



U.S. EPA 3Ts Program

Training, Testing & Taking Action

Plan eBuilder – Interactive Tool to Build an Implementation Plan for Testing and Reducing Lead in Drinking Water in Schools





Disclaimer

This guide is a product of the voluntary program of the U.S. Environmental Protection Agency (EPA) 3Ts for Reducing Lead in Drinking Water in Schools and Child Care Facilities - Training, Testing, and Taking Action Approach.

EPA's 3Ts program is not a federal requirement under the National Primary Drinking Water Regulations. Therefore, this guide is not intended for use by public water systems that are subject to compliance under the Lead and Copper Rule Revisions or other National Primary Drinking Water Regulations under the Safe Drinking Water Act (SDWA).

The 3Ts program approach is voluntary and provides tools and informational materials for schools, child care facilities, states, territories, and Native American Tribes to implement lead testing programs in drinking water, at their discretion.

This document does contain overviews of federal regulatory requirements concerning lead in drinking water that apply to public water systems. EPA has made every effort to ensure the accuracy of the discussion in this guidance. In the event of a conflict between the discussion in this document and any statute or regulation, this document would not be controlling.

The general description in this document does not substitute for any law or regulation. Many states (or tribes) and localities have different, more stringent requirements than EPA's, some of which may apply to schools and child care facilities even if they are not a public water system. Therefore, schools and child care facilities should not rely solely on this guidance for that compliance information.

This document does not impose legally binding requirements on EPA, states, or the regulated community.

This document does not confer legal rights or impose legal obligations upon any member of the public.

First Step: Download the Plan Builder!

Before beginning, to ensure user inputs are saved, please 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!

Why Use the 3Ts Plan Builder?

If you are a school, child care facility, tribe, or other group performing lead testing and/or remediation in drinking water, the 3Ts Plan Builder is for you.

Important: The 3Ts Plan Builder is a tool to help schools create a plan (consisting of schedules, getting started tips, communication, training, testing and taking action) to implement a program for reducing lead in drinking water. For child care facilities, use the “[Build a Plan for Reducing Lead in Drinking Water at Small Child Care Facilities](#)”.

- This document is designed to be used by the person(s) responsible for leading the 3Ts Program. This is often the director, principal, head of building maintenance/custodial services, or another leadership team member, or in some cases, it may be the State on behalf of the school or child care facility.

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

- **Training** school and 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 schools and child care facilities to identify potential lead problems.
- **Taking Action** to reduce lead in drinking water through short-term and/or long-term measures.

The Plan Builder was adapted from EPA's [3Ts for Reducing Lead in Drinking Water in Schools and Child Care Facilities 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>. Additional documents are hyperlinked throughout the Plan Builder for your reference as you work through the document.

Funding for Reducing Lead in Schools and Child Cares

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 state program at <https://www.epa.gov/dwcap/acity/wiin-2107-lead-testing-school-and-child-care-program-drinking-water-state-grant-program>.

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How to Use the Plan Builder

The 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](#)

Instructions for Printing the Plan Builder

This entire document is intended to be printed for easy reference to your lead reduction implementation plan. Complete the following steps to print all plans, including the summary pages at the end of the Builder titled “[Take It With You!](#)”.

1. In your toolbar -- click [File].
2. Click [Print] and ensure under [Pages to Print] that “**All**” is selected.
3. Click [Print]. The entire document will print to your selected printing device.

TAKE ACTION: TAKE IT WITH YOU!

At the end of this Builder, your responses from the Taking Action chapter will be auto-populated into summary pages titled “Take Action: Take It With You”. Print and use for a quick reference of your planned actions when lead is detected in your school’s drinking water.

Note: If changes are needed, make them in the *Taking Action* chapter to re-populate the summary pages of **Take It With You!**

Important Notes

- Users do not have to complete the Plan Builder in a single session, as progress can be saved in the downloaded PDF.
- Users are encouraged to walk through the steps in order, as each provides important context for future steps.
- You can use the checklist below to track progress through the document noting which sections have already been completed.

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.


Although you do not have to complete the Plan Builder in a single session, reviewing and/or completing the [Getting Started](#) section provides useful context for completing the other sections.

Elements of the Plan Builder

Fillable Tables and Text Entry Boxes

Each section provides prompting questions and step-by-step guidance to help users make decisions to build their school or child care plan.

- Users enter their answers into tables and text boxes in each section, text boxes shaded light blue are fully editable and some suggested text may already be provided.
- Tables and text boxes containing default suggested text can be overwritten or deleted.
- Resources (e.g., templates, posters, modules) are hyperlinked throughout. Click on the text to open to the resource.

When working through this document, some form fields will have "tooltips". When you hover over the tooltip icon or relevant fillable field a note will pop up. These tooltips will provide additional information to help build your plan. Tooltips are denoted by this symbol: 

Completion Checklist

TO-DO: To help you keep track of your progress, check the box after you complete each section of the Plan Builder.

<input type="checkbox"/> Introduction.....	1
<input type="checkbox"/> My Getting Started Plan.....	4
<input type="checkbox"/> My Communications Plan.....	11
<input type="checkbox"/> My Training Plan.....	14
<input type="checkbox"/> My Testing Plan.....	21
<input type="checkbox"/> My Taking Action Plan.....	34

Build a 3Ts Program

Start developing your plan by identifying stakeholders, assembling your team, coordinating with your state drinking water program for regulatory guidance, and establishing recordkeeping procedures.



1 Assemble Your Team



2 Identify State, Tribal, and Local Regulations



3 Establish Recordkeeping Practices



4 Create an Overall Schedule

INTRODUCTION

GETTING STARTED

COMMUNICATE

TRAINING

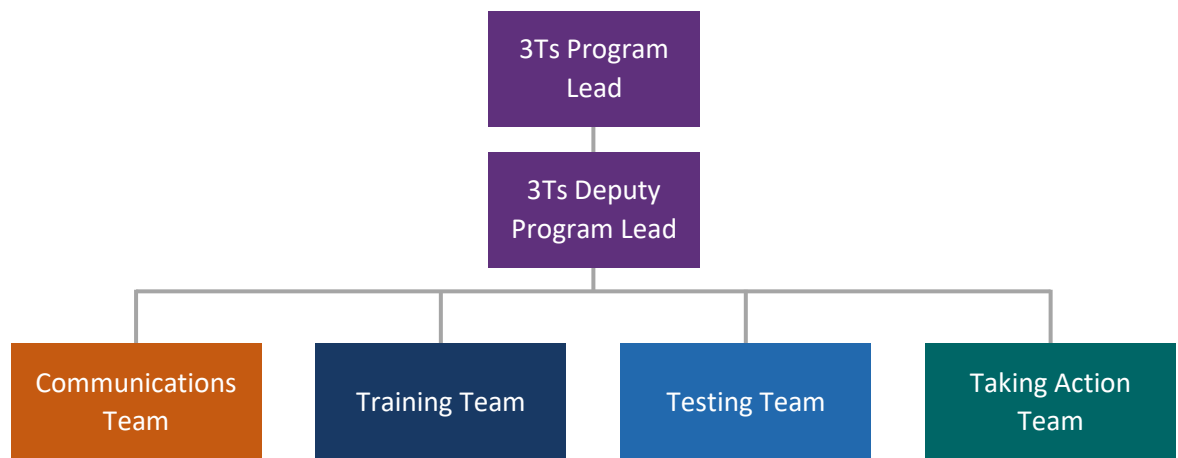
TESTING

TAKING ACTION

TAKE ACTION: TAKE IT WITH YOU!

STEP 1: Assemble Your Team ([3Ts Module 1](#))

- A successful 3Ts Program depends on having a dedicated and organized team. 3Ts Program responsibilities are likely additional responsibilities on top of your team members' current roles, so be thoughtful, deliberate, and clear about the scope of involvement for those you recruit to assist with the program.
- Depending on your facility size and resources, you may have one person responsible for several program activities.
- The overall 3Ts Team organization is outlined in the graphic below.



STEP 1A: Identify Program Leads

Designate your 3Ts Program and Deputy Program Leads. The Program Leads coordinate the design, implementation, and execution of your 3Ts Program.

Getting Started Table 1: Identify your 3Ts Program Leads.

