Part 2 of 3 - TESTING: Implementing a 3Ts program for Lead Testing in Drinking Water in Early Childhood Program Facilities

June 23, 2022 || 1:00 – 2:30 PM ET

Hosted by the US EPA Office of Water, Office of Ground Water and Drinking Water
Microsoft Teams Orientation

Please turn-off your camera and mic.

Type in your questions into the [CHAT] and press enter.
3-Part Joint Training Series

June 14, 2022 (1:00 pm – 2:30 pm ET)
• **Part 1 -- Training**: Implementing a 3Ts program for Lead Testing in Drinking Water in Child Care and Early Childhood Facilities.

June 23, 2022 (1:00 pm – 2:30 pm ET)
• **Part 2 -- Testing**: Implementing a 3Ts program for Collecting Lead Samples in Drinking Water in Child Care and Early Childhood Facilities.

July 14, 2022 (1:00 pm – 2:30 pm ET)
• **Part 3 -- Taking Action**: Implementing a 3Ts program for Reducing Lead Exposure in Drinking Water in Child Care and Early Childhood Facilities.
Agenda – Part 2

**Testing:** Implementing a 3Ts program for Collecting Lead Samples in Drinking Water in Child Care and Early Childhood Facilities

- EPA Program and Funding (15 min.)
- HHS-Office of Head Start Program and Funding (10 min.)
- HHS-Office of Child Care Program and Funding (10 min.)
- Case Study – Elevate Energy Lead Testing Program in Chicago, IL (15 min.)
- Testing for lead in drinking water: Prepare – Collect - Results (30 min.)
- Q&A (Use CHAT and enter your questions. Presenters will respond as time permits.)
**Presenters: EPA and HHS**

**Cindy Mack**
Environmental Health Scientist  
Program Manager, 3Ts on Reducing Lead Levels in Drinking Water in Schools and Child Care Facilities  
U.S. Environmental Protection Agency (EPA)/Office of Water/Office of Ground Water and Drinking Water, Washington, DC

**Ying Tan**
Physical Scientist  
Program Lead, EPA Water Infrastructure Improvements for the Nation Act (WIIN) Grant program Lead  
U.S. Environmental Protection Agency (EPA)/Office of Water/Office of Ground Water and Drinking Water, Washington, DC

**Dr. Ellen Wheatley**
Deputy Director of the Office of Child Care  
U.S. Health and Human Services/Administration for Children and Families/Office of Child Care, Washington, DC

**Dr. Marco Beltran**
Senior Head Start Program Specialist  
U.S. Health and Human Services/Administration for Children and Families/Office of Head Start, Washington, DC
Presenters: Illinois Lead Care Program

Brian W. Cox, P.E.
Manager
Plumbing and Water Quality Program
Illinois Department of Public Health (IDPH)
Springfield, IL
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Caroline Pakenham
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Elevate administers LeadCare Illinois with IDPH
Chicago, IL
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Justice 40 and Water Infrastructure

• The White House Council on Environmental Quality (CEQ) and the White House Environmental Justice Interagency Council (IAC) are collectively leading environmental justice efforts across the Federal government, which includes Justice 40.

• EPA is actively supporting the Justice40 Initiative from a whole-of-government approach to deliver:
  • At least **40% of the overall benefits from certain federal investments to disadvantaged communities.**
    ➢ The goal of 40% is **overarching for the entire federal government, not specific to EPA**
    ➢ It’s a government-wide initiative looking at federal investments in the areas of:
      ▪ clean energy and energy efficiency
      ▪ clean transit
      ▪ affordable and sustainable housing
      ▪ training and workforce development
      ▪ the remediation and reduction of legacy pollution
      ▪ the development of critical clean water infrastructure
“Every person in the United States has the right to clean air, clean water, and a healthier life no matter how much money they have in their pockets, the color of their skin or their zip code.”

EPA ADMIN. MICHAEL REGAN

THIS IS AN UNPRECEDENTED OPPORTUNITY TO SERVE OVERBURDENED AND VULNERABLE COMMUNITIES ACROSS THE UNITED STATES.

