INTRODUCTION
GETTING STARTED
COMMUNICATE
TRAINING
TESTING
TAKING ACTION
TAKE ACTION: TAKE IT WITH YOU!

Important: If you are a small child care facility, school, tribe, or another facility with 10 or fewer water outlets performing lead testing and/or remediation for drinking water, this 3Ts Plan Builder is for you. Use the 3Ts Program Plan Builder for Schools if your facility has more than 10 water outlets.

EPA's 3Ts Program approach for reducing lead in drinking water follows three key steps:

- Training child care staff to raise awareness of the 3Ts Program, the potential causes and health effects of lead in drinking water, and how to sample and test for lead.
- Testing for lead in drinking water in child care facilities to identify potential lead problems.
- Taking Action to reduce lead in drinking water through short-term and/or long-term measures.

How to Use the Plan Builder

This Plan Builder will walk you through five sections to create your 3Ts Program plan:

1. GETTING STARTED
2. COMMUNICATE
3. TRAINING
4. TESTING
5. TAKING ACTION

The Plan Builder was adapted from EPA's 3Ts for Reducing Lead in Drinking Water Manual, Toolkit, and associated documents (e.g., 3Ts Checklist). For full details on the 3Ts Program, including definitions of terminology (3Ts Manual Appendix A), refer to the 3Ts Toolkit at the following URL: https://www.epa.gov/ground-water-and-drinking-water/3ts-reducing-lead-drinking-water-toolkit.

U.S. EPA 3Ts Program
Training, Testing & Taking Action

Lead Sample Collection Field Guide
For Schools and Child Care Facilities

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Sample Field Guide

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Prepare the Sample Site

Schools or child care facilities should request, from the certified laboratory, the appropriate number of bottles and paperwork prior to sample collection.

Certified laboratories should send sampling bottles, labels, instructions, paperwork, and return shipping box. Determine how many sample containers you will use for each fixture, and make sure the laboratory has sent the appropriate number of containers. Leave the containers sealed until it is time to collect the samples. For more details – view the 2-Step Sampling at the Tap in Module 5 in the 3Ts Toolkit.

Collect

In this section, you will learn about the appropriate sampling techniques and best practices to obtain accurate results, as well as how to properly ship your sample to the laboratory for analysis. There are three potential sampling types that this guide covers (Refer to Modules 4 and 5 in the 3Ts Toolkit for more details on sample types):

- First-draw Samples
- Flush Samples
- Sequential Samples

Important Notes:

- **Collect all samples from cold water taps.** Although EPA encourages routine maintenance of hot water heaters, this guidance does not include sampling hot water outlets or hot water heaters, because hot water is not recommended for consumption (drinking/cooking). Refer to Module 6 under "Temperature Control" in Remediation and Establishing Routine Practices in the 3Ts Toolkit.
- **After collecting the samples, you will need to ship them to the laboratory in a timely manner** (typically within 2 weeks). Carefully follow any packing and shipping instructions the laboratory has sent. If no instructions were provided, please review the [Shipping Your Samples] section in this guide for additional directions.

First-draw Samples

First-draw samples are typically collected in the morning before the facility opens and before the fixtures have been used. Collect samples from the cold water tap.

Results

This section will cover the steps you can take after you receive the lead sample results from your selected laboratory. The steps include receiving and interpreting your results, taking action to address problem fixtures, and sharing the results with your school or child care community.

Receiving Results

The laboratory will provide you with an estimated time frame that you will receive the results.

- Use the 3Ts Sampling eTrackers to record your lead sample results for each fixture.

Interactive Tool: EPA 3Ts Sampling eTrackers

The 3Ts Sampling eTrackers were developed to assist schools and child care facilities to track and document sampling event information (i.e., inventory, results, actions). For WIIN grant recipients it also includes the date elements needed to report to your state. You can access the eTrackers here: 3Ts Sampling eTrackers.

Common Lead Concentration Units

- Use this table to convert units of measurement. Different units of measurements are often used between programs or documents.

Unit	Conversion
Parts per billion (ppb)	1 ppb = 1 µg/L = .001 ppm = .001 mg/L
Parts per million (ppm)	1 ppm = 1 mg/L = 1000 ppb = 1000 µg/L
Microgram per liter (µg/L)	1 µg/L = 1 ppb = .001 mg/L = .001 ppm
Milligram per liter (mg/L)	1 mg/L = 1 ppm = 1000 µg/L = 1000 ppb

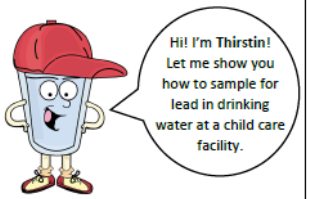
Interpreting Results

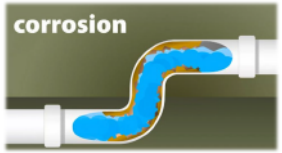
Once you receive your lead sample results, you will need to determine which fixtures or plumbing material need immediate, short term and/or permanent actions.