3Ts Program Administration Contact Information	
3Ts Program Lead	3Ts Deputy Program Lead
Name:	Name:
Phone Number:	Phone Number:
Email:	Email:

STEP 1B: Identify Internal and External Stakeholders

- Internal stakeholders include individuals and groups who are required to approve, support, or fund aspects of your 3Ts Program as well as those who have current job roles that align with protecting the health of your facility community. Internal stakeholders may include:
 - Principal/Director
 - Custodial/facilities staff
 - Board members
 - Facility nurses
 - Cafeteria staff
 - Physical Education staff
 - Teachers
 - Students
 - Parents
 - District wellness committees
 - Parent Teacher Associations (PTAs)
 - Local plumbing and construction contractors/suppliers
- External stakeholders can help operate and communicate about your 3Ts Program. Update Table 2 regularly and make it available to all team members for when a quick response is necessary.

Getting Started Table 2: Create a contact list of your external stakeholders.

External Stakeholder Contact Information	
Civic Leaders	State Drinking Water Program
Name: Phone Number: Email:	Name: Phone Number: Email:
Local Public Health Officials	EPA Regional Office
Name: Phone Number: Email:	Name: Phone Number: Email:
State Department of Education	Utility/Water Supplier
Name: Phone Number: Email:	Name: Phone Number: Email:
State Department of Health	Media
Name: Phone Number: Email:	Name: Phone Number: Email:

STEP 1C: Assign Communication Roles

- Identify individuals to help communicate findings to the public about your 3Ts Program activities. Individuals could include members of your school/child care community, local professionals, and public leaders.
- Note: The **Communicate** section covers how to execute communicating your 3Ts Program activities, testing results, and remediation actions.

Getting Started Table 3: Fill in the table below to identify your Communication Team.

Communications Team Roles and Responsibilities	
Communications Team Lead: acts as the main point-of contact to ensure the accuracy and consistency of public information and helps to coordinate communications activities, make announcements, and respond to questions.	Name: Phone Number: Email:
Partner Liaison Contact: keeps the 3Ts Team up to date with partners as the 3Ts Program progresses.	Name: Phone Number: Email:
Website and Social Media Contact: ensures the website and social media stay up to date with the latest information about the 3Ts Program.	Name: Phone Number: Email:
Public Hotline Contact: monitors and respond to questions and concerns from the email and/or hotline number.	Name: Phone Number: Email:
Communication of Health Risks Contact: works with your health department to communicate lead health risks and information about blood lead testing for children to stakeholders.	Name: Phone Number: Email:
School/Child Care Facility/District Communications or Public Relations Office (if any): helps utilize existing resources, such as a school website, newsletter, or district-wide announcements.	Name: Phone Number: Email:

STEP 1D: Assign Training Roles

- You will need to train your team members and stakeholders about the health effects of lead, its effect on children, and aspects of your 3Ts Program.
- The [Training](#) section will cover how to conduct 3Ts training and topics to train team members on.

Getting Started Table 4: Fill in the table to identify key Training Team members.

Training Team Roles and Responsibilities	
Training Team Lead: acts as the main person in charge of your trainings.	Name: Phone Number: Email:
Training Coordinator: coordinates logistics for trainings including scheduling, determining locations, and other administrative activities.	Name: Phone Number: Email:
Other team members: could lead trainings. Consider using internal staff, consultants, state and local agency contacts, or laboratory staff for the various trainings.	
Trainer 1	Trainer 2
Name: Phone Number: Email:	Name: Phone Number: Email:

Training Team Roles and Responsibilities	
Trainer 3	Trainer 4
Name:	Name:
Phone Number:	Phone Number:
Email:	Email:

STEP 1E: Assign Testing Roles

- Involve knowledgeable and experienced individuals (such as consultants, laboratories, or other partners) to help design a comprehensive testing plan and conduct testing.
- Who conducts testing may depend on whether the certified laboratory also provides specialists to assist with sample collection. If certified laboratory representatives or consultants are used, ensure that they have experience in conducting lead testing for drinking water at schools and child care facilities.
 - Consider designating a person to serve as the Testing Team Lead for testing and follow-up activities even if someone else is hired to conduct testing.
- The [Testing](#) section covers the specifics of lead sampling and testing.

Getting Started Table 5: Fill in the table below to identify key team members for developing and executing the testing portion of your plan.

Testing Team Roles and Responsibilities	
Testing Team Lead: designs your sampling methodology, serves as the point-of-contact for your testing efforts, and helps coordinate testing activities.	Name: Phone Number: Email:
Sample Collector: collects samples. This may be an employee of the certified laboratory you work with.	Name: Phone Number: Email:
Sample Shipper: ensures that samples are stored properly and shipped to the testing laboratory correctly.	Name: Phone Number: Email:
Laboratory Internal Point of Contact: communicates with the testing laboratory. This person regularly communicates the testing schedule and activities to the 3Ts Program Lead.	Name: Phone Number: Email:

STEP 1F: Assign Taking Action Roles

- Work closely with maintenance staff and plumbers who make repairs to your facility’s water infrastructure to identify and evaluate remediation options for your facility, ensure that chosen remediation options will reduce lead in school or child care water, understand the benefits and considerations associated with each remediation option, and select a remediation provider.
- In the [Taking Action](#) section, you will work together to consider remediation options and routine practices to help reduce lead exposure in your facility’s drinking water.

Getting Started Table 6: Fill in the table below to assign key team members for developing and implementing the remediation plans.

Taking Action Team Roles and Responsibilities	
Taking Action Team Lead: acts as the main person in charge of the Taking Action portion of your 3Ts Program and coordinates the Taking Action Team’s efforts.	Name: Phone Number: Email:
Remediation Contractor Internal Point of Contact: works with the remediation contractors. This person should regularly communicate the schedule, activities, and hazards of remediation to the 3Ts Program Lead.	Name: Phone Number: Email:
Head of Building Maintenance/Custodial Services: is important to include on the Remediation Team as they are familiar with facility needs and maintenance for any remediation actions that take place.	Name: Phone Number: Email:
Plumbers: are important to include for replacing pipes or make other plumbing changes to remediate elevated lead levels.	Name: Phone Number: Email:
Local Public Health Officials: helps determine your possible remediation options.	Name: Phone Number: Email:
Local Public Water System (PWS): may be responsible for your facility’s service line pipe replacement effort.	Name: Phone Number: Email:
Electrician: may be necessary to include on your 3Ts Remediation Team if you pursue pipe replacement. Electrical wires may be grounded to the water pipes and in some cases can be removed by a qualified electrician and replaced by an alternative grounding system.	Name: Phone Number: Email:
Point-of-Use (POU) Filter Maintenance Contact: is necessary if your facility installs POU filters to remediate lead problems.	Name: Phone Number: Email:

STEP 2: Identify State, Tribal, and Local Regulations ([3Ts Introduction](#))

Reach out to your state drinking water program to find out what rules or regulations may apply to your facility prior to building out your program, then tailor your plan to meet any local or state requirements. Some states, tribes, and local jurisdictions have established their own laws, regulations, or guidance for testing drinking water lead levels in schools and/or child care facilities.

TO-DO: Input relevant local laws or regulations about testing for lead in your school or child care facility’s drinking water and/or include relevant website links.

STEP 3: Establish Recordkeeping Practices ([3Ts Module 7](#))

Recordkeeping is critical to building an effective 3Ts Program. Keep and regularly update an ongoing record of partners, team contacts, testing efforts, remediation efforts, public outreach, and communication activities as you implement your 3Ts Program.

STEP 3A: Identify a Recordkeeping Lead

- Appoint someone to ensure methods and results are documented to reduce the impact of staff turnover on your 3Ts Program. This recordkeeper will work with all team members to gather and store information in a centrally accessible place.

Getting Started Table 7: Identify your Recordkeeping Lead.

3Ts Program Recordkeeping Lead Contact Information
Name:
Phone Number:
Email:

STEP 3B: Keep Key Records

Keep records of the following list of key items to help improve your program and prevent the loss of important programmatic knowledge.