WE VALUE YOUR FEEDBACK AND WANT TO MAKE SURE THAT OUR STRATEGIC PLAN MAKES SENSE, SHOWS ACCOUNTABILITY, AND ACHIEVES CLEAR IMPROVEMENTS ON THE GROUND.
3Ts for Reducing Lead in Drinking Water in Schools and Child Care Facilities

Memorandum of Understanding - Partners -

U.S. Environmental Protection Agency, Office of Water
1. U.S. Depart. of Agriculture, Rural Development Agency
2. U.S. Depart. of Education
4. U.S. Depart. of Health and Human Services, Centers for Disease Control and Prevention
5. U.S. Depart. of Health and Human Services, Indian Health Service
6. U.S. Depart. of the Interior, Bureau of Indian Affairs and Bureau of Indian Education
7. American Water Works Association
8. American School Health Association
9. Association of Metropolitan Water Agencies
10. Association of State Drinking Water Administrators
11. Inter Tribal Council of Arizona, Inc.
12. National Association of Water Companies
13. National Rural Water Association
14. Rural Community Assistance Partnership
15. United South and Eastern Tribes
WHY IS THIS IMPORTANT?

There is no safe blood lead level for children.

- Impaired Growth
- Reduced Attention Span
- Hyperactivity
- Learning Disabilities
What are the Sources of Lead in Drinking Water?

Even when water entering a facility meets all federal and state public health standards for lead, old (typically, before 1986) plumbing materials may contribute to elevated levels of lead in their drinking water.
How is Lead Regulated in Drinking Water?

- EPA does not have the authority to regulate schools and child care facilities, unless it is a PWS.
- EPA provides funding and the 3Ts program to voluntarily test and remediate lead in drinking water in schools and child care facilities.

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

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

1991 - The Lead and Copper Rule: A regulation by EPA to control the amount of lead and copper in water supplied by public water systems.

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

2011 - State Laws: Some states, tribes and local jurisdictions have established regulations for schools and child care facilities.

The Lead and Copper Rule Revisions (2021): For the first time, requiring PWSs to test schools and child care facilities in their customer base.
3Ts for Reducing Lead in Drinking Water in Schools and Child Care Facilities

TRAINING – TESTING – TAKING ACTION

**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.

EPA 3Ts Webpage: [https://www.epa.gov/safewater/3Ts](https://www.epa.gov/safewater/3Ts)
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 – Inventory to Actions
6) Toolkit (Manual) in Spanish

Coming this summer!
1) Sampling Field Guide & video (7 mins.)
2) Sampling Poster for Child Care Facilities
3) Plan eBuilders
4) Factsheet: Interpreting Sample Results
5) Factsheet: Common Drinking Water Plumbing Materials (Lead vs. non-lead)
6) Factsheet: Federal Agency Funding

EPA 3Ts Webpage: https://www.epa.gov/safewater/3Ts
WHY should you use this Sampling eTracker?

- For Recordkeeping: This tool assures results with any level of lead districts, or others that may require.
- For Reporting: This tool contains facility or small school is receiving HOW do I use this Sampling?

This is a PDF file with fields to fill auto-populated and does not need to be copied. You can print out the form. You will then fill in the Print dialog box. In this file, Sampling eTracker to electrically WIIN Grant Recipients to auto-populate.

Instructons for Users: For WIIN grant recipients, this is an asterisk.