Results from one outlet should not be used to generalize the lead levels at other outlets in the facility nor to determine the overall quality of your drinking water throughout the building.

U.S. EPA 3Ts: Sample Collection Guide for Child Care Facilities

For more information on how to sample for lead, visit the in-depth video at: https://www.epa.gov/ground-water-and-drinking-water/3ts-reducing-lead-drinking-water#mod5.
Visit EPA's 3Ts Toolkit for more information on the modules referenced below at: www.epa.gov/safewater/3Ts.





Lead in drinking water most often results from corroded plumbing materials that contain lead.

Children are most susceptible to the effects of lead as their bodies are still developing.

Extra caution must be taken when using in infant formula.

If your child care facility operates out of a home or relies on its own well, call EPA's Safe Drinking Water Hotline at 1-800-426-4791 for help testing your water for lead.

1 Contact a Certified Laboratory

To find a list of certified drinking water labs, visit – www.epa.gov/dwlabcert or contact your state WIIN grant program.*

Go to Module 4 for a list of considerations when choosing a laboratory.

2 Identify Fixtures to Sample

Prioritize sampling fixtures that are actively used for cooking or drinking.

3 Label Containers

Develop a labeling system to track and label your sample containers.

Go to Module 4 for the factsheet: *Develop a Code System for Samples.*

4 Prepare

Post signs the night before to ensure the water is not used before you sample.

Water must be stagnant for at least 8 hours, but no more than 18 before sampling.

Gather the following materials:

- ✓ Pencil and notepad
- ✓ Sampling form
- ✓ Hand wipes
- ✓ Stopwatch
- ✓ Disposable plastic gloves
- ✓ Bottled water
- ✓ Sample containers
- ✓ Map of the plumbing system

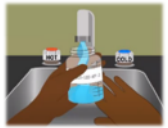
5 Conduct Sampling

Use cold water taps only.

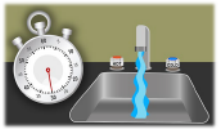
Take samples **before** the facility opens and **before** fixtures have been used.

For a first draw sample, do not run the water before collecting samples.

Place the container under the fixture and then open the faucet.



Fill the container to the top – careful not to overfill it.



For a flush sample, follow the same procedures, but use a stopwatch and let the water run steadily for 30 seconds, then fill the container.

6 Pack and Ship

Ensure that your samples have been properly labeled and that they are securely packed in the shipping container, according to the instructions from the lab.

Ship your samples as soon as possible.

7 Share Results

Share the testing results with your community, including parents, students, staff, and anyone else that might use the building.

Go to **Module 1** for EPA's customizable parent letter template.

8 Take Action

If there are elevated lead levels, take immediate action. Contact your state WIIN grant program* for help.

Consider the following actions:

- ✓ Posting a sign at the fixture
- ✓ Installing filters
- ✓ Implementing a routine flushing program
- ✓ Removing or replacing the fixtures

Go to **Module 6** to review remediation and establishing routine practices for more information.

Helpful Resources

For more details, review the 3Ts Sampling Field Guide and other EPA resources at www.epa.gov/safewater/3Ts.

***Schools and child care facilities may be eligible for funds to conduct lead testing and remediation through the Water Infrastructure Improvements for the Nation (WIIN) Act grant program. Contact your WIIN state program at: www.epa.gov/dwcapacity/wiin-2107-lead-testing-school-and-child-care-program-drinking-water-state-grant-program**

May Workshop Review & Recap

Ying Tan

May Workshop Recap

- Presenters: EPA, NC, MA, MI, OR, IL, PA, and MT
- Over 120 participants discussed and shared the grant program's:
  - Success stories,
  - Challenges, and
  - Best management practices
- Roundtable discussions highlighted communication and outreach, resource management, and other solution BMPs

May Workshop Outcomes

- Supports the EPA's FY 2022-2026 Strategic Plan where implementation under the awards made under this announcement will support Goal 5: Ensure Clean and Safe Water for All Communities. Objective 5.1: Ensure Safe Drinking Water and Reliable Water Infrastructure.
- Aligns with the Biden-Harris Lead Pipe and Paint Action Plan and reduce children's exposure to lead in drinking water via the development of regular lead testing and remediation programs.
- Provided evidence of success in program implementation & shared insights and concepts to move forward with program plans and provide BMPs to assist with current and/or future planning

May Workshop Outcomes (cont.)