- **Annual Water Quality Reports:** Your local PWS may be required to produce and distribute an annual water quality report that includes system-wide lead monitoring results. Contact your PWS to obtain a copy of the latest water quality report or visit the website [Find Your Local Customer Confidence Report \(CCR\)](#) to check if it is available online.
- **Contact Lists:** Keep contact information for partners as part of program records. Use the [3Ts Toolkit Partners Contact Template](#) to identify and record contact information for partners from various organizations and groups you work with.
- **Completed Plan:** Post your completed 3Ts plan in a central location where your team members can access it.
- **Communications Materials:** Keep an ongoing record of communication activities, including dated copies of past communication materials and questions received from the community that could be addressed in the future. The [Communicate](#) section covers these materials further.
- **Training Attendance, Schedule, and Materials:** Keeping attendance and schedule records helps you track training progress and better plan your future training needs. The [Training](#) section covers these topics further.
- **Testing Plan and Results:** Throughout the testing process, document the sampling methodology, sampling locations, any implemented procedures or protocols, and testing results. The [Testing](#) section covers these topics further.
- **Record Remediation Actions:** Record remediation actions, schedules for upkeep and maintenance, and lists of partners and contacts that assisted in your efforts. Keeping records of remediation actions will help maintain and actively monitor remediation measures for effectiveness. The [Taking Action](#) section covers these remediation actions further.

Recordkeeping Templates

- [Partners Contact Form](#)
- [Roles and Responsibilities Form](#)
- [School and Child Care Facility Data eTrackers](#)

- **Schedules of Routine Practices.** Keep records of scheduled routine practices to maintain a high level of water quality and set calendar reminders to help you keep on schedule. The [Taking Action](#) section covers routine practices further.

Step 4: Create an Overall Schedule

Use the table below to keep track of all the important information you may need along the way to test for lead in your facility’s drinking water. Activities may have a corresponding table as you continue through the Plan Builder. Font colors correspond with the appropriate sections if more information is needed. Some of the items below have already been auto-populated based on your answers to previous questions in the Getting Started section (e.g.,). **Fill out the rest of the Plan Builder to populate your schedule!** Once you have filled-in all the sections of the Plan Builder, your answers will appear here, and you can view and make adjustments to your 3Ts Program Plan Schedule.

Getting Started Table 8: Below is a schedule for your 3Ts Program. You can refer to this table and edit your dates, activities, and responsible leads as your program evolves and needs change.

Dates	Activities	Activity Lead	Notes
	1. Communicate with stakeholders about launching a 3Ts Program		
	2. Develop training materials for the Administrative Training Group		
	3. Schedule and invite attendees to the trainings for the Administrative Training Group		
	4. Conduct trainings for the Administrative Training Group		
	5. Develop training materials for the Communication Training Group		
	6. Schedule and invite attendees to the trainings for the Communication Training Group		
	7. Conduct trainings for the Communication Training Group		
	8. Develop training materials for the Testing Training Group		

Dates	Activities	Activity Lead	Notes
	9. Schedule and invite attendees to the trainings for the Testing Training Group		
	10. Conduct trainings for the Testing Training Group		
	11. Develop training materials for the Taking Action Training Group		
	12. Schedule and invite attendees to the trainings for Taking Action Training Group		
	13. Conduct trainings for the Taking Action Training Group		
	14. Create an outlet inventory		
	15. Create your plumbing profile		
	16. Decide your sampling outlets		
	17. Establish sampling procedures		
	18. Select your certified laboratory and backup laboratory		
	19. Define your laboratory's role		
	20. Communicate with stakeholders about testing schedule and when water must remain unused		
	21. Conduct sampling (include all dates and times)		
	22. Receive and interpret results		
	23. Communicate with stakeholders after receiving lead results		

Dates	Activities	Activity Lead	Notes
	24. Conduct follow-up sampling if necessary (includes another round of receiving, interpreting, and communicating results)		
	25. Identify if you receive any elevated lead results		
	26. If you receive elevated lead results, identify the source of lead		
	27. Communicate with stakeholders about plans for taking action if you received elevated lead results		
	28. Take immediate actions (See Taking Action Table 3)		
	29. Take short-term actions (See Taking Action Table 4)		
	30. Develop and implement long-term solutions (See Taking Action Table 5)		
	31. Incorporate routine practices into your water management plan (See Taking Action Table 6)		
	32. Implement routine practices		



Summary:

In this section, you identified your program’s stakeholders, assembled your 3Ts team, noted any relevant state or local regulations, and established your recordkeeping procedures. Return to this section to create and review your plan schedule.

Build Your Communications Plan

This section will build your plan for communicating about your 3Ts Program to your team, members of the community, and other stakeholders. The core of an effective communications plan is preparation and coordination to deliver information swiftly, professionally, and consistently. Communicating early and often about your testing plans, results, and next steps will build stakeholder confidence in your ability to provide a safe learning environment.



1 Identify Your Target Audience and Communication Methods



2 Incorporate Communications Best Practices



3 Schedule Communications Activities

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STEP 1: Identify Your Target Audiences and Communications Methods ([3Ts Module 1](#))

- Your Target Audiences are the groups that you plan on regularly informing about your 3Ts Program. Communications should always be directed at these audiences. Descriptions of target audiences can be found in [3Ts Module 1](#).
- Communication methods will depend on the level of importance of the message, audience preferences, and the number of people in the Target Audience.
- Communication method examples include press releases, letters/fliers, social media, mailbox stuffers, websites, staff newsletters, and presentations. Detailed descriptions of communication methods can be found in [3Ts Module 1](#).

Links to Communications Templates

- [Customizable Poster](#)
- [Parent Letter](#)
- [Newsletter](#)
- [Postcard](#)

TO-DO: Answer the following questions to work through things to consider when selecting communication methods.

- What communication methods have you used in the past? What made those methods successful?

- Will you change your communication method based on the message? Indicate the factors that will influence changing your communication method, such as the importance of the message, level of concern, timeliness of the message, and risk being communicated.

- What languages do you anticipate communicating in? If you will need to use multiple languages, how will you accommodate language needs (e.g., provide language-based contacts, translated information)?

Communicate Table 1: Select your Target Audience(s) by clicking in the box to mark it with a check mark. For each Target Audience selected, list the methods of communications you will use.

Stakeholder Groups	Target Audience?	Communication Methods	Notes
School or Child Care Facility Community	<input type="checkbox"/>		
Building Community	<input type="checkbox"/>		
Larger Community	<input type="checkbox"/>		
Local Community Organizations	<input type="checkbox"/>		
State Drinking Water Programs	<input type="checkbox"/>		
Drinking Water Community	<input type="checkbox"/>		
Other:	<input type="checkbox"/>		

STEP 2: Incorporate Communications Best Practices ([3Ts Module 1](#))

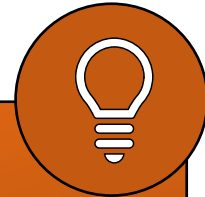
When carrying out communications activities, keep the following best practices in mind:

- ✓ Take the initiative to communicate with your community.
- ✓ Make sure your information is honest, accurate, and comprehensive.
- ✓ Speak with one consistent voice.
- ✓ Anticipate questions and concerns and address them proactively.
- ✓ Be positive and forthcoming.
- ✓ Keep your audience up to date with the newest information.

- ✓ Have a plan created for communicating the results of your sampling effort to your audience before testing begins.
- ✓ Share results regardless of the lead level detected.
- ✓ Share plans about remediation activities, including what actions will be taken and when.
- ✓ Regularly update your community on water quality improvement efforts and routine practices.
- ✓ Being transparent about improvement efforts will ensure your stakeholders and community members have agency.

STEP 3: Schedule Communications Activities ([3Ts Module 1](#))

- You will create schedules for completing program activities in the [Training](#), [Testing](#), and [Taking Action](#) sections. These schedules will also include communications activities that align with activities in these other sections. Communications activities are indicated by **orange font**.
- Time your communications to coincide with other activities so that your stakeholders remain informed throughout the process.



Summary:

In this section, you identified Target Audiences to share information with, finalized methods of communication to use, and learned best practices for communicating about your 3Ts Program activities. Return to this section to identify methods to reach out to the community and internal stakeholders.

Build Your Training Plan

Use this section to build your internal training and educational outreach process. This section helps you select relevant topics, communicate background information on health effects and drinking water regulations, group team members and stakeholders with similar roles into targeted trainings, incorporate best practices for conducting trainings into your trainings, and utilize existing materials for training sessions.

