WIIN 2107 (Voluntary School and Child Care Lead Testing and Reduction Grant Program)

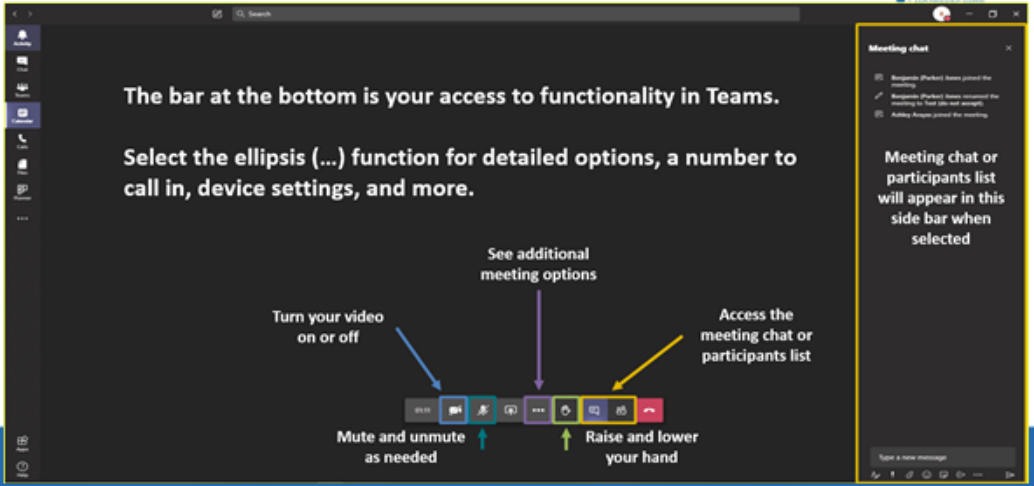
Best Management Practices Workshop

May 17, 2022

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

EPA
OFFICE OF GROUND WATER AND DRINKING WATER

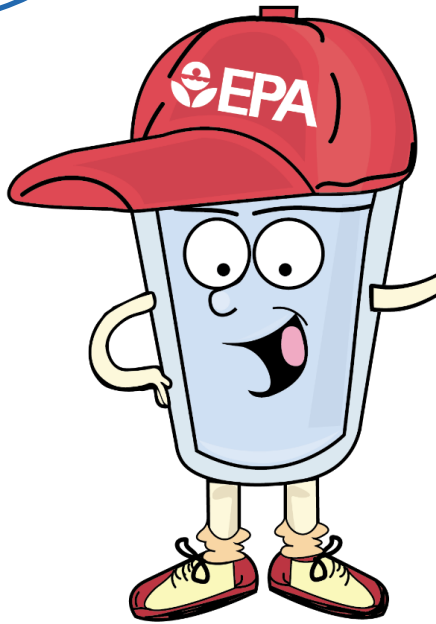
Microsoft Teams Orientation



Agenda

EPA
OFFICE OF GROUND WATER AND DRINKING WATER

- ❑ Welcome Remarks
- ❑ National Program Data Overview
- ❑ 3Ts Program (Training, Testing, & Taking Action)
- ❑ Program Success Stories
- ❑ Program Challenges, Overcame
- ❑ Round Table Discussion and Q&A Session
- ❑ Next Steps



Presenters

- **EPA –** Ying Tan & Cindy Mack
- **North Carolina -** Ed Norman & Jennifer Redmon
- **Massachusetts -** Michael Celona
- **Michigan -** Holly Gohlke
- **Oregon -** Brian French
- **Illinois** - Brian Cox & Caroline Pakenham
- **Pennsylvania** - Brent Sailhamer
- **Montana** - Gregory Montgomery