<table>
<thead>
<tr>
<th>Form</th>
<th>Instructions</th>
<th>Notes</th>
</tr>
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<tbody>
<tr>
<td>Table 1. Testing Table</td>
<td>All Fields</td>
<td>Complete Form</td>
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Potential Funding Sources for Reducing Lead in Drinking Water in Schools and Child Care Facilities

- Assist schools and child care facilities identify potential funding sources for lead testing and remediation plus water quality-related projects
- Information on national foundations, corporations, state, and federal agencies that have a strong commitment to support school and child care improvement initiatives
- This guide includes:
  - 4 federal programs
  - 79 state programs
  - 115 foundations/companies providing funding opportunities

https://www.epa.gov/dwcapacity/funding-sources-schools-and-child-care-facilities
Water Infrastructure Improvements for the Nation Act (WIIN Act) Grants - SDWA 1464(d)

Overview:
The 2016 WIIN Act addresses, supports, and improves America's drinking water infrastructure and promote public health and the protection of the environment. Each grant program has a tribal and state component.

SDWA 1464(d) | Lead Testing in School and Child Care Program Drinking Water: Voluntary testing for lead contamination in drinking water at schools and child care programs.
Grant Program Priority Areas

- Disadvantaged, low-income, and underserved communities (lack household water or wastewater services)

- Small communities (population of less than 10,000 individuals and lacks the capacity to incur debt sufficient to finance a project)

- Schools with at least 50% of the children receiving free and reduced lunch and Head Start facilities

- Older facilities that are more likely to contain lead plumbing

- Tribal elementary and child care facilities that primarily care for children six years and under

- Tribal communities and Indian Nations
Bipartisan Infrastructure Law (BIL)

• Also known as the Infrastructure Investments and Jobs Act,
• Signed by President Biden on November 15, 2021
• Historic investment in key programs and initiatives implemented by the U.S. EPA to build safer, healthier, cleaner communities.
• Includes $50 billion to EPA to strengthen the nation’s drinking water and wastewater systems – the single largest investment in water that the federal government has ever made.
• Approximately $30 billion of this funding through the existing Drinking Water State Revolving Fund programs.
Voluntary School and Child Care Lead Testing and Reduction Grant Program

Expanded the program to allow funding for:

- **Lead remediation** (in addition to testing)
- Increases authorization of funding appropriations to approximately ~$200 million for the coming five years of the program
What type of lead remediation efforts does the grant support?

Use grant to replace, remove, install:

• internal plumbing
• faucets
• water fountains
• water filler stations
• Point-of-Use (POU) devices (e.g., NSF/ANSI certified filters)
• lead service lines
• other lead apparatus related to drinking water
Voluntary School and Child Care Lead Testing and Reduction Grant Program

- **Purpose of Grant**
  - Reduce children’s exposure to lead in drinking water
  - Utilizing EPA’s 3Ts (Training, Testing, and Taking Action) model or another model no less stringent to establish best practices

- **Who Receives Funding**
  - States & Territories that have identified participation through a call for a *Notice of Intent to Participate*

- **Total Funds Allocated**
  - ~$43 million in FY 2019
  - ~$26 million in FY 2020
  - ~$26.5 million in FY 2021
  - ~$36 million in FY 2022 (estimated)
Who is Eligible to Receive Grant Funding?

- All 50 states and DC, Puerto Rico, US Virgin Islands, and American Samoa
- Public/charter schools and **child care facilities**
  - Defined by the state
- Disadvantaged communities prioritization
How to Access the U.S. EPA Grant Funding?

• EPA → State → Child Care and Early Childhood facilities

• Program participation varies with state administrations
  • Voluntary online sign-ups (e.g., MN – sign up form)
    https://120water.formstack.com/forms/minnesota_lead_in_schools_testing_program_application

• Contact your state agencies administering the program on participation and information. State agency contacts are available at the following link:
  • https://www.epa.gov/dwcapacity/wiin-2107-lead-testing-school-and-child-care-program-drinking-water-state-grant-program

www.epa.gov/safewater/grants
Recommendation 1

- The OHS director should require Head Start programs to document that water provided to children has been tested for lead.