1

*Determine
Materials for
Use in Training
Program*

2

*Group Team
Members and
Select Topics for
Targeted Training*

3

*Incorporate Best
Practices into Training
Development*

4

*Schedule
Trainings*

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STEP 1: Group Team Members and Select Topics for Targeted Training ([3Ts Module 3](#))

- Use the following table to identify your Training Groups. You may find it efficient to train groups of people with similar roles. You may have personnel in more than one training group; if this is the case, be sure to avoid scheduling conflicts
- Use the following table to guide your selection of the appropriate training topics.
- Physical walkthroughs may be beneficial for those involved with facility infrastructure. Varying the format of your trainings can help engage different types of learners; some attendees may be visual, auditory, or kinesthetic learners.
- Some topics are broadly applicable to all trainings, as they provide helpful context and generate buy-in. There is no one way to conduct trainings, but referring to these topics at the beginning of each training may serve as a useful starting point. These topics include:
 - Background of your facilities and buildings
 - Your relationship to your PWS
 - Common terminology used
 - Health effects of lead
 - Vulnerability of children to lead poisoning
 - Sources of lead
 - How lead gets into drinking water
 - Regulatory background (State and/or Federal requirements) of lead in drinking water
- Refer to [3Ts Module 2](#) for more information about the above topics. For additional training resources, see EPA's [Lead webpage](#).
- Refer to the "Best Practices" listed in [Step 3](#) later in this section for suggestions on activities your trainings can incorporate and the best format for each group. For example, breakout groups may be useful for larger training groups with clusters of similar roles.
- Physical walkthroughs may be beneficial for those involved with facility infrastructure. Varying the format of your trainings can help engage different types of learners; some attendees may be visual, auditory, or kinesthetic learners.

trainings, including the training materials from EPA’s 3Ts Program, your state or municipal offices, non-profits, and professional associations.

- Your partners may have other materials that may be useful for your trainings. Check with:
 - Your district’s public relations team, who may have existing training materials.
 - Other local or regional schools/child care facilities.
 - Professional water organizations like the Water Research Foundation or local chapters of the American Water Works Association and National Rural Water Association.
- You may find it useful to develop your own training materials based on guidance from EPA, your state, and partners, or to include supplemental materials attached to the plan. If you decide to develop your own training materials, refer to [Step 3](#) later in this section.

***TO-DO:** Select the training materials your program will use.*

- EPA 3Ts Materials such as the [3Ts Toolkit](#), [3Ts Manual](#), and [Interactive Tools](#)
- State Training Materials
- Municipal Training Materials
- Partner Training Materials
- School or Child Care Facility Training Materials
- Develop your own
- List the specific training materials you will use for the categories checked above:

Training Table 1: Fill in the table below. You may use the recommended topics and activities auto-populated in the form field or adjust to what will best work for your team members. Refer to the [Getting Started](#) section to identify who should be grouped together for trainings and which trainer should lead each group.

Training Group Names	Topics	Materials	Activities	Location/Platform	Additional Notes
Group: Leader: Members:					
Group: Leader: Members:					
Group: Leader: Members:					
Group: Leader: Members:					

STEP 3: Incorporate Best Practices into Your Training Development ([3Ts Module 3](#))

The following steps guide you through the process of developing trainings to prepare your team members and stakeholders for their roles in the program.

Best Practices for Training Development

Incorporate supportive and inclusive best practices to sustain buy-in and investment in your program. Keep these best practices in mind when developing and conducting your trainings.

Outreach

- ✓ Employ your Communications Team to announce trainings and provide materials that may be broadly beneficial to the larger community. This may include information on lead in drinking water and EPA's 3Ts Program, and state and local resources on lead in school drinking water.
- ✓ Be transparent in communications with stakeholders. Make sure to include stakeholders across your whole community, including underserved populations so that everyone is made aware of your trainings.
- ✓ Begin training early in your 3Ts Program to ensure your team is informed of their responsibilities.

Training Materials

- ✓ Provide materials in advance of trainings and indicate topics that will be discussed so your team is prepared.
- ✓ Vary training tools and presentation formats to keep trainings fresh and attendees engaged. Some training tools work better with different audiences.
- ✓ Enhance your training materials with graphics, examples, and pictures.

Training Procedures

- ✓ Create an open, honest, and inclusive learning environment, as this may be new information for many attendees.
- ✓ Allot ample time for questions. Encourage attendees to ask questions, and repeat questions asked back to them to ensure that you can properly answer their questions.
- ✓ Incorporate interactive activities to engage attendees. Some examples of interactive activities are knowledge checks and quizzes, tours of testing sites, group discussions, case studies, and hands-on exercises.
- ✓ Emphasize that your program is a partnership and highlight the various roles that attendees will play in your program. Clearly defining responsibilities will encourage continued buy-in to your program.


Developing Your Trainings

While the content of each training session may vary based on the training audience and timing, there are some structural features that are applicable to all your trainings.

TO-DO: Brainstorm answers to the questions below to get a sense of your training protocols.

- How will you ensure that your trainings are accessible for all attendees? For example, if you will be holding remote trainings, will you use video, audio, and phone line? Will they be recorded for future reference?

- Will training materials be made available in languages other than English (including ASL)?

- Will these trainings be incorporated with other training programs that your facility is involved in? If so, how will you integrate materials related to your 3Ts Program? 

STEP 4: Schedule Trainings ([3Ts Module 3](#))

- Building your 3Ts Program requires providing team members with the necessary knowledge to carry out program activities. Plan out your training dates so that all team members have the necessary information before beginning their assigned roles.

Training Table 2: Enter the dates by which you will complete training activities, the activity leads, and any relevant notes in the table below. If applicable, revise activities to match the training groups you have created above.

Dates	Activities (Color coded to match to associated plan activity.)	Activity Lead	Notes
	1. Communicate with stakeholders about launching a 3Ts Training Program		
	2. Develop training materials for the Administration Training Group		
	3. Schedule and invite attendees to the trainings for the Administration Training Group		
	4. Conduct trainings for the Administration Training Group		
	5. Develop training materials for the Communication Training Group		
	6. Schedule and invite attendees to the trainings for the Communication Training Group		

Dates	Activities (Color coded to match to associated plan activity.)	Activity Lead	Notes
	7. Conduct trainings for the Communication Training Group		
	8. Develop training materials for the Testing Training Group		
	9. Schedule and invite attendees to the trainings for the Testing Training Group		
	10. Conduct trainings for the Testing Training Group		
	11. Develop training materials for the Taking Action Training Group		
	12. Schedule and invite attendees to the trainings for Taking Action Training Group		
	13. Conduct trainings for the Taking Action Training Group		



Summary:

In this section, you identified useful training materials, then organized and identified content for training groups. You learned some training best practices, and developed features of your training program. Review this section to determine how and when you will implement training for your 3Ts Program.

Build Your Sample Testing Plan

Use this section to help build your Lead Testing Plan. Testing includes the process of sample collection, which is usually conducted by your team members, and sample analysis, which is conducted by a certified laboratory. This section will cover how to plan, prioritize, and determine sampling locations, develop sampling collection procedures, and begin to analyze and interpret your results. This plan will depend on the physical infrastructure of your building and your facility's schedule and needs.



1 Conduct Physical Walkthrough



2 Develop a Plumbing Profile



3 Prioritize Testing Outlets



4 Establish Testing Procedures



5 Select a Certified Lab



6 Define the Lab's Role



7 Decide How to Analyze Sample



8 Schedule and Conduct Testing

STEP 1: Conduct Physical Walkthrough to Create an Inventory ([3Ts Module 4](#))

- Begin by conducting a physical walkthrough to create an inventory of your outlets used for human consumption in all buildings. Conducting an inventory will help you choose which outlets to sample.
 - Identify how your water enters and flows through the building(s)' plumbing, priority outlets, and additional sites staff or students may be using for drinking water.
- Before conducting your walkthrough, develop a coding system that will allow each unique outlet to be identified by location, type, and other relevant characteristics.

***TO-DO:** Enter your coding system here. Use [3Ts Appendix C](#) for examples of outlet coding. (Ex. **Building Number – Floor – Room Number – Outlet Type – Sample Number**). Note: This information is also needed for the [3Ts "Recordkeeping and Reporting" Tool](#).*

When conducting the walkthrough of the facility, make sure to:

- ✓ Take note of all outlets and visible plumbing used for human consumption. i
- ✓ If a floor plan is available, mark each tap and water filler on the floor plan with their unique identifier established through your coding system.
- ✓ Take pictures to refer to at a later time.
- ✓ Look for signs of outlets with discoloration or rust that may be faulty or corroded. Pay close attention to these indicators when prioritizing outlets. These indicators include:
 - Rust around the outlet
 - Stains on fixtures, dishes, and laundry
 - Blue-green deposits on pipes and sinks indicate copper corrosion; brown stains result from the corrosion of iron
 - Frequent leaks
 - Discolored water coming from the outlet
 - For more information on these indicators, refer to [3Ts Appendix G](#)

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STEP 2: Develop a Plumbing Profile ([3Ts Appendix G](#))

- A plumbing profile can assist you in selecting and prioritizing outlets for sampling ([Step 3](#)).
- In Testing Table 2, the questions in the left column help determine whether lead is likely a problem in a facility and inform outlet prioritization. Use the gray “TIP” boxes as a guide to interpret your answers and gain a better understanding of the significance of possible answers. Only skip questions that do not apply to your building. For additional information on creating a plumbing profile, see the [3Ts Appendix G](#).