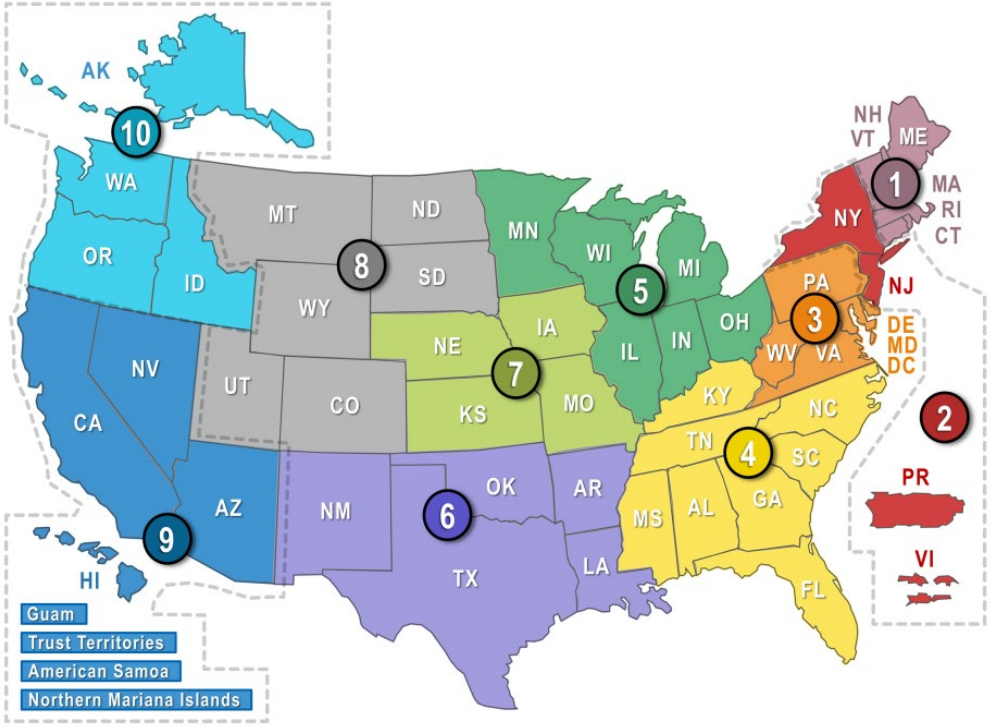

Welcome Remarks
Anita Thompkins, Director,
Drinking Water Protection Division

National Program Data Overview

Ying Tan

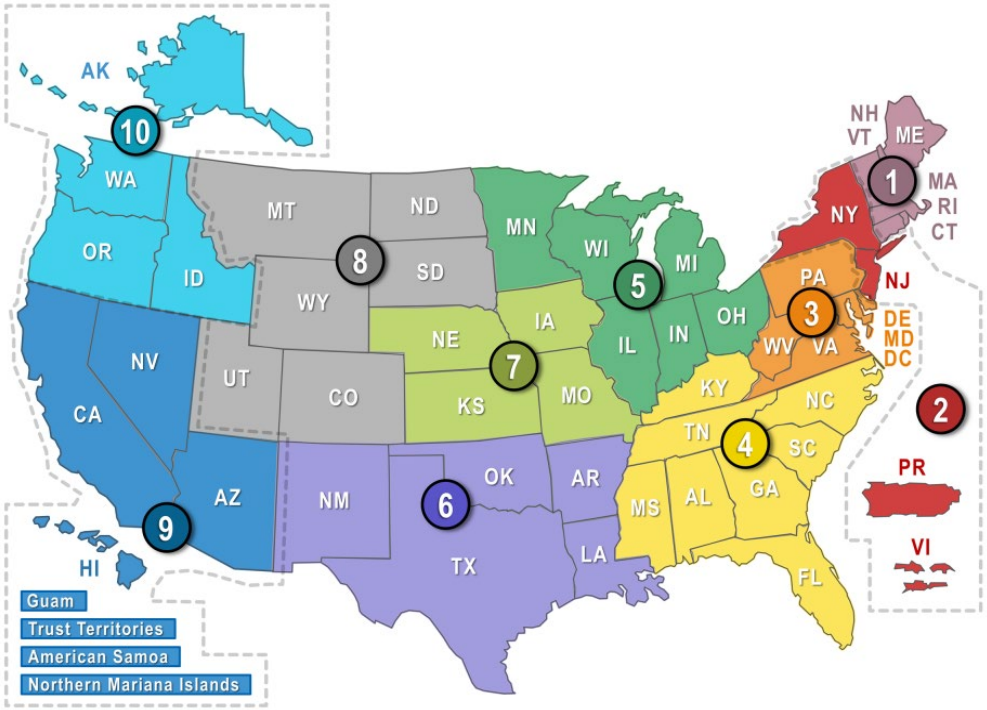
Program Funds Allocated

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



*Estimated allocation amount

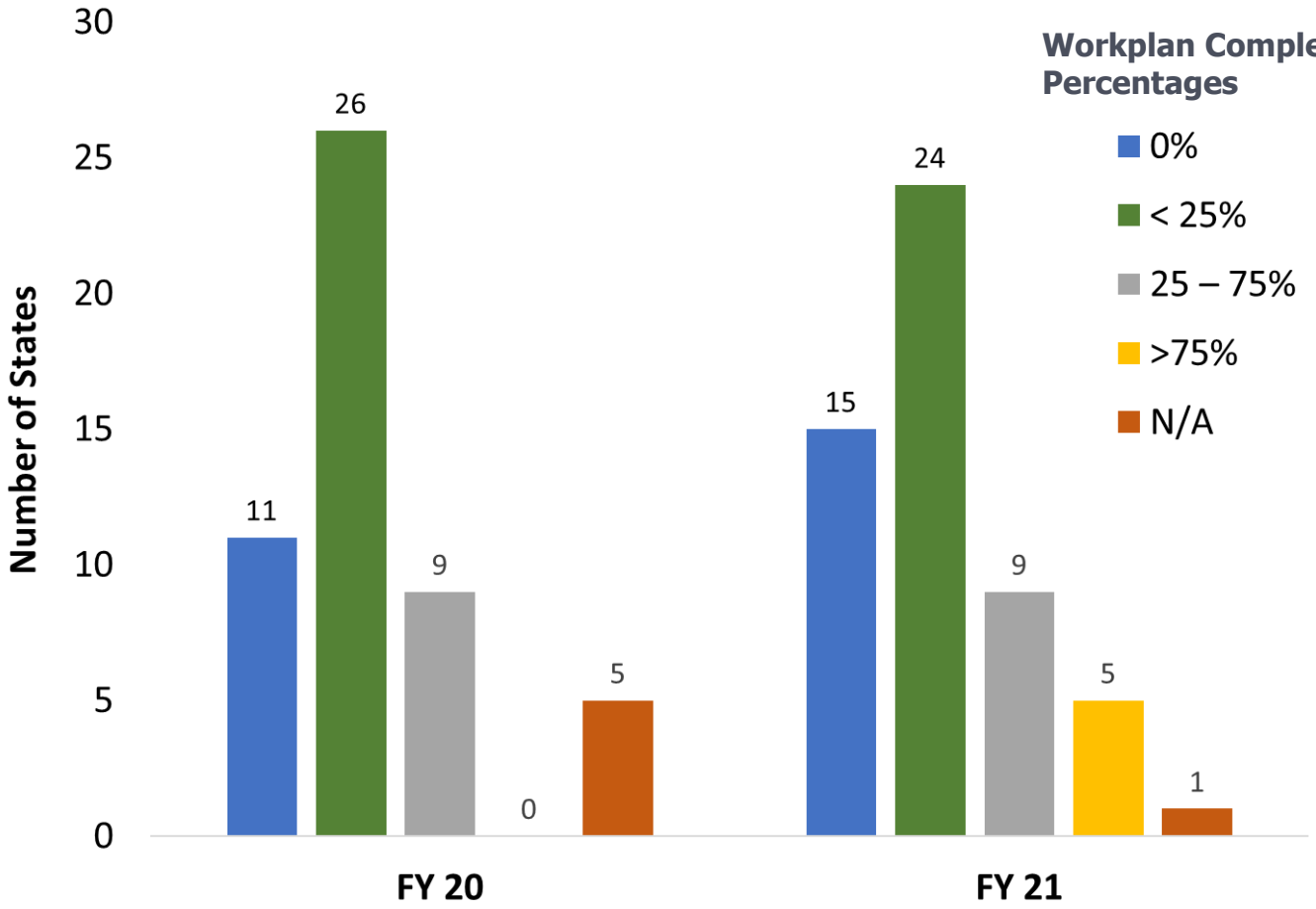
Program Funds Awarded



Regions	Awarded Amount (Million)*
1	$5.9
2	$3.5
3	$5.2
4	$10.5
5	$10.3
6	$6.7
7	$3.6
8	$3.9
9	$7.4
10	$3.1
Total	**$60.1**

*FY18 – 20 funds awarded

Program Workplan Progress



Data Source: Lead testing in schools/childcares program FY 2020 & 2021 annual reports.

Program Progress – FY20 & 21

EPA
OFFICE OF GROUND WATER AND DRINKING WATER

	Total Number of Staff Trained	Total Number of Facilities Tested	Total Number of Facilities Exceeding PRT
Schools	1,615	2,893	1,036 (36%)
Child Cares	3,652	5,972	625 (10%)
Total	5,267	8,865	1,661 (19%)

Note: Program Remediation Trigger (PRT) varies and is set by the state or school/child care facility
Data Source: Lead testing in schools/childcares program FY 2020 & 2021 annual reports.

What's Next?

- Bipartisan Infrastructure Law (Nov. 2021)
  - Grant to fund compliance monitoring and lead remediation
  - Eligible recipients expanded to include tribal consortia, qualified non-profit organizations and public water systems
- Revision of Program Implementation Document
  - Current unused and future funds eligible for lead remediation activities
  - Provides guidance on eligible lead remediation activities
  - Guidance on procedures for declining funding and transfer of program administration

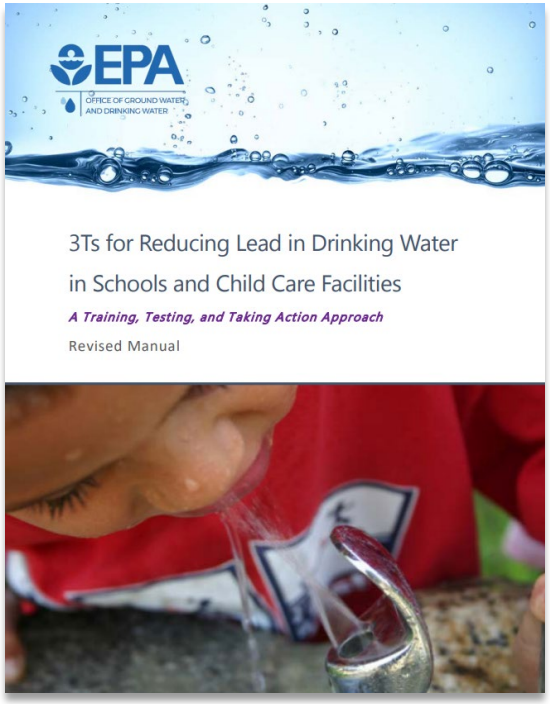
EPA 3Ts Program

Cindy Mack,
Senior Program Manager

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

TRAINING – TESTING – TAKING ACTION

3Ts Manual



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

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

Taking action *to reduce lead in drinking water.*

3Ts 7-Module Toolkit

View School-specific Resources

View Child Care-specific Resources

View Additional Resources

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

NEW!

3Ts - TRAINING – TESTING – TAKING ACTION
Tools and Outreach Materials

OFFICE OF GROUND WATER AND DRINKING WATER

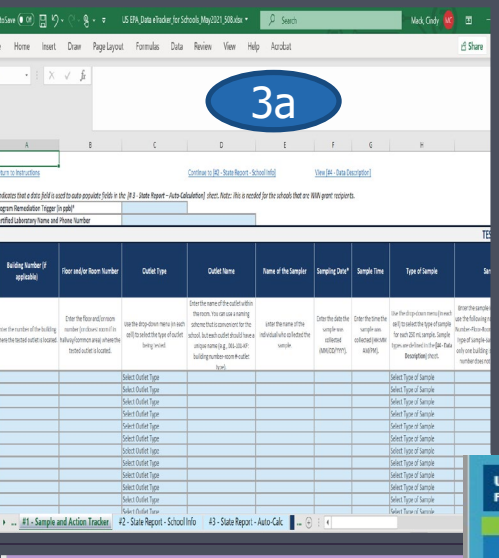
3Ts Tools

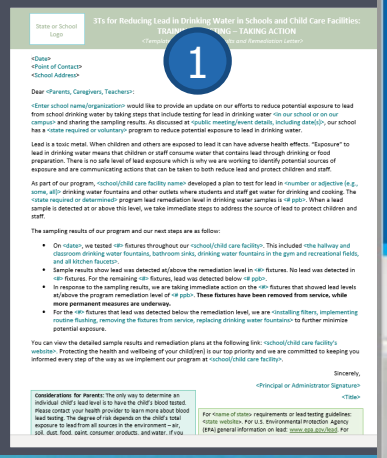
1) Factsheet: Ensuring DW Quality During and After Extended Closures
2) Parent Communication Template Letter
3) Webinar: EPA & US Dept. of Agriculture Grants and Loans
4) Data eTrackers – Inventory to Actions
5) Toolkit (Manual) in Spanish
6) Lead Sampling Field Guides & Video (*Publish by end of May*)
7) Plan eBuilders (*Publish by end of May*)

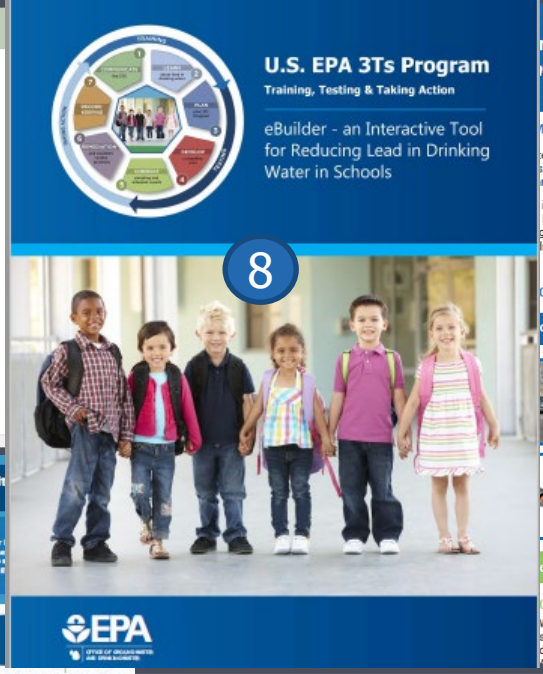
Coming soon!

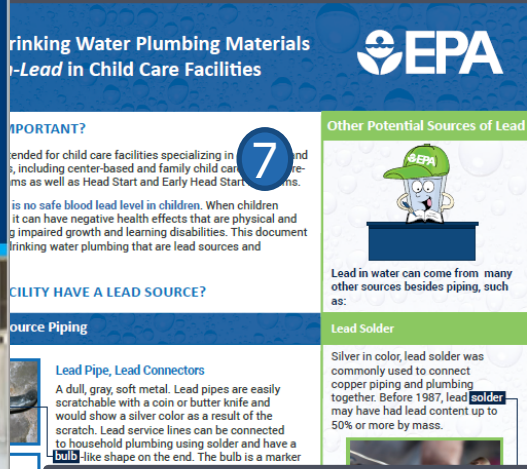
1) Joint webinar to child care facilities (EPA & Health & Human Services)
2) Factsheet: Interpreting Lead Sample Results
3) Factsheet: Common Drinking Water Lead and Non-lead Plumbing Materials

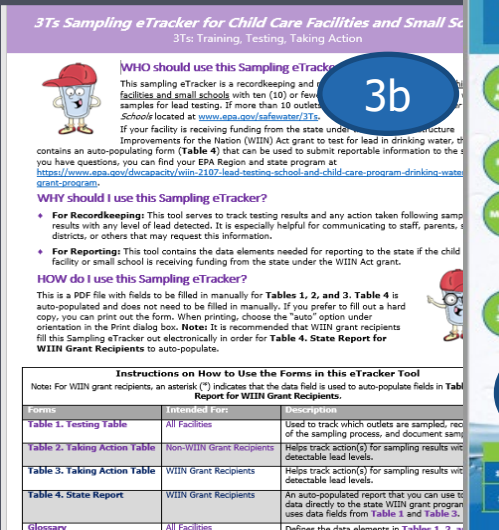
EPA 3Ts Webpage: https://www.epa.gov/safewater/3Ts