Recommendation 2

- The Assistant Secretary for the Administration for Children and Families should direct OCC and OHS to develop an agreement with the EPA on their roles and responsibilities in implementing a memorandum of understanding on reducing lead levels in drinking water in schools and childcare facilities.
Standards Used for Lead Testing Findings

1302.47(b)(1)(ix)

(b) A program must develop and implement a system of management...that includes policies and practices to ensure all facilities, equipment and materials, background checks, safety training, safety and hygiene practices and administrative safety procedures are adequate to ensure child safety. This system must ensure:

(1) **Facilities.** All facilities where children are served...are, at a minimum:

(ix) Kept safe through an ongoing system of preventative maintenance.

1302.47(b)(1)(iii)

(b) A program must develop and implement a system of management...that includes policies and practices to ensure all facilities, equipment and materials, background checks, safety training, safety and hygiene practices and administrative safety procedures are adequate to ensure child safety. This system must ensure:

(1) **Facilities.** All facilities where children are served...are, at a minimum:

(iii) Free from pollutants, hazards and toxins that are accessible to children and could endanger children’s safety.
Funding Guidance

- **EPA-State-Child Care and Early Childhood facilities**
  - Program participation varies with state administrations voluntary online sign-ups (e.g., MN – sign up form) [https://120water.formstack.com/forms/minnesota_lead_in_schools_testing_program_application](https://120water.formstack.com/forms/minnesota_lead_in_schools_testing_program_application)
  - Contact your state agencies administrating the program on participation and information. State agency contacts are available at the following link: [https://www.epa.gov/dwcapacity/wiin-2107-lead-testing-school-and-child-care-program-drinking-water-state-grant-program](https://www.epa.gov/dwcapacity/wiin-2107-lead-testing-school-and-child-care-program-drinking-water-state-grant-program)

- **Head Start funds**

- **Program Improvement (One-Time) Requests**
The Office of Child Care

Ellen C. Wheatley, Ph.D.
Deputy Director
OCC is authorized through the Child Care and Development Block Grant (CCDBG) Act. Block grants provide flexibility to OCC’s 321 state, territory, and tribal lead agency in terms of designing and implementing programs within specific guidelines.
WHO DOES CCDF SERVE?

NUMBER SERVED
Approximately 1.4 million children and 857,700 families per month received child care assistance in FY 2019.

Serves
1 in 7 federally eligible children

Child Care Providers
231,723
Activities to improve the quality of child care, (658G (b)) – Lead Agencies must spend 9%, plus an additional 3% for infants and toddlers, of their CCDF allocation on quality improvement activities. CCDBG requires that quality funds are spend on at least 1 of 10 specified quality activities, one of which is **Licensing and health and safety requirements**
• First contact your State WIIN program
• The State defines the criteria for allocating funds, look for other funding sources, one of which may be your State Child Care Office
• This is a **State Decision** – They may have obligated their quality funds in other directions, but at least two states are supporting water testing.
• Vermont requires schools and licensed or registered child care providers to test their drinking and cooking water for lead.
• The State provides templates for communication with parents and staff about testing and test results.
• LeadCare Illinois:
  – Empowers child care providers to address lead in drinking water and comply with Illinois Department of Children and Family Services testing requirements
  – Offers free lead safety trainings
  – Supplies child care providers with a free test kit to sample drinking and cooking water sources
  – Provides education to help child care providers minimize or reduce the source of lead, if present.
IMPORTANT WEBSITES FOR TESTING DRINKING WATER IN CHILD CARE


- https://info.childcareaware.org/blog/minimizing-lead-exposure-in-child-care
IMPORTANT WEBSITES FOR TESTING DRINKING WATER IN CHILD CARE


Case-Study
Elevate Lead Testing Program in Chicago, IL

Presenters

Brian Cox and Caroline Pakenham
Lead in Water Testing at Child Care Facilities in Illinois

Presented by Elevate and the Illinois Department of Public Health
Overview

- Illinois background
- LeadCare Illinois program overview
- Education and resources for testing, mitigation, and communicating with parents
- Lead test results
- Mitigation results
Fast Facts About Child Care Providers in Illinois

- There are 10,000 licensed providers in Illinois
- 96% of child care owners/directors are women
- 50% of administrators/owners are providers of color
- 70% of licensed facilities are home-based
Illinois Requirements for Child Care Providers

- Test all drinking and cooking water sources
- Post results and share with DCFS
- Retest until lead levels below 2.01ppb
- Develop a mitigation plan and share with DCFS and parents
- Implement immediate actions if results $\geq 2.01$ppb
What Is LeadCare Illinois?