Testing Table 2: Fill out this table to create a plumbing profile for your facility. After answering each question, review the gray boxes to see what your answer means for potential lead contamination.

Plumbing Profile Question	My Answer
What year was the building(s) built? Include dates for any additions added to original building. If built or repaired in/or before 1986, was “lead-free” plumbing and solder used?	
TIP: Based on your building’s age identify likely sources of lead in your facility’s plumbing. For detailed information, refer to 3Ts Appendix G . <ul style="list-style-type: none"> • Plumbing older than 1930: Likely to contain lead pipes that can contaminate water quality. • 1930 - 1986: Likely to contain lead solders used to join copper pipes together. Lead pipes are possible. • 1986 - 2014: “Lead-free” solders used on plumbing joints, brass fixtures or plumbing components may have lead. Lead pipes are very unlikely. • 2014 - Present: Even if “lead-free materials” were used in new construction and/or plumbing repairs, lead leaching may occur. Lead pipes are very unlikely. 	
Were any buildings or additions added to the original facility? If so, note the year for each new building or addition.	
TIP: If there are separate buildings or additions, complete a plumbing profile for each building, addition, or wing. Because this plumbing profile will be used to inform testing order based on the building’s plumbing infrastructure, different plumbing setups will result in different recommended testing orders.	
When were the most recent plumbing repairs made? Note the locations and years by building.	
TIP: This is used to determine if lead contamination from plumbing repairs may have occurred. Elevated lead levels may occur if the building, an addition, new plumbing, or repair is less than 5 years old and lead solder or other leaded materials were used (especially if they were purchased prior to 2014).	

Plumbing Profile Question	My Answer
<p>What type of solder has been used? Was lead solder used in the plumbing system? Note the locations with lead solder.</p>	
<p>TIP: Lead solder can contribute to contamination of downstream fixtures. It is likely that high-lead solder and fluxes continued to be used until 1988 and even later in some areas. The local plumbing code authority or building inspector may be able to provide guidance regarding when high-lead solder was last used on a regular basis in the area.</p>	
<p>What material(s) is the service connection pipe(s) (i.e., the pipe that carries water to the school or child care facility from the PWS's main in the street) made from? Note the locations where the service line enters the building and connects to the interior plumbing.</p>	
<p>TIP: Based on material type, some pipes are at higher risk of contamination than others. Based on your lead testing results, pipes may need to be replaced. Survey the building for exposed pipes, preferably accompanied by an experienced plumber who should be able to identify the composition of pipes on site:</p> <ul style="list-style-type: none"> • Lead pipes are dull gray in color, may be easily scratched by an object such as a key and aren't magnetic. They are likely to contaminate water that flows through them. • Galvanized metal pipes are gray or silver-gray in color, usually fitted together with threaded joints, and magnetic. Debris from this material, which has fallen inside the pipes, may be a source of contamination. Galvanized service lines that are or ever were downstream from a lead service line can adsorb lead and contribute to lead in drinking water. • Copper pipes are red-brown in color, green if corroded, and may be joined together with lead solders. • Plastic pipes, especially those manufactured abroad, may contain lead. If plastic pipes are used, be sure they meet NSF International Standards. <p>More information about service connections can be found in 3Ts Module 2 and more information identifying pipe materials can be found in 3Ts Module 4.</p>	
<p>What are the building's potable water pipes made of (e.g., lead, plastic, galvanized metal, cast iron, copper, other)? Note the location of the different types of pipe, if applicable, and the direction of water flow through the building.</p>	

Plumbing Profile Question	My Answer
<p>TIP: This is used to determine if your building has a lead service line. A lead service line is a pipe made of lead that connects a water main to the school’s distribution system. In general, larger buildings do not have lead service lines because lead is impractical for the larger water service pipes typically used in these facilities; however, many facilities reside in small older buildings and have a higher likelihood of being served by lead pipes. If you have a lead service line, it is recommended that you work with your local PWS to explore options for replacement. The pipe may fall under your facility’s jurisdiction and the PWS’s jurisdiction. Replacing only one portion of the service line could lead to more lead contamination. You may explore state or federal programs to help finance its replacement. Be aware that the lead service line can produce contaminated water at any fixture. For this reason, it is recommended to fully replace the pipe rather than one section. More information about service connections can be found in 3Ts Module 2.</p>	
<p>Are there tanks in the plumbing system (e.g., pressure tanks or gravity storage tanks)? Note the locations of any tanks, and information about the tank (e.g., manufacturer, date of installation).</p>	
<p>TIP: Older tanks may contain coatings that are high in lead content or sediment that could be flushed back into the plumbing system under certain circumstances. You may wish to contact the supplier or manufacturer to obtain information about coatings. Also, you may also wish to hire a plumber or tank service contractor to inspect the tanks, especially gravity storage tanks that are located outside of the building.</p>	
<p>Is any electrical equipment grounded to water pipes? Note the locations.</p>	
<p>TIP: If electrical equipment has been installed using water pipes as a ground, the electric current traveling through the ground wire will accelerate the corrosion of interior plumbing containing lead. This practice should be avoided; however, if existing wires are already grounded to water pipes, the wires should not be removed from the pipes unless a qualified electrician installs a grounding system.</p>	
<p>Ask the PWS to determine whether any testing has been done. If testing has been done at your school or child care, note the name of contaminant(s) and concentrations. Is testing done regularly at the facility?</p>	
<p>TIP: Your water supplier (usually your PWS) should also be able to tell you whether they have conducted lead monitoring or any other kind of testing at the school or child care facility. If so, your water supplier may be able to provide some indication of whether lead or other contaminants could be a problem within your building(s).</p>	
<p>Are building blueprints available? Are there known plumbing “dead-ends,” low use areas, existing leaks, or other potentially problematic areas? Are renovations being planned for part or all of the plumbing system?</p>	
<p>TIP: Low use areas and dead-end locations are locations where water quality can be unsafe for consumption and/or use. Incorporate this information into decisions regarding testing locations and protocols. You may wish to note the direction of water flow and the location of fixtures, valves, tanks, areas of sediment accumulation, areas of corrosion, etc., on a sketch or blueprint of the plumbing.</p>	

STEP 3: Identify Priority Outlets for Sampling ([3Ts Module 4](#))

- When considering how many outlets you will test, you may need to prioritize some locations due to time or resource constraints. The following are factors that increase outlet priority.
 - Use by children under the age of six years old
 - Use by pregnant women
 - High frequency of use
 - Old fixtures (especially those constructed before 1988)
 - Proximity to point of entry
 - Presence of brass fittings, faucets, or valves
 - Outlet with accessible screens or aerators
 - Strong odor
 - Visible signs of corrosion, such as rust (See [Step 1](#)).
 - Outlets with complaints of unusual (metallic) taste
- When determining which outlets to test, include a variety of fixtures used for human consumption.
 - Test multiple types of fixtures and areas of the building. Using results from one outlet to characterize potential lead exposure from all other outlets may fail to identify localized lead problems.
 - Do not include faucets that are not used for human consumption, such as sinks in janitor’s closets or outdoor hoses. If these could potentially be used for consumption (e.g., the janitor closet is close to kitchen and is used for cleaning appliances or the outdoor hoses are used to fill water jugs for sports activities), use clear signage to notify people that the faucet should not be used for drinking or cooking, or include these fixtures in your Testing Plan.

Testing Table 3: In the table below, indicate which outlets you will test. See details in [3Ts Module 4](#).

Sample Outlet ID	Outlet Location	Types of Outlets	Will you test this outlet?	Priority Level

STEP 4: Establish Sampling Procedures ([3Ts Module 4](#), [3Ts Module 5](#))

Determine sampling procedures and protocols to ensure that lead sampling is implemented properly and consistently in your facility.