3a

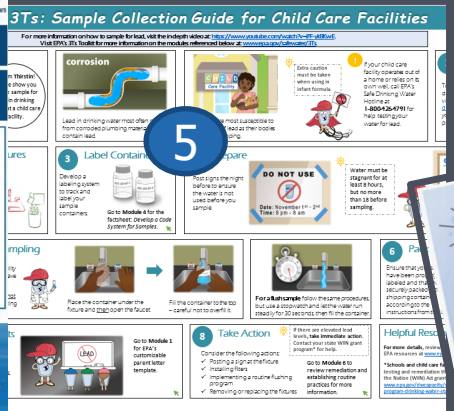

1

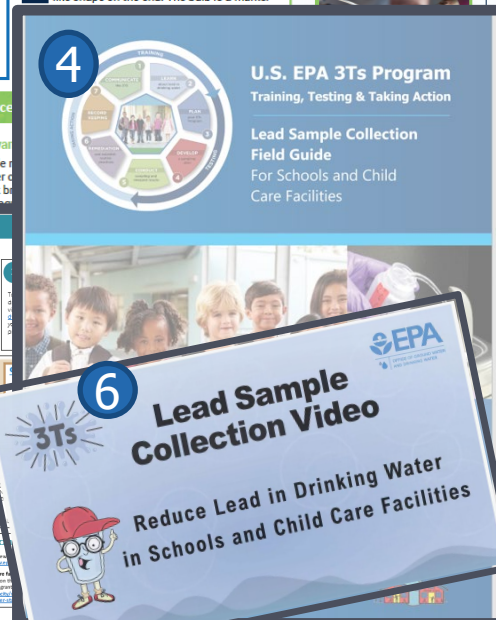

U.S. EPA 3Ts Program
Training, Testing & Taking Action
eBuilder - an Interactive Tool for Reducing Lead in Drinking Water in Schools
8


rinking Water Plumbing Materials
-Lead in Child Care Facilities
EPA
7
Other Potential Sources of Lead
Lead in water can come from many other sources besides piping, such as:
Lead Solder
Silver in color, lead solder was commonly used to connect copper piping and plumbing together. Before 1987, lead solder may have had lead content up to 50% or more by mass.
Lead Pipe, Lead Connectors
A dull, gray, soft metal. Lead pipes are easily scratchable with a coin or butter knife and would show a silver color as a result of the scratch. Lead service lines can be connected to household plumbing using solder and have a bulb-like shape on the end. The bulb is a marker


3Ts Sampling eTracker for Child Care Facilities and Small Sc
3Ts: Training, Testing, Taking Action
3b
WHO should use this Sampling eTracker
WHY should I use this Sampling eTracker?
HOW do I use this Sampling eTracker?
Instructions on How to Use the Forms in this eTracker Tool
Table 1. Testing Table
Table 2. Taking Action Table
Table 3. Taking Action Table
Table 4. State Report


U.S. EPA 3Ts Program Interpreting Lead Sample Result
For Schools and Child Care Facilities
Interpreting Lead Results
Lead Result Actions
Result
Meaning
Next Steps
Non-Detect (ND), 0 ppb, or < (less than) 1 ppb*
Between 1 ppb* and 10 ppb
> (greater than) 10 ppb
There was no detectable amount of lead in the sample tested
Lead was detected in the sample
Lead was detected in the sample and action should be taken within 24 hours of receiving the results
2
Conversion
Common Lead Concentration Units


3Ts: Sample Collection Guide for Child Care Facilities
corrosion
Label Containers
Prepare
Sampling
Take Action
5


4
U.S. EPA 3Ts Program
Training, Testing & Taking Action
Lead Sample Collection Field Guide
For Schools and Child Care Facilities
6
Lead Sample Collection Video
Reduce Lead in Drinking Water in Schools and Child Care Facilities

Best Management Practices

- **North Carolina -** Ed Norman & Jennifer Redmon
- **Massachusetts -** Michael Celona
- **Michigan -** Holly Gohlke
- **Oregon -** Brian French
- **Illinois** - Brian Cox & Caroline Pakenham
- **Pennsylvania** - Brent Sailhamer
- **Montana** - Gregory Montgomery

Clean Water for Carolina Kids

Best Management Practices Workshop

WIIN Lead Testing and Reduction in School and Child Care Program Drinking Water Program

May 17, 2022

NCPH North Carolina Public Health

delivering **the promise of science** for global good

RTI INTERNATIONAL

Ed Norman, MPH, Program Manager, Environmental Health Section, **North Carolina Division of Public Health**

Melanie Napier, MSPH, PhD, Public Health Epidemiologist, Environmental Health Section, **North Carolina Division of Public Health**

Jennifer Hoponick Redmon, MSES, MPA, CHMM, Senior Environmental Health Scientist, Clean Water for Carolina Kids Program Director, **RTI International**

Introductions

Program Overview and Key Questions

- Overview of our program
- What factors contributed to the successful implementation of your lead testing program?
- Are there best management practices that makes your lead testing program successful?

Pilot Study

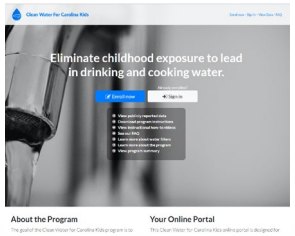
Jennifer Hoponick Redmon surveying taps at a child care center with child care administrator Jolene Thorpe in 2017.

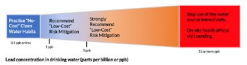
Our Pilot Study Objectives

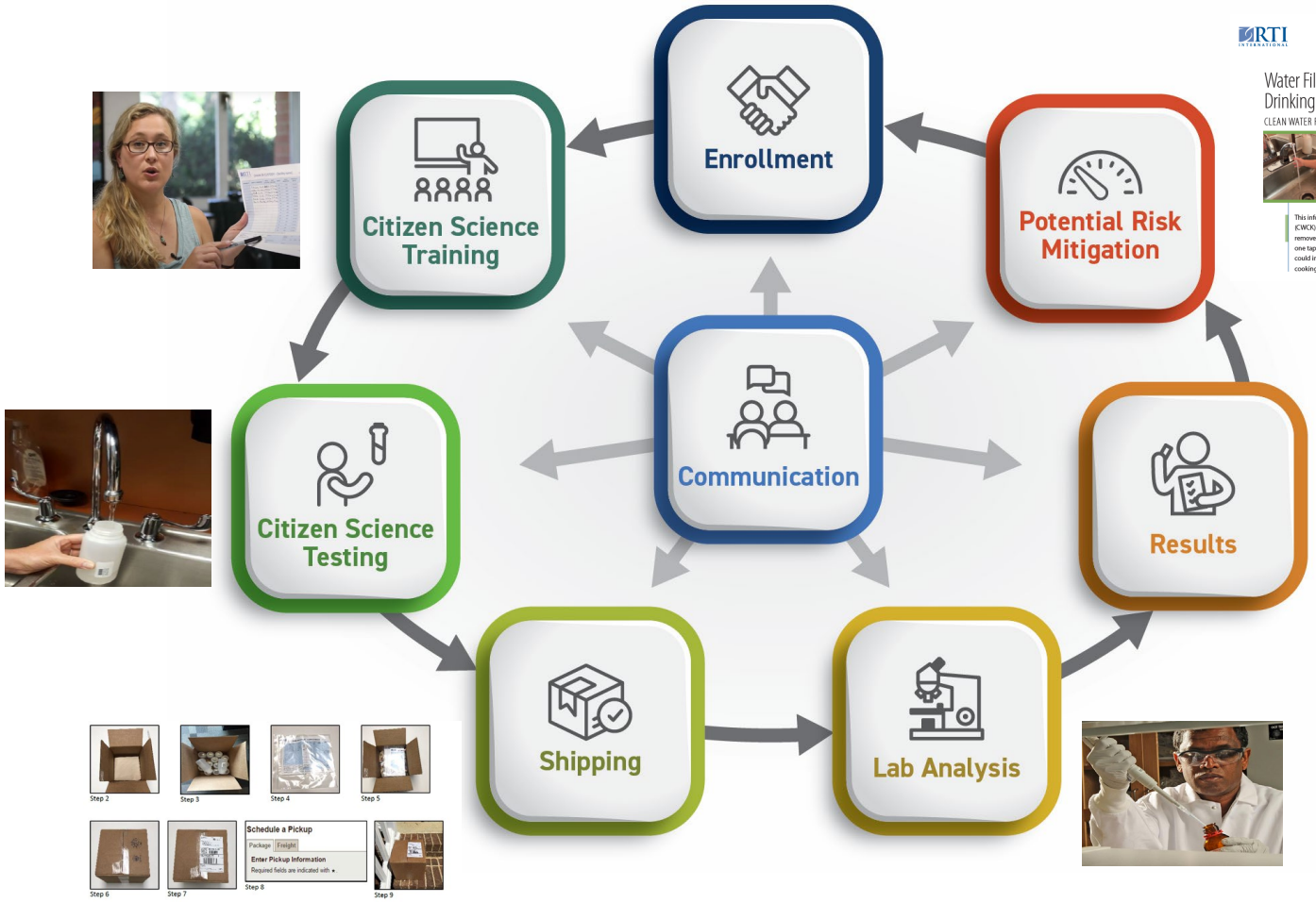
1) **Characterize lead in drinking water** at licensed NC child care centers or elementary schools.

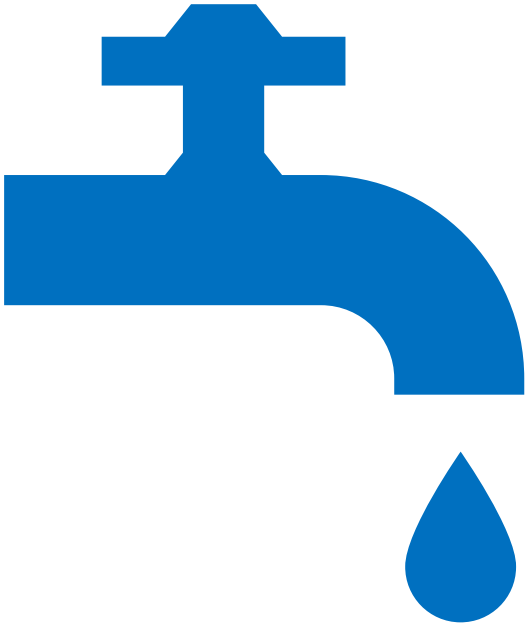
2) **Pilot** a novel citizen-science led **approach that is scalable** with limited resources.

Our approach









Clean Water for Carolina Kids
Pilot Study Results

- 103 centers enrolled with 84% completion rate
- Lead was detected above 1 ppb in 63% of centers
- 97% of centers had at least one tap with detectable lead (0.1 ppb)
- One in six centers contained lead above 15 ppb in at least one tap
- Wide range of lead across taps in the same building

Multi-Sectoral Partnerships & Rule Development

The making of a multi-sectoral partnership

Duke University Environmental Law and Policy Clinic conducted **legal research** that contributed to the proposed rule change and related efforts to eliminate childhood exposure to lead.