LeadCare Illinois is a free lead in water testing and education program for licensed child care providers in Illinois.
Program Offerings

Training

Testing

Support
Testing Resources

- Free lead safety training
- Call center support
- Free testing supplies and lab analysis
- Checklist and instructional booklet
- Educational videos
Locations to Test

- Kitchen Sink
- Restroom Sink
- Classroom Sink
- Water Fountain
- Water Dispenser
- Ice Maker

- Any cooking or drinking water source
- Fixture inventory
- Fixture photo guide
Dear Victoria,

We greatly appreciate the time and effort you’ve put into testing your facility’s water for lead. One or more of your results showed the presence of lead at or above the DCFS action level of 2.01 ppb.

Since lead has been detected at or above 2.01 ppb, there are DCFS requirements your facility will need to meet. Click the button below to review your test results and learn about the immediate and long-term actions you will need to take at the fixtures where lead is present. You’ll also find guidance to help communicate your results with parents and staff.

Access Your Test Results

LeadCare Illinois
info@LeadCareIllinois.org
312-360-7074

This email was sent by: Elevate Energy
322 E. Green Street, Suite 500
Chicago, IL 60607 United States
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To unsubscribe from LeadCare Illinois emails, please click here.
Management Approach

Next Steps

**Take immediate action.** It's important to take immediate action at fixtures with lead levels at or above 2.01 ppb. Visit the [Immediate Mitigation Strategies page](#) to see what actions you can take today.

**Notify parents, staff, and DCFS.** You are required to post your test results in a visible location in your facility for parents and staff to see. Download the [notification template](#) to communicate your results and the actions you have taken to ensure a safe water supply. We encourage you to share these results via email, mail, or on your website. Licensing standards also require you to submit your test results to your DCFS licensing representative within 120 days of receiving them.

**Develop a mitigation plan.** Once you complete both steps above, you will need to develop a mitigation plan that outlines the long-term mitigation strategies you will implement to reduce the level of lead to below 2.01 ppb. Remember, you are required to submit your selected mitigation plan to your DCFS licensing representative within 120 days of receiving your test results and share it with parents. We'll send you an email within the next day with more detailed instructions on how to develop a mitigation plan and how to retest your water once your mitigation actions are complete. In the meantime, you can learn more about developing a mitigation plan [here](#).

**Retest your water.** Once you have implemented a long-term mitigation plan, you will need to retest each fixture that indicated lead is present at least two additional times until the levels are below 2.01 ppb. Your first retest must occur within 6 months of taking long-term action and your second retest within a year. Learn more about these requirements on our [Retesting page](#).
Mitigation Support

- Summary of required next steps and options
- One-on-one conversation with staff
- Mitigation plan template
- Free retesting supplies
- Connection to resources (if available)
Visit LeadCareIllinois.org/notification to use the following templates:

• Notification 1: Your Facility Will Test Its Drinking Water for Lead
• Notification 2a: Communicate Your Test Results (All Samples Below 2.01 ppb)
• Notification 2b: Communicate Your Test Results (Lead Present at or Above 2.01 ppb)
• Notification 3: Communicate Your Mitigation Plan
• Notification 4: Communicate Your Follow-Up Test Results
Provider Test Results

- 42% of providers have at least one sample at or above 2.01ppb
- Of those providers with lead:
  - 3% had a sample >50ppb
  - 20% between 10ppb – 50ppb
  - 25% had lead in more than 50% of samples
Common Mitigation Strategies

<table>
<thead>
<tr>
<th>Immediate</th>
<th>Long-term</th>
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</thead>
<tbody>
<tr>
<td>1. Do Not Drink or Handwashing Only Signage</td>
<td>1. Fixture Replacement</td>
</tr>
<tr>
<td>2. Bottled Water</td>
<td>2. Long-term Filter Strategy</td>
</tr>
<tr>
<td>3. Temporarily Remove Fixture from Service</td>
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<tr>
<td>4. Point of Use Filter</td>
<td></td>
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<tr>
<td>5. Manual Flushing</td>
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</table>
“Thank you for explaining how to reduce lead levels! No one has explained what to actually do about the lead in our water before.”