STEP 4A: Order the Sampling of Your Outlets ([3Ts Module 4](#))

- First, consider the order in which you will sample outlets. Sampling typically follows the flow of water through a building, usually starting on the bottom floor (where the water main is located) then continuing up.
- Using your inventory ([Step 1](#)), the plumbing profile ([Step 2](#)), [Exhibits 2 and 3 in 3Ts Module 4](#), and the questions below, decide on the order of taking samples. You also may want to refer to useful documents such as floor plans.

TO-DO: List the order of floors and/or parts of the building where you will test.

- Where does water enter the building?

- How does water flow through your building? Include the point of entry, where the water goes from floor to floor, and the order in which fixtures receive water on the same floor. Identify the order in which priority outlets are serviced using the coding system you developed earlier. *See information you entered in [Step 2](#) and [Step 3](#).*

- List the order of floors and/or parts of the building where you will test.

STEP 4B: Testing Frequency ([3Ts Module 4](#))

- How frequently your facility can and should test for lead in drinking water depends on a variety of factors (e.g., plumbing, water quality, lead results, budget, and competing priorities).
- Annual monitoring provides information on changes in the lead levels and the effectiveness of remediation or treatment efforts as well as timely notice of faulty or damaged outlets and other problems that may need to be addressed.

TO-DO: Answer the following questions to determine how often you will test for lead.

- What is your budget for lead testing? [i](#)

- Have you had lead-positive sample results in the past?

- What other building priorities compete with lead in drinking water testing? [i](#)

- Given your answers from the previous three questions, how often will you test for lead in your facility's drinking water? [i](#)

STEP 4C: Sampling Protocols ([3Ts Module 4](#), [3Ts Module 5](#))

- Next, choose your sample volume and the types of samples you will collect. [i](#)
- 250-mL sample volume can help identify the sources of lead at an outlet, as it is representative of the amount of water consumed per serving.

TO-DO: Enter the sample volume you plan to collect in the text box below.

For each outlet to be sampled, determine which type of sample is appropriate: first-draw samples and/or flush samples. For more information about types of sample and sampling protocols, including the recommended 2-Step sampling procedure, see [3Ts Module 5](#) including the Sampling Field Guide and Sampling Guide Video.

TO-DO: Answer the questions below about sample types.

- From which outlets and fixtures will you collect first-draw samples? [i](#)

- From which outlets and fixtures will you collect flush samples/second-draw samples? [i](#)

- Will you collect second-draw samples at the same time that initial samples are taken? i

STEP 4D: Detailed Fixture Evaluations ([3Ts Appendix D](#))

- If you receive a lead-positive result after sample analysis, consider conducting a detailed fixture evaluation to pinpoint where lead is getting into drinking water.
- Types of fixtures that often require detailed fixture evaluations include drinking water fountains, cold water faucets, drinking water fountains with coolers, ice-making machines, and central chiller units. Note this guidance does not include testing hot water outlets or hot water heaters, because hot water is not recommended for consumption (drinking/cooking).
- More information on detailed fixture evaluations, such as how to take and interpret samples from the above fixtures, can be found in [3Ts Appendix D](#).

TO-DO: List the fixtures included in your Testing Plan that you may need to conduct a detailed fixture evaluation on if you receive elevated lead results.

STEP 4E: Shipping Your Samples ([3Ts Appendix E](#))

- Establish an organized shipping process prior to collection to help ensure that samples are properly handled.
- In your shipping procedures, keep samples properly labeled and sealed between collection and preparation by the laboratory.
- Most laboratories will provide the necessary shipping containers and cold packs. To prevent sample degradation, ship the samples as soon as possible.

TO-DO: Describe your comprehensive storage and shipping procedure from storing samples to packaging and sending out the containers.

STEP 5: Select a Certified Laboratory ([3Ts Module 4](#))

Select a certified laboratory approved by the state or EPA for analyzing your samples. It is best practice to have a backup laboratory in case your primary laboratory cannot analyze samples within your desired timeframe. See [3Ts Module 4](#) for more information about selecting a certified laboratory.


Testing Table 4: Enter the laboratory and backup laboratory that will analyze your samples.


Laboratory Name	Position	Contact Information	Shipping Address	Cost
	Primary	Phone Number: Email:		
	Backup	Phone Number: Email:		

STEP 6: Define the Laboratory’s Role ([3Ts Module 4](#))

Define the laboratory’s role in your testing procedures (i.e., collecting samples vs. conducting analysis). Communicate with the laboratory to confirm testing details, such as when they will send out the sample kit, their timeline for conducting sample analysis, and providing the results.

TO-DO: Identify the services your selected laboratory will provide.

- What kinds of sampling containers will the laboratory provide? 

- What services will the laboratory provide? 

STEP 7: Decide How to Analyze Your Drinking Water Samples ([3Ts Module 4](#))

- Particles of lead in drinking water may result from physical corrosion of lead distribution system and interior plumbing components. Physical disturbances (e.g., construction), pipe replacement, and connection of new fixtures can cause the release of lead particles from system and plumbing components, which can result in temporary, but significant, increases of lead levels in the water.
- For more detail about analytical methods, see EPA’s [Analytical Methods Approved for Drinking Water Compliance Monitoring of Inorganic Contaminants and Other Inorganic Constituents](#). This information should be provided to you by the certified laboratory outlined in their procedure guidelines.

TO-DO: Answer the questions below to identify details about analyzing for lead.

- Will the laboratory analyze for total lead, dissolved lead, or both to determine particulate lead?

- What other testing could the laboratory conduct for your facility (e.g., microbiological such as total coliforms)? See [3Ts Appendix D](#) for more information.

- What is the laboratory’s timeframe for returning sample results?

STEP 8: Schedule and Conduct Testing ([3Ts Module 4](#), [3Ts Module 5](#))

- Now that you have chosen sampling locations and established procedures, create a schedule for completing Testing activities.
- When identifying dates and times for sampling, schedule sample collection *before* the facility opens and *before* any water is used. Ideally, the water should sit in the pipes unused for 8 to 18 hours before a sample is taken.
- When your facility conducts testing, use the [3Ts eTracker](#) to record your sampling and results.

TO-DO: Answer the questions below to help determine when to conduct your testing.

- On what holidays and vacations is your facility closed? Avoid testing after a building was closed for 18 hours or more. i

- What are your facility’s normal hours of operation?

Testing Table 5: Enter the dates you will complete certain activities, the activity leads, and any relevant notes in the table below.

Dates	Activities	Activity Lead	Notes
	1. Create an outlet inventory		
	2. Create your plumbing profile		
	3. Decide your sampling outlets		
	4. Establish sampling procedures		
	5. Select your certified laboratory and backup laboratory		
	6. Define your laboratory's role		
	7. Communicate with stakeholders about testing schedule and when water must remain unused		
	8. Conduct sampling (include all dates and times)		
	9. Receive and interpret results		
	10. Communicate with stakeholders after receiving lead results		
	11. Conduct follow-up sampling if necessary (includes another round of receiving, interpreting and communicating results)		



Summary:

In this section, you captured information about outlets and plumbing in your facility, established sampling procedures, determined how your samples will be analyzed, and identified times to sample for lead in drinking water. Return to this section to identify your laboratory, sample locations, and the frequency of your samples.

Build Your Remediation Plan

Use this section to build your plan for taking action after receiving lead testing results. You will consider immediate, short term, and long term actions to remediate lead in your drinking water and determine which actions could be best for your facility and community. Solutions to lead problems typically need to be implemented on both a short term and a long term basis.

Remember, there is no level of exposure to lead that is without risk to children.; taking actions on all outlets that show a detected lead level can help to reduce exposure. These remediation actions could be as easy as shutting off the outlet as an interim measure or putting up signage noting that lead was detected at a very low level and providing instructions to let the water run for a set amount of time to flush the lead out. However, results with elevated lead levels, based on your Program Remediation Trigger, will require immediate action, so know your potential remediation options prior to sampling and prepare a plan to take remediation actions. This will also help establish routine practices to integrate into your facility's management program to reduce exposure to drinking water contaminants.