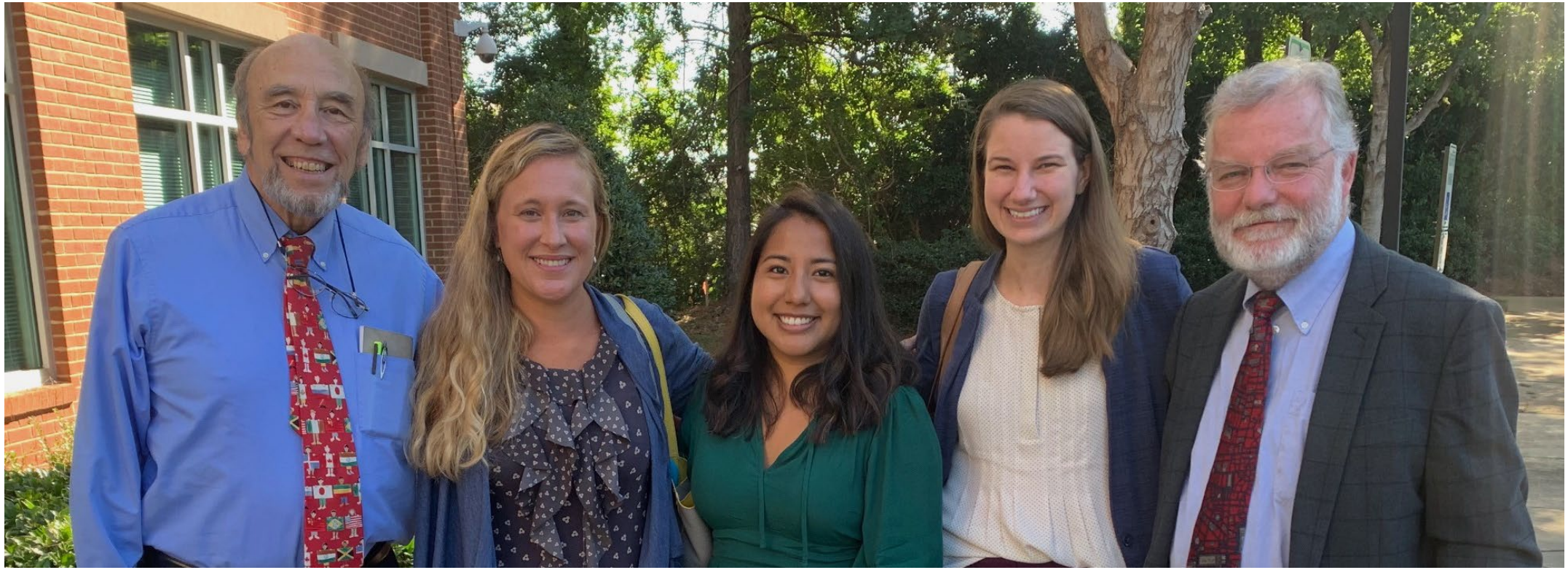
RTI's pilot study showed **the need** for the testing **and proof of a feasible testing approach**

NC Child spearheaded statewide **community engagement and advocacy** to ensure that the testing rule is inclusive of the voices of various child care centers and children

The **North Carolina Division of Public Health formally proposed a change** to the child care sanitation rule.

Initial Statewide Lead Testing Rule Approved in 2019

- Test all drinking and cooking taps at licensed NC child care centers (includes Pre-K & Head Starts)
- Recommend mitigation and required at hazard level (from 15 to 10 ppb on 12/2021)
- Retest every 3 years



For more information, see https://ncchildcare.ncdhhs.gov/Whats-New/new-rule-requires-testing-of-water-for-lead-contamination-at-child-care-centers and https://ncchildcare.ncdhhs.gov/Portals/0/documents/pdf/R/Rule_Amendment_15A_NCAC_18A__2816-9302019.pdf?ver=2019-10-07-140930-613

External Program Awards

2020 Harvard Roy Award for Environmental Partnership due "the significance in solving an important problem, our innovation, and potential for scalability and transferability to other environmental problems or geographic regions."

2020 Environmental Business Journal Award for project merit based on "significant innovation and solutions to addressing drinking water quality concerns."

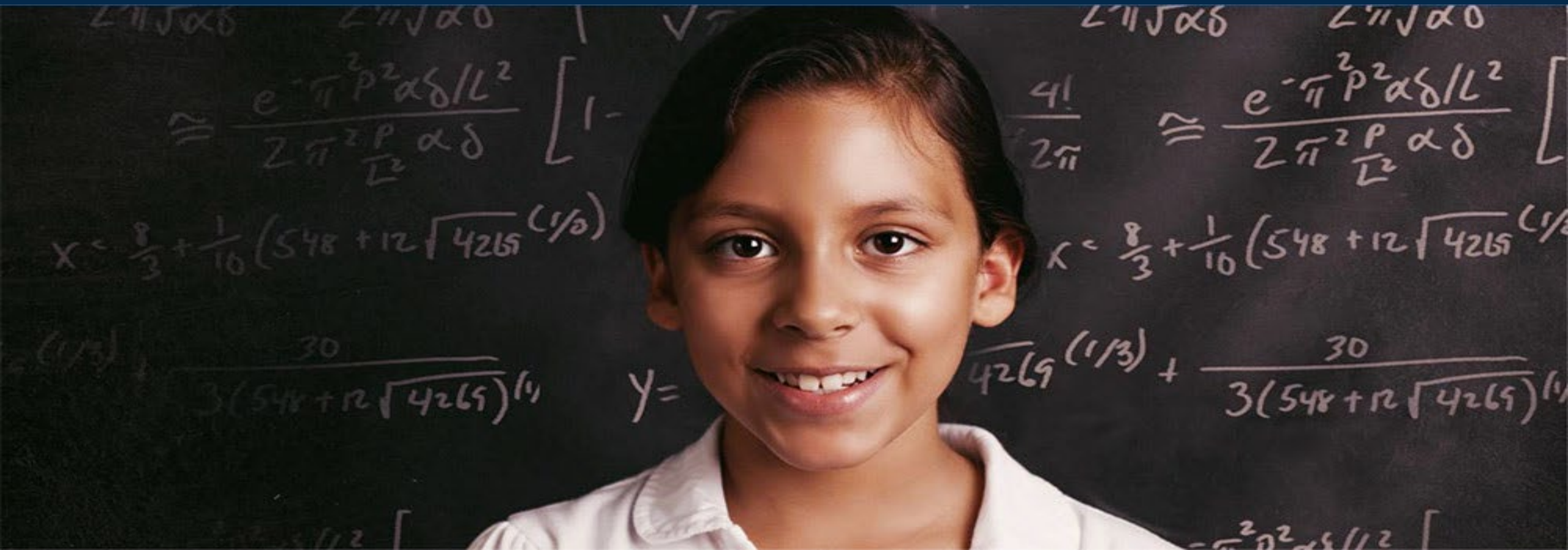
2021 Mutual of America Community Partnership Award for "exemplary leadership with multi-sectoral leaders to build a cohesive community that serves as a model for collaborating with others for the greater good."

WIIN-Grant Funded Program

Federal Grant Funding to Support Testing

- Covers testing costs
- We provide recommendations for risk mitigation

Our mission is to identify and eliminate lead in drinking and cooking water where North Carolina children learn and play.



Testing Schedule

June 2020 to September 2021:

Licensed Childcare Centers (~4,100/4,400 statewide; 96% complete now)

October 2021 – September 2022:

Remaining licensed centers (~300)

and New centers

October 2021 – September 2022:

Family child care homes (~1,350)

Next FY period:

Retesting licensed centers with one or more taps ≥ 10 ppb, Head Starts, or on well water

From Pilot to Program

We virtually walk participants through the process with training support, a mail out test kit, laboratory analysis, and our online enrollment, reporting, and communication portal.

Clean Water for Carolina Kids

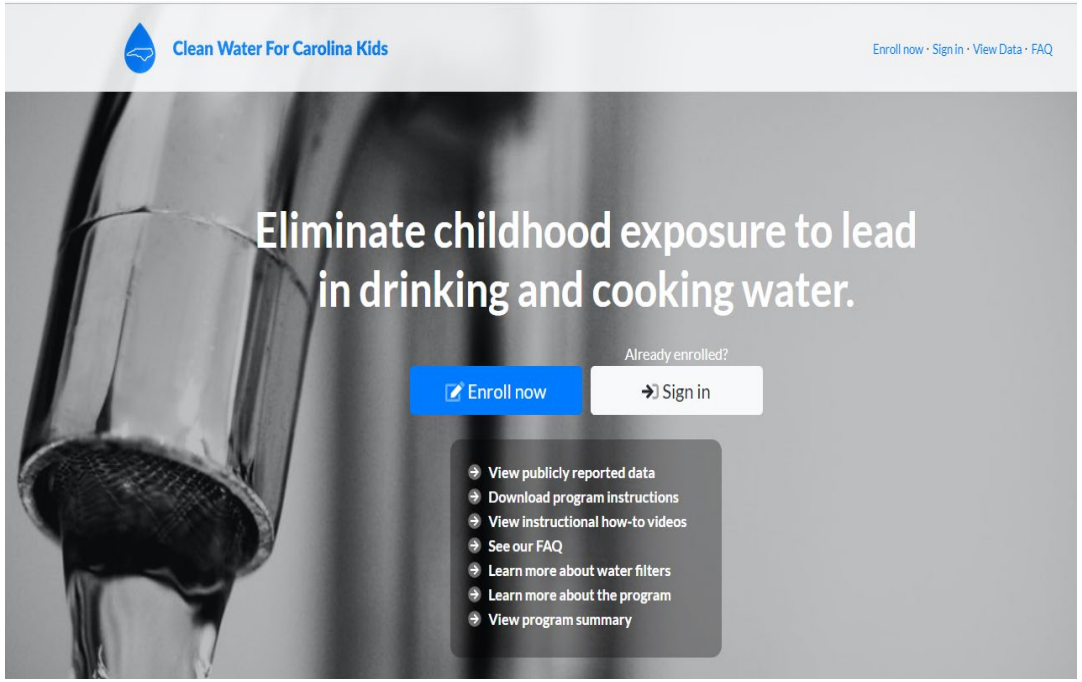
Pre-enrollment webinar:

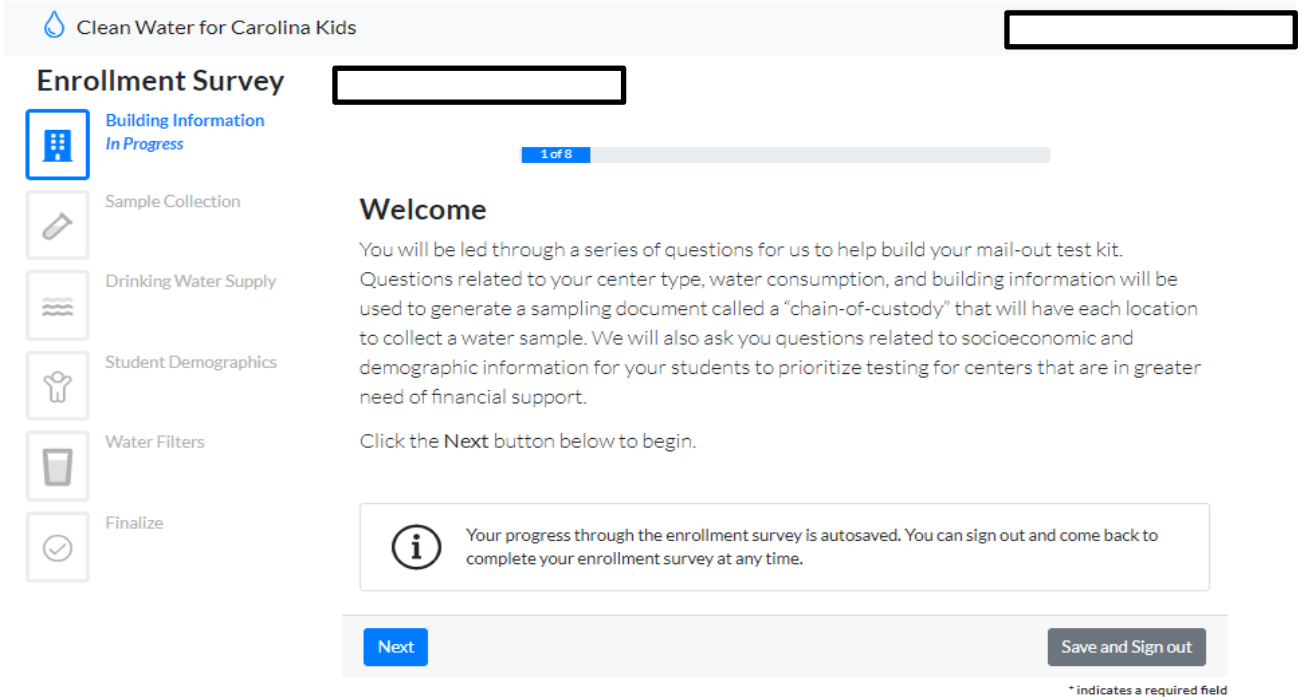
How to enroll

How to sample

How to ship samples

Enrollment at a Glance





https://www.cleanwaterforcarolinakids.org/

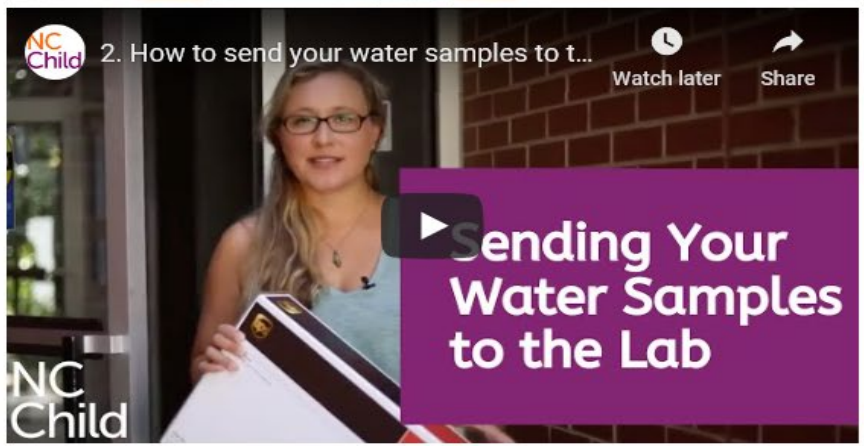
Clean Water for Carolina Kids

Instructional Videos

Español

How to sample for lead in your Child Care center's water

In this video, Jenny will show you how to use the testing kit to sample your drinking water for lead.

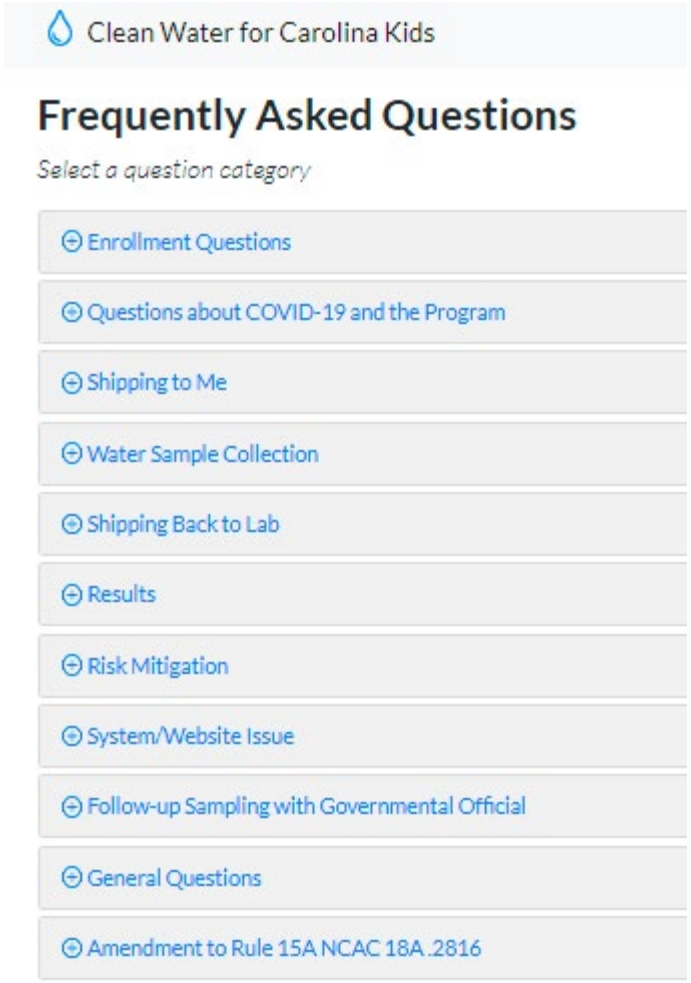


How to send your water samples to the lab

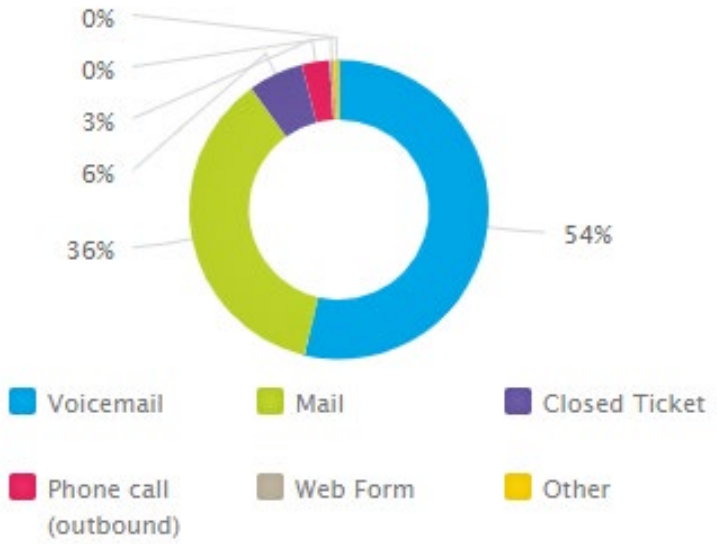
In this video, Jenny will show you how to package your water samples and send them to the lab.

https://www.cleanwaterforcarolinakids.org/howto

Support – FAQ, Contact Us by Email and Phone, and Webinars



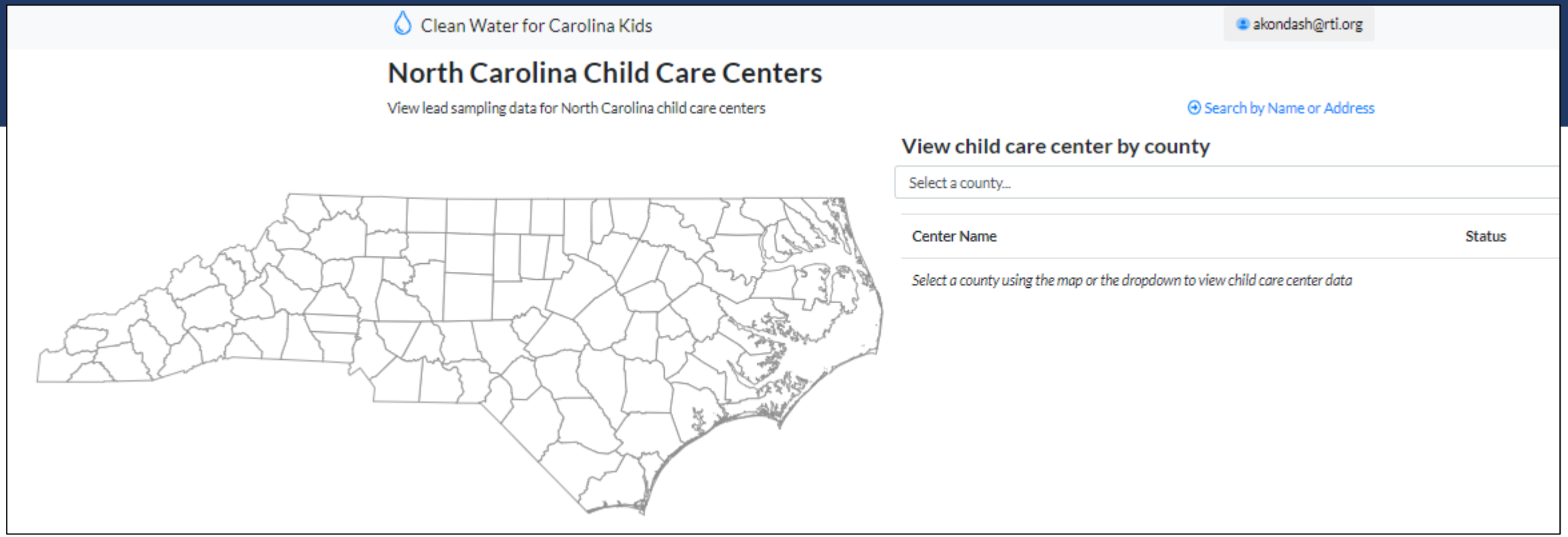
https://www.cleanwaterforcarolinakids.org/faq



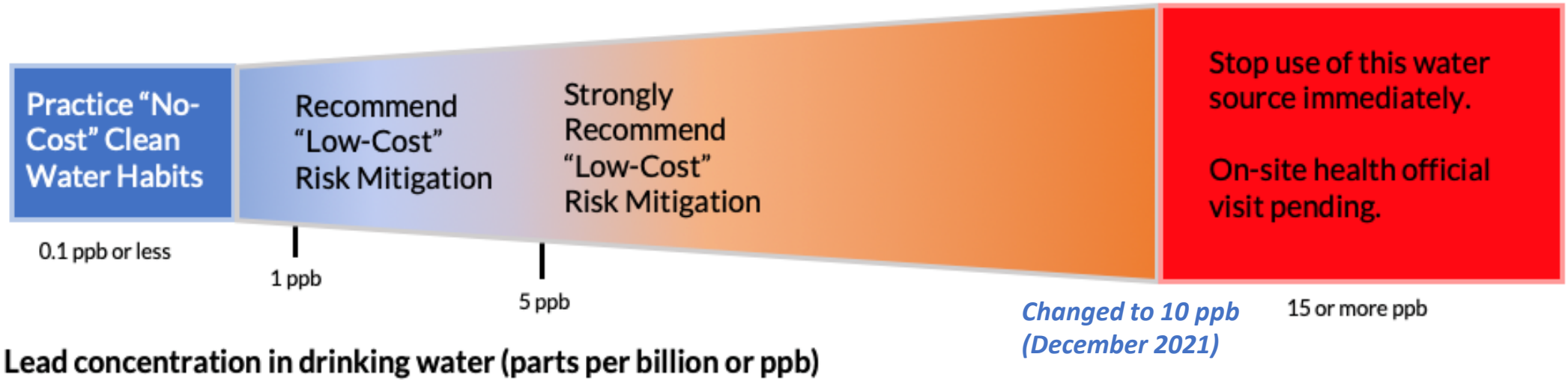
https://www.cleanwaterforcarolinakids.org/contact

Results Reporting

- You can check here: https://www.cleanwaterforcarolinakids.org/data
- Type in your address or name, or look by county
- See results by tap



What do my results mean?