– Shelley, child care provider in Geneseo, IL
Questions?

Contact Information

• LeadCareIllinois.org
• info@LeadCareIllinois.org
• 312.300.7074
Hi! My name is Thirstin.
Let’s look at the 3Ts Sample Collection Video!
Before collecting samples, build your plan with the eBuilder for:

1. Communicating (e.g., methods and frequency to communicate results and actions to parents and staff);
2. Training (e.g., who and how personnel will be trained);
3. Testing (e.g., prioritize outlets for sampling and identify the type of lead samples to collect); and
4. Taking Action (e.g., identify the type of short-term and/or long-term measures to take if lead is detected).

Transparency and communication are key to developing a successful program for reducing lead in drinking water in child care and early childhood facilities. Use the 3Ts program resources, including step-by-step instructions and interactive tools, to create your plan.
Your public water system/utility is a critical partner:

− May provide free lead testing to schools and child care facilities
− Offer technical guidance
− Help develop sampling plans or plumbing profiles
− Assist with sample collection and laboratory analysis
− Support you in communicating lead sample results to the community
− Help interpret results and determine potential lead sources

• For more information:

  − Lead and Copper Rule - https://www.epa.gov/ground-water-and-drinking-water/final-revisions-lead-and-copper-rule
3Ts Prepare – The Program Remediation Trigger (PRT)
When should you take action to reduce lead levels in your drinking water?

Benchmarks
There are many benchmarks for determining when to take action to reduce lead exposure in drinking water.

<table>
<thead>
<tr>
<th>Amount (ppb)</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>EPA MCLG for public water systems</td>
</tr>
<tr>
<td>1</td>
<td>American Academy of Pediatrics</td>
</tr>
<tr>
<td>5</td>
<td>Bottled Water Standard</td>
</tr>
<tr>
<td>10</td>
<td>World Health Organization Provisional Guidance</td>
</tr>
</tbody>
</table>

All State/Tribal Consortia/Territory WIIN grant programs have established a PRT. State agency contacts are available at the following link:
https://www.epa.gov/dwcapacity/wiin-2107-lead-testing-school-and-child-care-program-drinking-water-state-grant-program
3Ts Prepare – Prioritizing

Sample all fixtures used for human consumption

Factors to consider when selecting and prioritizing sampling locations:

- **Oldest known fixtures** - these are more likely to contain lead (especially those installed prior to the Lead Ban Act of 1986);
- **Outlets used by children under the age of 6 or pregnant women**
  - e.g., drinking fountains, nurse’s office, early childhood education classroom, kitchen, teachers’ lounges;
- **Areas with known service lines or lead pipes**;
- **Areas with corroded plumbing**; and
- **Frequency of use**. The longer the water remains in contact with the lead plumbing material, the potential increases for lead to leach into the water.

For more information on prioritizing sampling site locations, refer to Module 4 in the 3Ts Toolkit and answer the Plumbing Profile Questionnaire.
3Ts Prepare – Select Certified Lab

• Use a laboratory certified by the state or EPA for testing lead in drinking water.
  – Validated by EPA or the state to use appropriate analytical techniques
  – find a list of certified labs - [https://www.epa.gov/dwlabcert](https://www.epa.gov/dwlabcert)
  – List of considerations when choosing a lab - [Module 4 in the 3Ts Manual](#)

• Certified labs provide:
  – sampling bottles, labels, relevant paperwork, and specific instructions
  – some may offer to send qualified individuals to collect the samples
  – Many PWSs are certified labs and may provide free lead testing to child care facilities
3Ts Prepare – Develop Coding and Labeling System

- Create a coding & labeling system that will allow each unique outlet to be identified by location, type, and other relevant characteristics (e.g., room number, floor, etc).