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STEP 1: Identify Program Remediation Trigger and Interpret Results ([3Ts Module 5](#))

- Establish your **Program Remediation Trigger (PRT)**. This is the level of lead detected (e.g., in ppb, µg/L, ppm, or mg/L) in your drinking water sample at which you will prioritize to take immediate remediation action(s) to reduce or eliminate the exposure that exceeds the PRT. The level may be set by the facility and/or state, depending on existing state regulations and funding support. If your facility is receiving funding from the Water Infrastructure Improvements for the Nation Act (WIIN) grant through the state, then the state is required to set this level for your facility. Contacts for EPA and state agencies administrating the WIIN grant program can be found at: <https://www.epa.gov/dwcapacity/wiin-2107-lead-testing-school-and-child-care-program-drinking-water-state-grant-program>. For more guidance on this level, ask your state or refer to the [3Ts Manual](#).
- EPA regulates public water systems (PWSs) and does not have a health-based standard for lead. To keep lead from entering the water, EPA's Lead and Copper rule requires PWSs to treat water using certain chemicals that keep the lead from leaching into the water by reducing corrosion of pipes and plumbing. This treatment is called corrosion control. To check if corrosion control is working, EPA requires PWSs to test for lead at the tap in certain homes. PWSs compare sample results from these homes to EPA's action level of 15 ppb. If 10 percent of the samples from these homes have lead levels that are greater than 15 ppb, then the PWSs must perform actions such as public education and lead service line

To assist those schools and child care facilities in a state without a state-specific lead remediation trigger level, the facility determines the PRT. Contact your appropriate local agency (e.g., public health department) for guidance. Recognizing there is no level of exposure to lead that is without risk to children, the following illustrates baseline action levels recommended by other federal agencies, state WIIN programs and public health organizations:

- National data from the state WIIN grant program show PRT levels range from 4 ppb to 15 ppb.
- World Health Organization baseline level is 10 ppb.
- American Pediatric Association baseline level is 1 ppb.

TO-DO: Indicate your Program Remediation Trigger (e.g., in ppb or ppm) to take remediation actions.

If your results are above the Program Remediation Trigger, you will need to take immediate, short-term, and long-term actions to reduce lead in your drinking water. If your sample results are below the Program Remediation Trigger EPA recommends taking action to further minimize potential exposure. Action may include posting a sign at the fixture to inform that lead was found, installing filters, implementing routine flushing, removing the fixtures from service. For more details, see [3Ts Module 6](#) to reduce lead exposure.

STEP 2: Consider Facility Features ([3Ts Module 6](#))

- To determine which immediate, short-term, and long-term actions may be best for your facility, consider certain facility features and keep key questions in mind.

Taking Action Table 1: List the relevant features for your facility that will determine which remediation methods are potentially feasible for your facility.

Facility Features	Notes
Size (Note number of buildings, floors, wings, and year they were built)	
Budget (Note source of funding, total budget, potential future funding)	
Location (Note presence of lead service lines, technical assistance programs available)	
Season (Note typical use patterns or periods of reduced use [i.e., summer break])	
Facility Status (Note ongoing or planned building projects)	
Other	

STEP 3: Identify Remediation Contractors (3Ts Module 6)

- Identify potential external contractors for remediation. Prior to agreeing to work with any particular organization, ask contractors for information on schedule, health precautions that must be taken during and following remediation, upfront costs, and operations and maintenance costs.
- When selecting a contractor, confer with your local health department, PWS, and other internal or external stakeholders to ensure the organization performing remediation is qualified and reputable.

Taking Action Table 2: List potential remediation contractors and the services they can offer. ⓘ

Contractor Contact Information	Services Offered	Reference Name and Contact Information	Notes

STEP 4: Determine Immediate Actions (3Ts Module 6)

- Determine which actions you will take first if you receive elevated lead results. For these actions to be effective, you may take all or a combination of several actions.
- As you evaluate the feasibility of each option and choose the actions that you will integrate into your plan, consider the questions that appear when you hover over each box. Work with your remediation provider, your local health department, or to help answer these questions and determine which remediation options may be right for you.

Taking Action Table 3: Fill in the table on the next page to determine which immediate action(s) to take following elevated lead results. The auto-populated text provides information to consider as you determine which actions to take. Additional information about these actions can be found in [3Ts Module 6](#).

Immediate Remediation Actions	Likelihood of Success i	Cost i	Availability of Water i	Staffing Requirements i	Additional Notes
<input type="checkbox"/> Immediate shutoff: Shut off or disconnect the problem outlet until the problem is resolved.					
<input type="checkbox"/> Do not drink (or cook) orders: Post clear signage to notify people that the outlet is not to be used for drinking or cooking.					
<input type="checkbox"/> Share test results: Let stakeholders know about your test results.					

STEP 5: Determine Short-term Actions ([3Ts Module 6](#))

- Determine which short-term actions you will take following elevated lead results. Additional information about these actions can be found in [3Ts Module 6](#).

Taking Action Table 4: Fill in the table with your short-term actions. The auto-populated text provides information for you to consider as you determine which actions you will take.

Short term Remediation Actions	Likelihood of Success	Cost	Availability of Water	Staffing Requirements	Additional Notes
<input type="checkbox"/> POU Filters: Install POU filters at each problem outlet. Ensure that the selected POU device is certified to remove lead by checking with the manufacturer or a third-party website (such as nsf.org or wqa.org) to verify the product was tested and certified against NSF/ANSI Standard 53 and for particulate lead, certified against NSF/ANSI Standard 42. For details refer to Consumer Tool for Identifying Point of Use (POU) Drinking Water Filters Certified to Reduce Lead [EPA/600/F-18/335 December 2018]					
<input type="checkbox"/> Flushing: Flush individual problem water outlets or all outlets within the facility. Unless you can ensure lead levels remain low throughout the day, flushing is recommended multiple times per day.					

<input type="checkbox"/> Providing bottled water: Provide students and staff with bottled water to minimize use of tap water. This may be warranted if you are aware of widespread contamination and other remediation is not a near-term option.					

STEP 6: Determine Long-term Solutions ([3Ts Module 6](#))

- Determine long-term solutions you will implement if you receive elevated lead results. Long-term solutions may involve replacement or repairs. When making any repairs or conducting work to replace plumbing or fixtures, ensure that “lead-free” solders and other materials are used. Additional information about these actions can be found in [3Ts Module 6](#). Refer to your [plumbing profile](#) as you determine long-term solutions.

***Taking Action Table 5:** Fill in the table with long-term actions. The auto-populated text provides information for you to consider as you determine which actions you will take.*

Long term Remediation Actions	Likelihood of Success	Cost	Availability of Water	Staffing Requirements	Additional Notes
<input type="checkbox"/> Replacement of Problem Outlets: Replace identified problem outlets and any identified upstream plumbing components (e.g., valves, leaded solder) permanently.					
<input type="checkbox"/> Pipe Replacement: Replace lead pipes and portions of lead service lines. Lead service lines may fall under your or your PWS’s jurisdiction.					

Long term Remediation Actions	Likelihood of Success	Cost	Availability of Water	Staffing Requirements	Additional Notes
<input type="checkbox"/> POU Filters: Install and maintain POU filters. Create maintenance schedules and identify a point of contact to ensure POU filters are properly maintained. For details refer to A Consumer Tool for Identifying Point of Use (POU) Drinking Water Filters Certified to Reduce Lead [EPA/600/F-18/335 December 2018]					
<input type="checkbox"/> Reconfigure Plumbing: Modify plumbing system to bypass sources of lead contamination. Ongoing renovation of school or child care buildings may provide an opportunity. You may need to conduct additional testing to be certain you have properly identified all sources of lead contamination.					

STEP 7: Establish Routine Practices ([3Ts Module 6](#))

- Establish routine practices to reduce exposure to elevated lead levels and other environmental hazards in the future.
- Below are examples of routine activities that can be conducted to prevent exposure to drinking water contaminants. Determine which practices your facility will implement.
- The frequency with which you implement these practices will depend on your facility, type of fixtures, and amount of lead found in your facility.

Taking Action Table 6: Check which routine practices to include in your facility’s overall water management program.

Routine Practices
Cleaning
<input type="checkbox"/> Clean fountains, aerators, and water fountain strainers regularly and post a cleaning time tracking card by the water fountains/outlets for maintenance staff to complete. Set a reminder on the calendar to notify maintenance staff when cleaning is required.
POU Maintenance
<input type="checkbox"/> Create a schedule for filter replacement to notify maintenance staff when it is time to change the filter.
Temperature Control
<input type="checkbox"/> Use only cold water for food and beverage preparation as hot water will dissolve lead more quickly. Communicate this to cafeteria staff and post notices.
<input type="checkbox"/> If hot water is necessary, take it from the cold-water faucet and heat on a stove or in a microwave oven.
Cross-Connections Control
<input type="checkbox"/> Evaluate the facility for the presence of cross-connections (e.g., connections of non-potable water to potable sources) and address any sources of potential contamination.
Communication
<input type="checkbox"/> Create and post cards near bathroom handwashing sinks with notices that water should not be consumed.
<input type="checkbox"/> Organize events for the community to explain how everyone can help
<input type="checkbox"/> Use pictures if there are small children using bathrooms and ask teachers to remind students.
Routine Flushing Practices
<input type="checkbox"/> Flushing as a routine practice can help prevent elevated lead results proactively as opposed to flushing as a remediation action. For guidance on flushing, refer to 3Ts Module 6 .