- Common challenges highlighted include:
  - Lack of regulatory support
  - Lack of participation and limited overall engagement
  - Lack of funding for remediation
    - Recent change: BIL allows funding to cover compliance monitoring and reduction/remediation of lead
- Produced a BMPs document to carry forward and implement a successful program

EPA

Voluntary School and Child Care Lead Testing and Reduction Grant Program:

Best Management Practices for States

Introduction

EPA hosted a workshop on May 17th, 2022 to bring the oversight agencies participating in the program together to share the programs' success stories, challenges, and Best Management Practices (BMPs). BMPs provide effective and practicable means to implement the grant program and ultimately reduce lead in drinking water at schools and child care facilities. BMPs are illustrated in the state case studies across the country that are removing and minimizing sources of lead in drinking water. This document summarizes the best management practices learned from collaboration of states during that meeting.

Best Management Practices

Recipients of the Water Infrastructure Improvements for the Nation Act (WIIN) are required to use 3Ts guidance or an equivalent guidance that is equally as stringent. Before testing, schools and child care facilities need a plan to train staff and to react to results appropriately. The testing plan must be tailored and specific to the school or child care facility. This next section includes BMPs from the workshop survey, workshop presentations, and others identified during the workshop. The BMPs are organized by the 3Ts categories: communication, training, testing, and taking action.

BMP Document

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- Document overview/highlights
  - Consists of BMPs discussed in the workshop
  - Success stories based on the seven case studies and break out discussions
  - Ongoing challenges
- Intended to be a living document with new BMP strategies and data
  - Link to BMP document: https://www.epa.gov/dwcapacity/wiin-grant-voluntary-school-and-child-care-lead-testing-and-reduction-grant-program#training

Communication BMPs

- **Provide a tool that clearly communicates** all steps of the program
- **Maintaining a program-specific website** to ensure program information in one place
- Programs should have an **easy-to-access online enrollment form** that schools and child care providers can access easily
- **Engaging stakeholders and provider networks** in development of plans

LESSONS FROM ILLINOIS

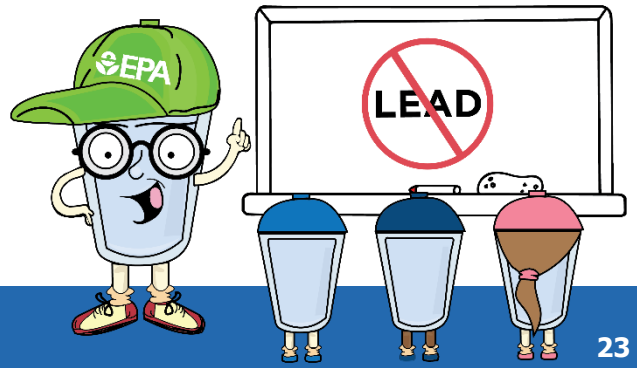
Illinois had a marketing effort to help them establish a brand. This included postcards, email campaigns, and social media.

Training BMPs

- Having **standardized training materials and templates** to ensure all staff are trained consistently.
- Creating and posting **instructional videos** online.
- **Holding free virtual and/or in-person informational events** to explain the program.
- **Providing onsite training and support.**
- **Providing resources for parents** about the lead testing program.

LESSONS FROM NORTH CAROLINA

When North Carolina first began their statewide program in 2020, they quickly realized they had to adjust how they approached training with the COVID-19 pandemic. They added a pre-enrollment webinar with a virtual Q&A session to minimize enrollment, sample collection, and shipping issues.



Testing BMPs

LESSONS FROM OREGON

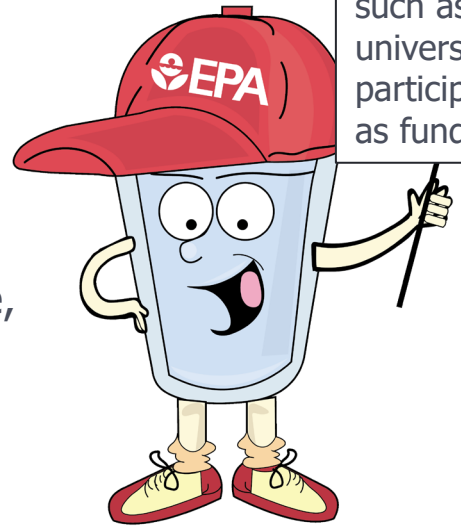
Oregon reimburses the costs of testing (including shipping and collection) as long as the tester provides the state with a complete reimbursement spreadsheet, invoices, lab reports, and a summary of the testing request.