How Do I Label My Sample Locations?

Room Number-Outlet-Sample Type-Sample Number

N1-K-First Draw-1

Nursery (N), Kitchen (K), First draw sample
U.S. EPA

3Ts Collect: Water Samples To Test For Lead

Presenter: Ying Tan
3Ts Collect – 2-Steps

- Use a **2-steps sampling** procedure
  - 1\textsuperscript{st} (primary) follow by a flush sample
- Identify if there is lead in the fixture (e.g., faucet, fixture, or water fountain) or behind the wall (e.g., in the interior plumbing)

**Step 1**
**250-mL First Draw Sample**
Take a 250mL first draw sample at all fixtures used for consumption to identify potential lead in the fixture.

**Step 2**
**250-mL Flush Sample**
If the result of Step 1 is high, take a 30-second flush sample to identify lead in the plumbing behind the fixture.
3Ts Collect - Sequential Sample Collection

- 1st sample
  - Faucet + aerator + plumbing
- Flush sample (2nd sample)
  - Plumbing
- Flush sample (3rd sample)
  - Plumbing
3Ts Collect - Volume Size vs Plumbing Location

Source: Triantafyllidou et al., 2021
3Ts Collect – Water Flow

- Smooth flow out of fixture
- Not splashing
- Capturing all water flowing out during collection
- Be familiar with the flow rate of the fixtures before collecting samples
3Ts - Schedule and Collect

There should be no water usage at the facility before sampling.

- The water should stagnate in the pipes, unused for 8 to 18 hours before a sample is collected
  - Normal operation schedule
  - Holidays and vacation

- When identifying dates and times for taking samples, schedule sample collection *before* the facility opens and *before* any water is used
3Ts - Testing Laboratory and Roles

- Select state/EPA certified approved testing laboratories
  - Select primary and backup labs

- Laboratory roles
  - Personnel for sample collection
  - Testing supplies
    - Sampling bottles (wide mouth)
    - Chain-of-custody form
    - Shipping procedures
    - Shipping labels
U.S. EPA 3Ts: Lead Sample Collection Guide for Child Care Facilities

For more information on how to sample for lead, visit the in-depth video at: https://www.youtube.com/watch?v=PF+y68Ew6E.
Visit EPA’s 3Ts Toolkit for more information on the modules referenced below at: www.epa.gov/safewater/3Ts.

1. Contact a Certified Laboratory
To find a list of certified drinking water labs, visit – www.epa.gov/advance or contact your state WIN 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.

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

5. Conduct Sampling
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.

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.

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

8. Take Action
Consider the following actions:
- Posting a sign at the fixture
- Installing filters
- Implementing a routine flushing program
- Removing or replacing the fixtures

Gather the following materials:
- Pencil and notepad
- Sampling form
- Hand wipes
- Stopwatch
- Disposable plastic gloves

Bottled water
Sample containers
Map of the plumbing system

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 (WIN) Act grant program. Contact your WIN state program at: www.epa.gov/regions/wes-21071-leprowaducational-materials-and-child-care-program-drinking-water-state-grant-program.
3Ts Collect – Reminders!

- **There is no safe blood lead level in children.** Children are most susceptible to the effects of lead because their bodies are still developing; therefore, they tend to absorb more lead from any source, including drinking water, than adults.

- **Collect samples in a 250 ml container** or container provided by a certified lab.

- **Collect cold water**

- **A sample test is a snapshot of the lead level taken at the time it was collected.** Results from one fixture cannot characterize the entire building.

- **The best way to know if there is lead in drinking water is to test for it.** Regularly schedule testing and routine maintenance are essential to reducing lead in drinking water.
3Ts Results – What to do?