STEP 8: Schedule Remediation Actions ([3Ts Module 5](#), [3Ts Module 6](#))

Now that you have determined your action steps following lead testing and chosen routine practices you will implement into your water quality management plan, make a schedule to execute this action plan.

Taking Action Table 7: Enter the dates you will complete certain activities, the activity leads, and any relevant notes in the table below.

Dates	Activities	Activity Lead	Notes
	1. Identify if you receive any elevated lead results		
	2. If you receive elevated lead results, identify the source of lead		
	3. Communicate with stakeholders about plans for taking action if you received elevated lead results		
	4. Take immediate actions (See Taking Action Table 3)		
	5. Take short-term actions (See Taking Action Table 4)		
	6. Develop and implement long-term solutions (See Taking Action Table 5)		
	7. Incorporate routine practices into your water management plan (See Taking Action Table 6)		
	8. Implement routine practices		

Summary:

In this section, you determined what immediate, short-term, and long-term actions you will take in the event of elevated lead levels. You also decided on routine practices that you will establish as part of your facility's water management plan to reduce your community's exposure to not only lead but other drinking water contaminants. Refer to this section to confirm your remediation trigger and next steps for when you receive your lead results.

Reminder: The next section is the auto-summary of all your responses from the Taking Action chapter.



TAKE ACTION: TAKE IT WITH YOU

Take Action: Your Summary Input

This section auto summarizes your input from the Taking Action chapter of the Plan Builder. Print and use for a quick reference of your planned actions when lead is detected in your school’s drinking water. To print this summary only, complete the following steps:

1. In the toolbar click [File]
2. Click [Print] and select [Pages], then enter all the page numbers of Take It With You! (e.g., 43-47).
3. Click [Print] and you will have a quick reference of your planned actions when lead is detected in your school’s drinking water.

Note: If changes are needed, make them in the Taking Action chapter to re populate the summary pages of Take It With You!

TO-DO: Indicate your Program Remediation Trigger (e.g., in ppb or ppm) to take remediation actions.

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Taking Action Table 1: List the relevant features for your facility that will determine which remediation methods are potentially feasible for your facility.

Facility Features	Notes
Size (Note number of buildings, floors, wings, and year they were built)	
Budget (Note source of funding, total budget, potential future funding)	
Location (Note presence of lead service lines, technical assistance programs available)	
Season (Note typical use patterns or periods of reduced use [i.e., summer break])	
Facility Status (Note ongoing or planned building projects)	
Other	

Taking Action Table 2: List potential remediation contractors and the services they can offer.

Contractor Contact Information	Services Offered	Reference Name and Contact Information	Notes

TAKING ACTION: TAKE IT WITH YOU

Taking Action Table 3: Fill in the table on the next page to determine which immediate action(s) to take following elevated lead results. The auto-populated text provides information to consider as you determine which actions to take. Additional information about these actions can be found in [3Ts Module 6](#).

Immediate Remediation Actions	Likelihood of Success	Cost	Availability of Water	Staffing Requirements	Additional Notes
<input type="checkbox"/> Immediate shutoff: Shut off or disconnect the problem outlet until the problem is resolved.					
<input type="checkbox"/> Do not drink (or cook) orders: Post clear signage to notify people that the outlet is not to be used for drinking or cooking.					
<input type="checkbox"/> Share test results: Let stakeholders know about your test results.					

TAKING ACTION: TAKE IT WITH YOU

Taking Action Table 4: Fill in the table with your short-term actions. The auto-populated text provides information for you to consider as you determine which actions you will take.

Short term Remediation Actions	Likelihood of Success	Cost	Availability of Water	Staffing Requirements	Additional Notes
<p><input type="checkbox"/> POU Filters: Install POU filters at each problem outlet. Ensure that the selected POU device is certified to remove lead by checking with the manufacturer or a third-party website (such as nsf.org or wqa.org) to verify the product was tested and certified against NSF/ANSI Standard 53 and for particulate lead, certified against NSF/ANSI Standard 42. For details refer to A Consumer Tool for Identifying Point of Use (POU) Drinking Water Filters Certified to Reduce Lead [EPA/600/F-18/335 December 2018]</p>					
<p><input type="checkbox"/> Flushing: Flush individual problem water outlets or all outlets within the facility. Unless you can ensure lead levels remain low throughout the day, flushing is recommended multiple times per day.</p>					
<p><input type="checkbox"/> Providing bottled water: Provide students and staff with bottled water to minimize use of tap water. This may be warranted if you are aware of widespread contamination and other remediation is not a near-term option.</p>					

TAKING ACTION: TAKE IT WITH YOU

Taking Action Table 5: Fill in the table with long-term actions. The auto-populated text provides information for you to consider as you determine which actions you will take.

Long term Remediation Actions	Likelihood of Success	Cost	Availability of Water	Staffing Requirements	Additional Notes
<input type="checkbox"/> Replacement of Problem Outlets: Replace identified problem outlets and any identified upstream plumbing components (e.g., valves, leaded solder) permanently.					
<input type="checkbox"/> Pipe Replacement: Replace lead pipes and portions of lead service lines. Lead service lines may fall under your or your PWS's jurisdiction.					
<input type="checkbox"/> POU Filters: Install and maintain POU filters. Create maintenance schedules and identify a point of contact to ensure POU filters are properly maintained. For details refer to A Consumer Tool for Identifying Point of Use (POU) Drinking Water Filters Certified to Reduce Lead [EPA/600/F-18/335 December 2018]					
<input type="checkbox"/> Reconfigure Plumbing: Modify plumbing system to bypass sources of lead contamination. Ongoing renovation of school or child care buildings may provide an opportunity. You may need to conduct additional testing to be certain you have properly identified all sources of lead contamination.					

TAKING ACTION: TAKE IT WITH YOU

Taking Action Table 6: Check which routine practices to include in your facility’s overall water management program.

Routine Practices	
Cleaning	
<input type="checkbox"/> Clean fountains, aerators, and water fountain strainers regularly and post a cleaning time tracking card by the water fountains/outlets for maintenance staff to complete. Set a reminder on the calendar to notify maintenance staff when cleaning is required.	
POU Maintenance	
<input type="checkbox"/> Create a schedule for filter replacement to notify maintenance staff when it is time to change the filter.	
Temperature Control	
<input type="checkbox"/> Use only cold water for food and beverage preparation as hot water will dissolve lead more quickly. Communicate this to cafeteria staff and post notices.	
<input type="checkbox"/> If hot water is necessary, take it from the cold-water faucet and heat on a stove or in a microwave oven.	
Cross-Connections Control	
<input type="checkbox"/> Evaluate the facility for the presence of cross-connections (e.g., connections of non-potable water to potable sources) and address any sources of potential contamination.	
Communication	
<input type="checkbox"/> Create and post cards near bathroom handwashing sinks with notices that water should not be consumed.	
<input type="checkbox"/> Organize events for the community to explain how everyone can help	
<input type="checkbox"/> Use pictures if there are small children using bathrooms and ask teachers to remind students.	
Routine Flushing Practices	
<input type="checkbox"/> Flushing as a routine practice can help prevent elevated lead results proactively as opposed to flushing as a remediation action. For guidance on flushing, refer to 3Ts Module 6 .	

Taking Action Table 7: Enter the dates you will complete certain activities, the activity leads, and any relevant notes in the table below.

Dates	Activities	Activity Lead	Notes
	1. Identify if you receive any elevated lead results		
	2. If you receive elevated lead results, identify the source of lead		
	3. Communicate with stakeholders about plans for taking action if you received elevated lead results		
	4. Take immediate actions (See Taking Action Table 3)		
	5. Take short-term actions (See Taking Action Table 4)		
	6. Develop and implement long-term solutions (See Taking Action Table 5)		
	7. Incorporate routine practices into your water management plan (See Taking Action Table 6)		
	8. Implement routine practices		