- **Provide free testing and/or technical assistance** may increase participant enrollment and sample collection.
- **Provide reimbursement for testing costs** makes testing accessible for many facilities.
- **Provide on-site sample collection at the facility** is an alternative to sending free kits.
- **Spread out testing** to not overwhelm labs and minimize backups and delays.

Taking Action BMPs

- **Maintaining a system to track results and remediation actions** at both the state and facility level allows accurate records and actions.
- **Making lead testing results easy to access and understand**
- **Creating regulatory changes** at the state or local level requiring lead testing in schools to increase program involvement
- **Connecting providers to funding for remediation** is crucial for taking action. For example, EPA's document "Potential Funding Sources for Reducing Lead in Drinking Water in Schools and Child Care Facilities" summarizes potential funding sources to remediate lead and water quality related projects.

LESSONS FROM PENNSYLVANIA: Pennsylvania benefited from multiple partnerships such as nonprofits and a university to increase participation rates as well as funding source.



Poll Questions

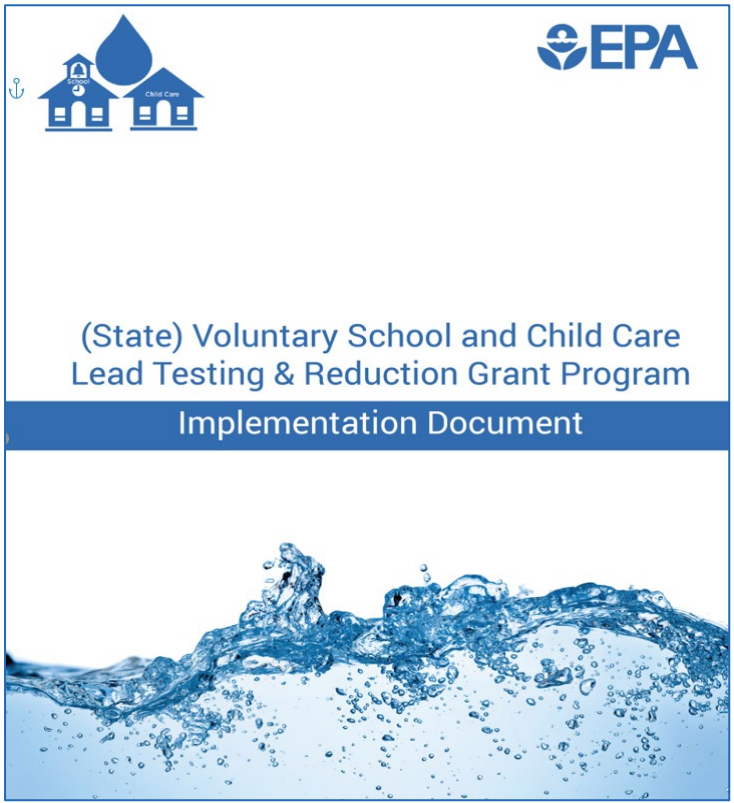
Round Table Discussion and Q&A Session

Break Out Room Topics

- **Room 1 – Communication and Outreach BMPs (Cadmus, NC, OR, PA, IL)**
  - *Ashley, Jennifer Redmon, Brian French, Brent Sailhamer, Caroline Pakenham*
  - E.g., Getting participants, communications to public, test results and taking actions communications, etc.
- **Room 2 – Resource Management BMPs (EPA, NC, IL, MA)**
  - *Cindy Mack, Melanie Napier, Brian Cox, Michael Celona*
  - E.g., Personnel/staffing, funding allocation, supply chain challenges, logistics on sampling errors, data management, etc.
- **Room 3 – Challenges and Solutions BMPs (EPA, NC, MT)**
  - *Ying Tan, Ed Norman, Gregory Montgomery*
  - E.g., Hinderances, lack of partnership, lead remediation concerns, etc.


Q&A Session

Updated Implementation Document for States – FY 2022



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DRAFT and Subject to Change

"**Lead Remediation** is the reduction of lead sources in drinking water through the replacement or new installations of plumbing and associated services that affect human consumption. This includes but is not limited to activities related to internal plumbing, faucets, water fountains, water filler stations, Point-of-Use (POU) devices, lead service lines, and other lead-free apparatus related to drinking water."