Understanding the results of your water tests

In this video, Jenny will help you understand your test results. If the lab finds lead in your water, you have options about what to do. Jenny will walk you through those options.

www.cleanwaterforcarolinakids/howto

On-site support

When we identify a tap at or above lead hazard level

- Tap use is discontinued with “Do not use” sign and tape over the tap
- The State or local Public Health Department visits and resamples tap
- Support to identify how to get the lead out
- Confirmatory testing after remediation

No Cost Clean Water Habits Include:

Designate taps for drinking and cooking with proper signage.

Use only cold water for drinking or cooking. Don't start using hot water, even if you're going to boil it.

www.cleanwaterforcarolinakids.org/howto

https://www.rti.org/brochures/water-filters-certified-remove-lead-drinking-water-and-cooking-water-clean-water-carolina

Low Cost Risk Mitigation Includes:

Fixing a clog

Flushing water regularly

Faucet fixture replacement to stainless steel

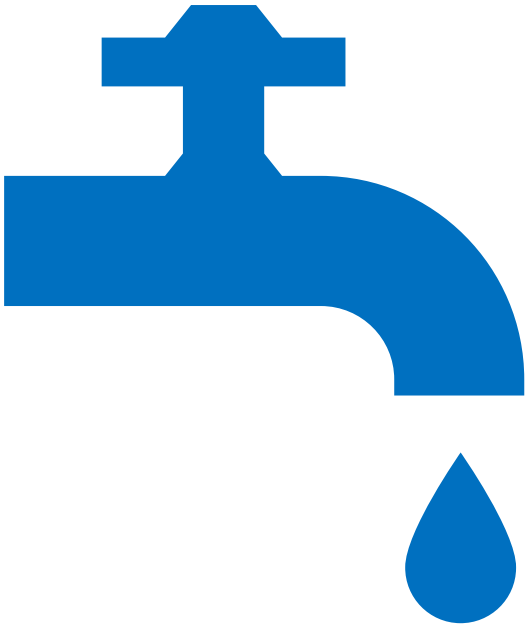
Install and maintain a water filter that is *certified to remove lead*

Install a bottle filling water fountain with built-in filter

In limited cases, more costly lead service line replacement may be needed

https://www.rti.org/brochures/clean-water-carolina-kids-information-lead-drinking-water

https://www.rti.org/brochures/water-filters-certified-remove-lead-drinking-water-and-cooking-water-clean-water-carolina



Clean Water for Carolina Kids Program Trends

July 2020 through April 20, 2022

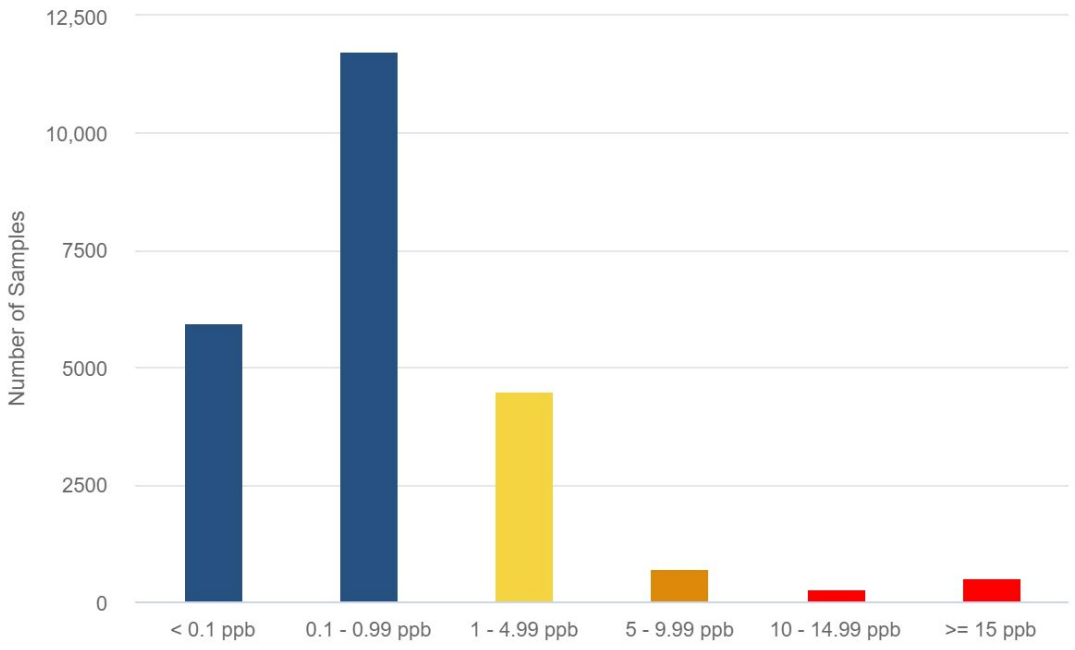
ENROLLMENT

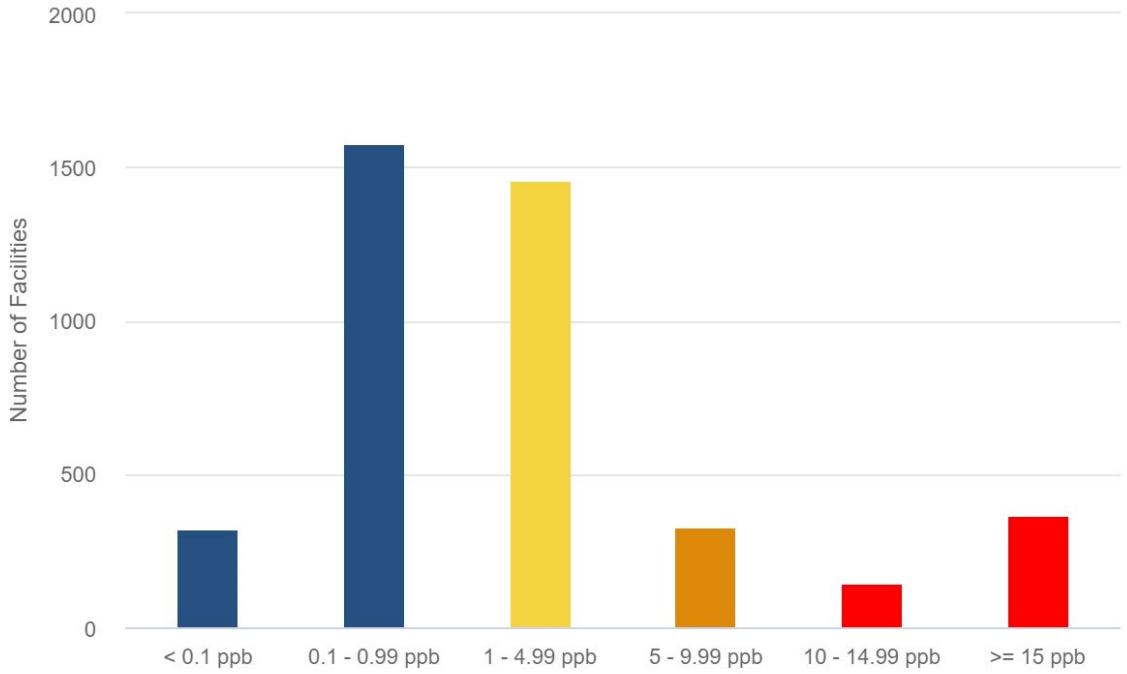
- Enrolled 4,364 licensed NC centers
- 4,193 centers have completed testing
- Tested 23,737 validated samples

TESTING

- 74.9% of samples and 92.7% of facilities have detectable lead in at least one tap (0.1 ppb)
- 12.2% of facilities have one tap ≥ 10 ppb (8.7% ≥ 15 ppb)
- 3.4% of samples ≥ 10 ppb (2.2% ≥ 15 ppb)
- Highest value to-date: 3,930 ppb in child care center kitchen

Results Data (as of 4/20/2022)





https://www.cleanwaterforcarolinakids.org/programsummary

Keys to success

- ✓**Piloting** the program
- ✓Multi-sectoral **partnerships**
- ✓**Rule** development
- ✓ **On-site support** when needed
- ✓**Funding** for testing
- ✓A **scalable** approach - scientifically rigorous, supportive, standardized
- ✓No-cost and low-cost **solutions**
- ✓Wrap-around **communication** support

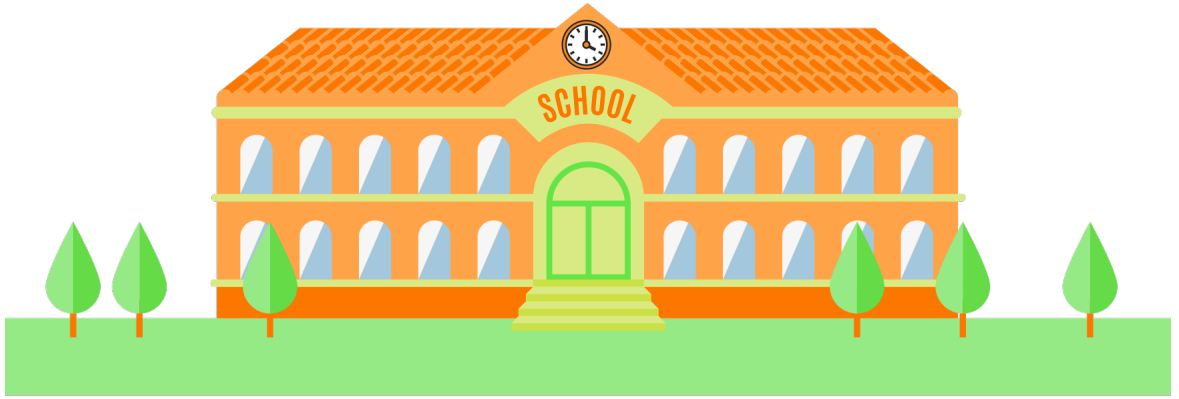
Thank you for your interest in our Clean Water for Carolina Kids program!