• Make sure you know your 3Ts Program Remediation Trigger (PRT) or level of concern before you receive the lead sample results.
  ✓ Contact your appropriate state agency and discuss your state’s requirements.

• Review your plan (which you prepared before sampling) to determine the action(s) you will take when lead is detected.
  ✓ Determine which fixtures or plumbing material need immediate (typically within 24 hours), short term and/or permanent actions
  ✓ The 3Ts program recommends taking immediate action for sample results that exceed the PRT.
U.S. EPA Helpful Resources

This builds on EPA’s continued efforts to provide proactive steps to protect children’s health. Specific to lead testing and water quality, EPA develops tools and materials for schools and child care facilities to use.

Testing

- 3Ts Lead Sample Collection Field Guide For Schools and Child Care Facilities; 3Ts Lead Sample Collection Video for Schools and Child Care Facilities; 3Ts Lead Sample Collection Guide For Child Care Facilities: [https://www.epa.gov/ground-water-and-drinking-water/3ts-reducing-lead-drinking-water](https://www.epa.gov/ground-water-and-drinking-water/3ts-reducing-lead-drinking-water) (July 31, 2022)
- 3Ts Sampling eTrackers: [https://www.epa.gov/ground-water-and-drinking-water/3ts-reducing-lead-drinking-water#mod7](https://www.epa.gov/ground-water-and-drinking-water/3ts-reducing-lead-drinking-water#mod7)
- List of EPA Certified Labs: [https://www.epa.gov/dwlabcert/contact-information-certification-programs-and-certified-laboratories-drinking-water](https://www.epa.gov/dwlabcert/contact-information-certification-programs-and-certified-laboratories-drinking-water)
- EPA’s Website on Certification of Laboratories: [https://www.epa.gov/dwlabcert](https://www.epa.gov/dwlabcert)
- EPA’s National Accredited Laboratory: [https://www.epa.gov/lead/national-lead-laboratory-accreditation-program-list](https://www.epa.gov/lead/national-lead-laboratory-accreditation-program-list)
- 3Ts Revised Manual for Reducing Lead in Drinking Water in Schools and Child Care Facilities: [https://nepis.epa.gov/Exe/ZyPDF.cgi/P100VLI2.PDF?Dockey=P100VLI2.PDF](https://nepis.epa.gov/Exe/ZyPDF.cgi/P100VLI2.PDF?Dockey=P100VLI2.PDF)
- 3Ts Toolkit: [https://www.epa.gov/ground-water-and-drinking-water/3ts-reducing-lead-drinking-water](https://www.epa.gov/ground-water-and-drinking-water/3ts-reducing-lead-drinking-water)
This builds on EPA’s continued efforts to provide proactive steps to protect children’s health. Specific to lead testing and water quality, EPA develops tools and materials for schools and child care facilities to use.

**Funding**

- EPA's Water Infrastructure Improvements for the Nation Act Lead Testing in School and Child Care Program Grant: [http://www.epa.gov/safewater/grants](http://www.epa.gov/safewater/grants)

- Lead Testing in School and Child Care Program Drinking Water Grant Contact Information: [https://www.epa.gov/dwcapacity/wiin-2107-lead-testing-school-and-child-care-program-drinking-water-state-grant-program](https://www.epa.gov/dwcapacity/wiin-2107-lead-testing-school-and-child-care-program-drinking-water-state-grant-program)

**Planning**


- EPA’s Information on Maintaining or Restoring Water Quality in Buildings with Low or No Use: [https://www.epa.gov/coronavirus/information-maintaining-or-restoring-water-quality-buildings-low-or-no-use](https://www.epa.gov/coronavirus/information-maintaining-or-restoring-water-quality-buildings-low-or-no-use)


- EPA’s Extended Closure Factsheets for Child Care Facilities and Schools: [https://www.epa.gov/ground-water-and-drinking-water/audience-factsheets](https://www.epa.gov/ground-water-and-drinking-water/audience-factsheets)
Questions and Exit Poll

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Get the Lead Out!

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