Ed Norman at ed.norman@dhhs.nc.gov

Melanie Napier at melanie.napier@dhhs.nc.gov

Jennifer Hoponick Redmon at jredmon@rti.org

The Massachusetts Experience: Lead In Drinking Water in Schools and Early Education and Care Facilities



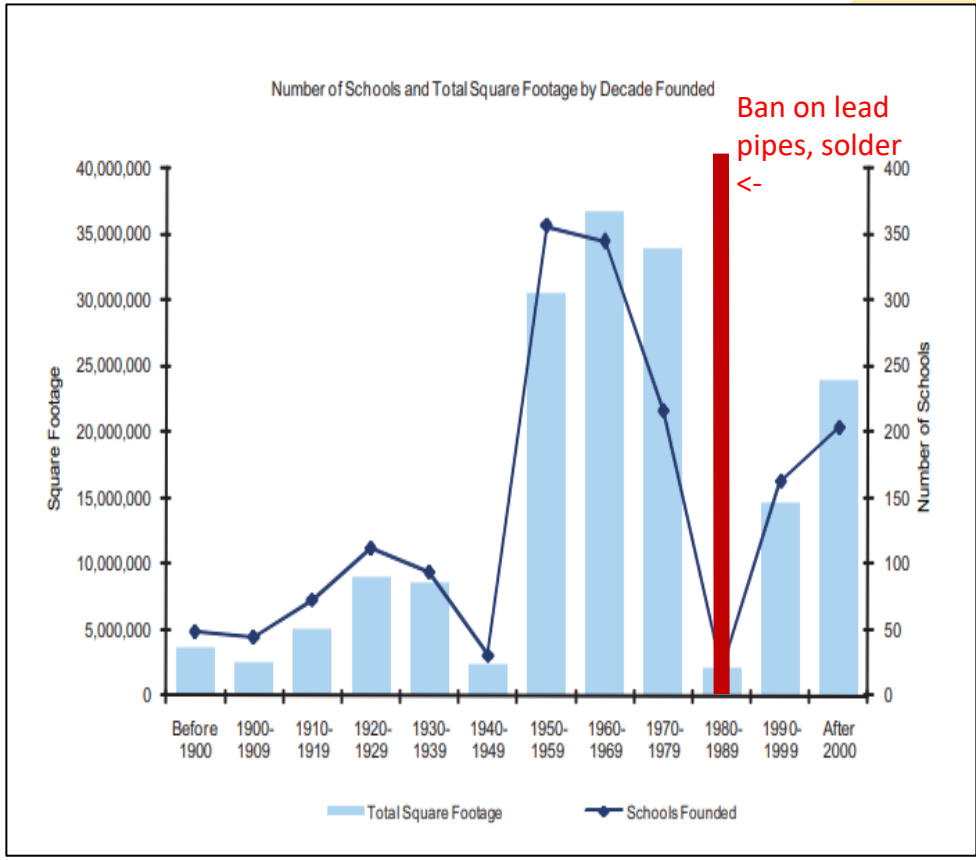
Drinking Water Program
MassDEP

MassDEP School/EECF Regulations and Guidance

- Regulations
  - MassDEP requires PWS to collect two samples at two schools/EECFs as part of their monitoring under the Lead and Copper Rule
  - No state requirement for school/EECF testing
- Guidance
  - MassDEP recommends testing all outlets used for drinking, cooking, and medical purposes for lead (and copper)
  - MassDEP has operated a voluntary technical assistance program that supports schools/EECF efforts around sampling, interpreting, and responding to results
    - Used a voluntary action level of 15 ppb
    - In 2018, after EPA released update to its 3Ts guidance, MassDEP changed voluntary action level to 1 ppb

Massachusetts Schools and EECFs

- **Schools**
  - Licensed by MA Dept of Elementary and Secondary Education- however much authority remains at local level
  - Approx. 2,400 schools: 1,900 public and 500 private
  - Many built prior to 1986 ban on lead pipes, solder
- **EECFs**
  - Licensed by MA Department of Early Education and Care
  - Approx. 7,500 private EECFs: 3,000 group and 4,500 family-based
  - Many group-EECFs in buildings built prior to 1986
  - Many family-based programs located in older urban house stock



Year of school construction

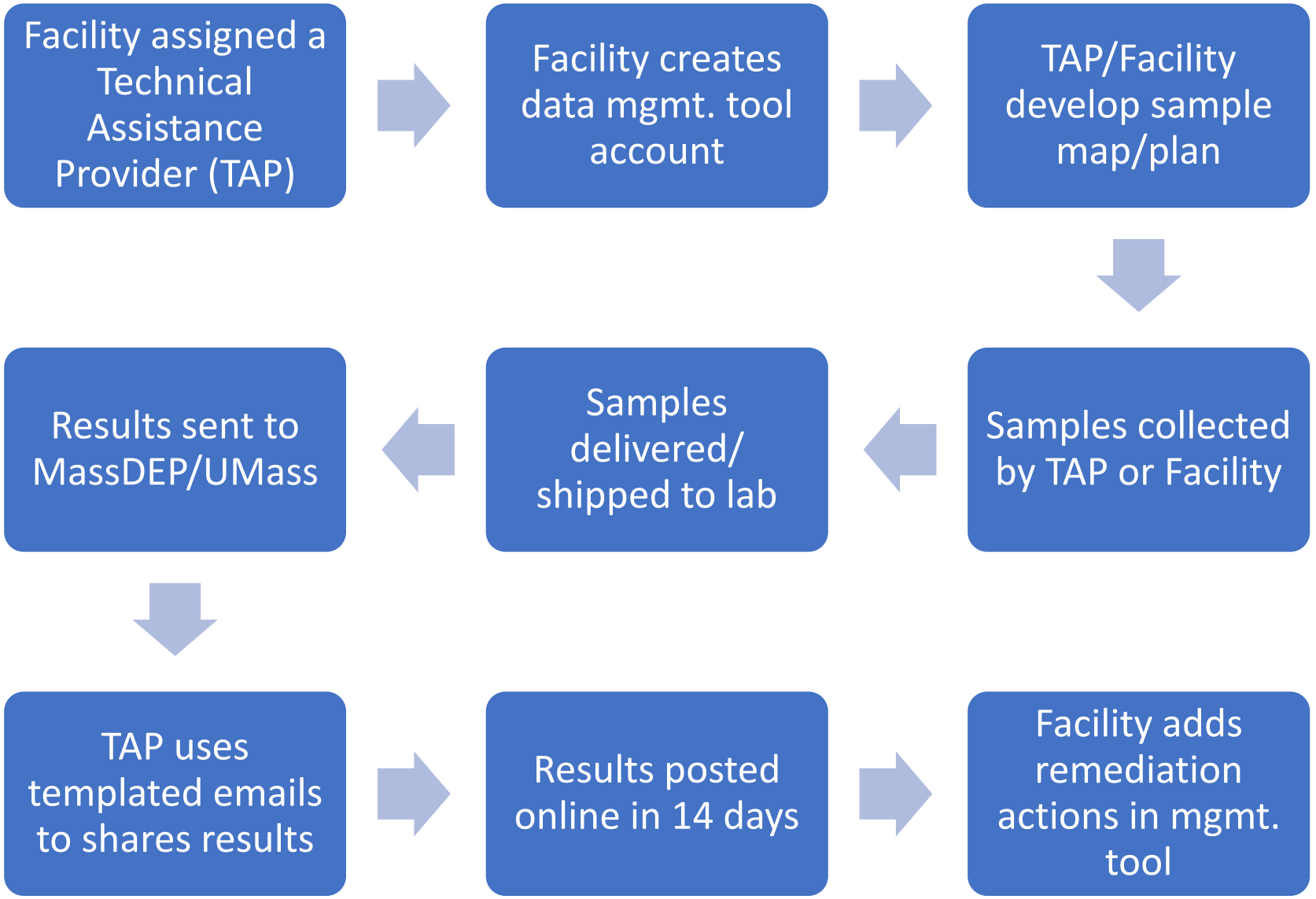
Massachusetts Comprehensive Assistance Programs

- Phase 1: 2016-2019
  - Free technical assistance and testing for lead and copper at public schools/EECFs
  - Funding: MA Clean Water Trust (SRF agency)
- Phase 2: 2020-now
  - Free technical assistance and testing for lead (only) at public/private schools/EECFs
  - Funding: EPA WIINs grants and MA Clean Water Trust funding (private schools)
  - Grants for purchase of filtered water bottle filling stations (MA Clean Water Trust)
- Results
  - Tested over 1,000 schools and 200 EECFs
  - Over 60,000 samples collected (stagnation and flush at each location) at all locations used for drinking, cooking, and medical purposes

BMP: Collaborations

- University of Massachusetts- Amherst
- MA Clean Water Trust (SRF)- Funding
- MA Dept of Public Health- TA for local health depts
- USEPA- Funding and guidance
- MA Water Resources Authority- Lab support
- MA Dept of Early Education & Care- Outreach to childcare
- MA Dept of Education- Outreach to schools

BMP: Facility Processing Flow



UMass Amherst

BMP: Online Resources

1

1. PRIMARY POINT OF CONTACT FOR ASSISTANCE PROGRAM

This individual will be contacted by a technical assistance provider from the University of Massachusetts

* indicates a required field

First Name *

Last Name *

Job Title *

Mailing Addre

Mailing Addre

2

2. FACILITY INFORMATION

Select your facility type and the town in which it is located. The Facility Name dropdown will populate based on what you select for Facility Type and Town. Please provide the facility information for each facility that will be participating in the Program.

Facility Type

Town

Facility Name

Add Selected Facility

If you cannot find your facility using t

FACILITY TYPE

3

3. CERTIFICATION

The application must be signed by one of the following officials:

- School Superintendent or Principal,
- School Committee Representative,
- Child Care Facility Manager or Representative,
- Mayor,
- Town Administrator or other official authorized by the municipality or child care facility to make the required commitments to participate in this program.

* Required Field

I certify that I am authorized to submit this application and that appropriate employee identified in Section 1 will be designated to work with a technical assistance provider to complete Program activities. *

First Name *

Last Name *

Job Title *

Simple online application

phase-three-application-form-submissions

File Edit View Insert Format Data Tools Extensions Help

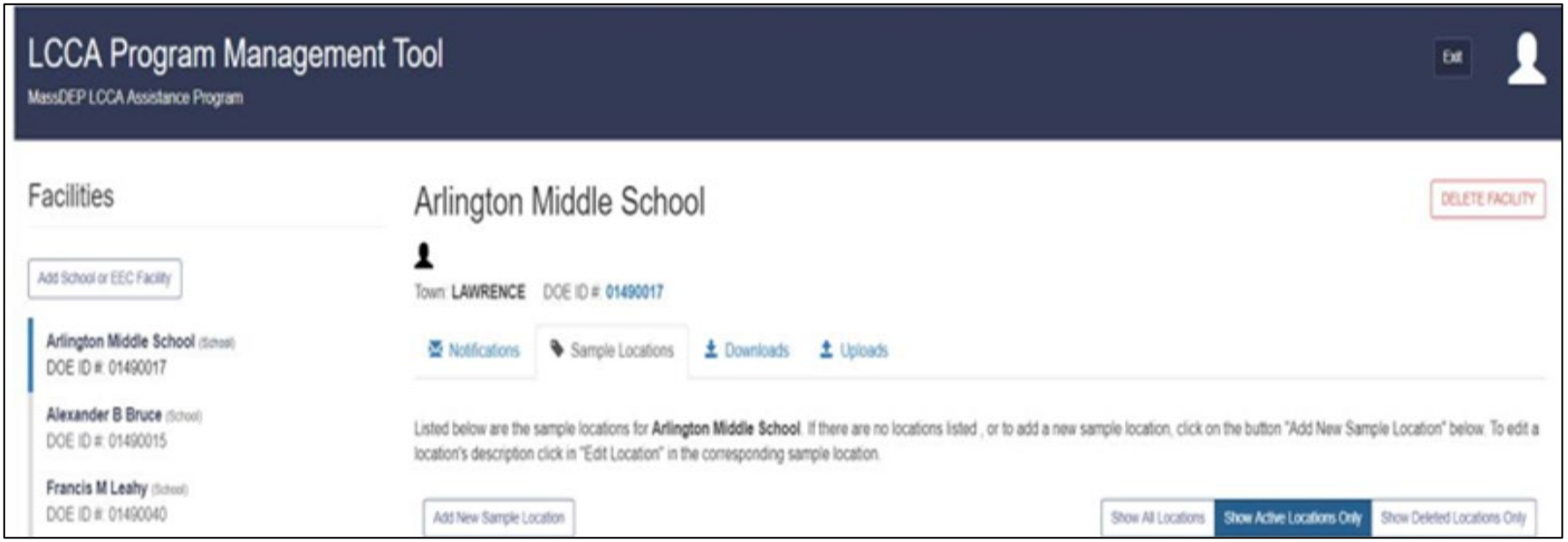
100% View only

A1 REFERENCE_NUM

	D	E	F
1	FACILITY_NAME	FACILITY_TYPE	FACILITY_STREET_1
2	Cape Cod Lighthouse Charter School	sch	195 Route 137
3	Loving Nest Preschool	ccf	562 WAVERLY ST
4	Crayon College, Inc.	ccf	24 Main Street
5	Concord Montessori School	ccf	29 DOMINO DR STE 2
6	Small Friends	ccf	21 Nobadeer Farm Rd
7	Giggle Garden's, Inc.	ccf	627 STATE ST

Transfers to Google sheets file

BMP: Online Resources



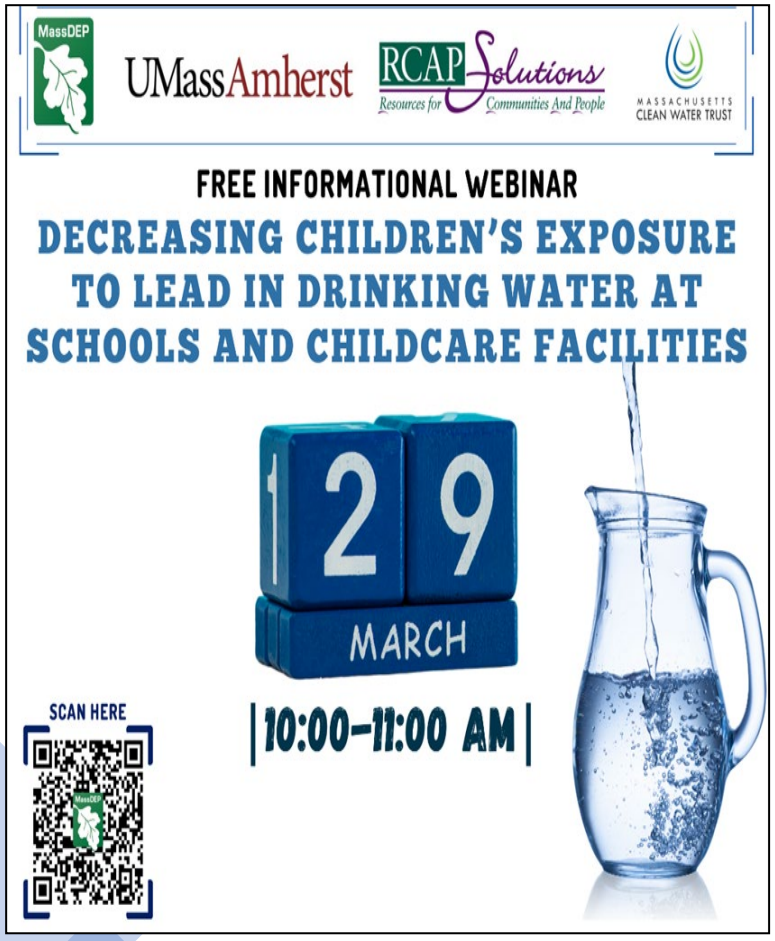
Facility Management Tool

- Upload a sample map
- Track results over time
- Add remediation actions

Data Reporting

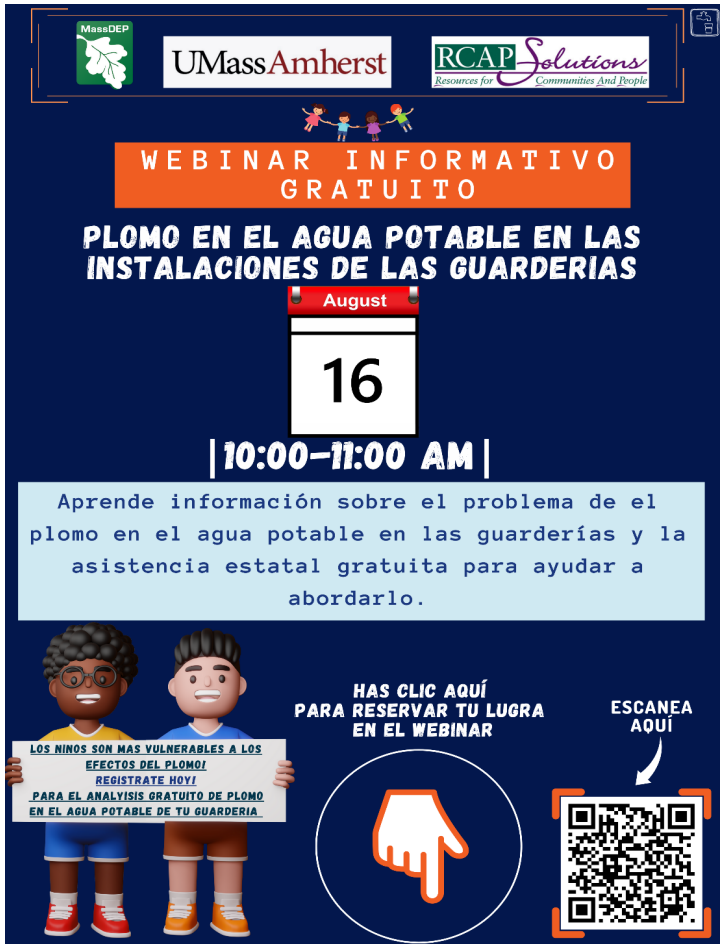
- Sampling results
- Remediation actions

BMP: Outreach, Education, and Training



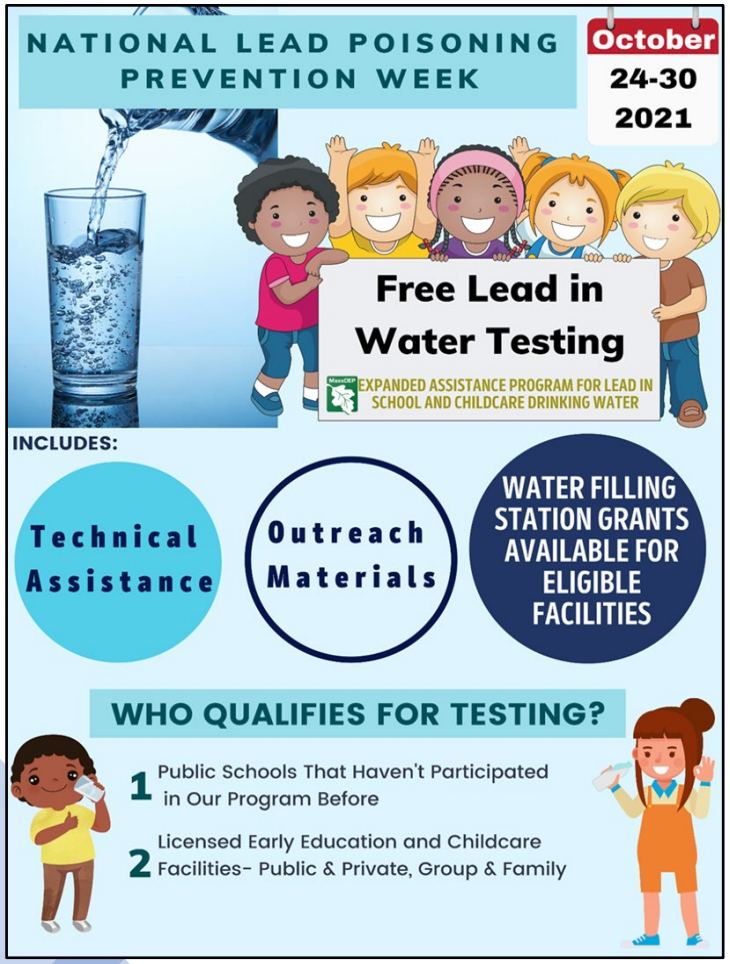
English-language Webinar

Spanish-language Webinar

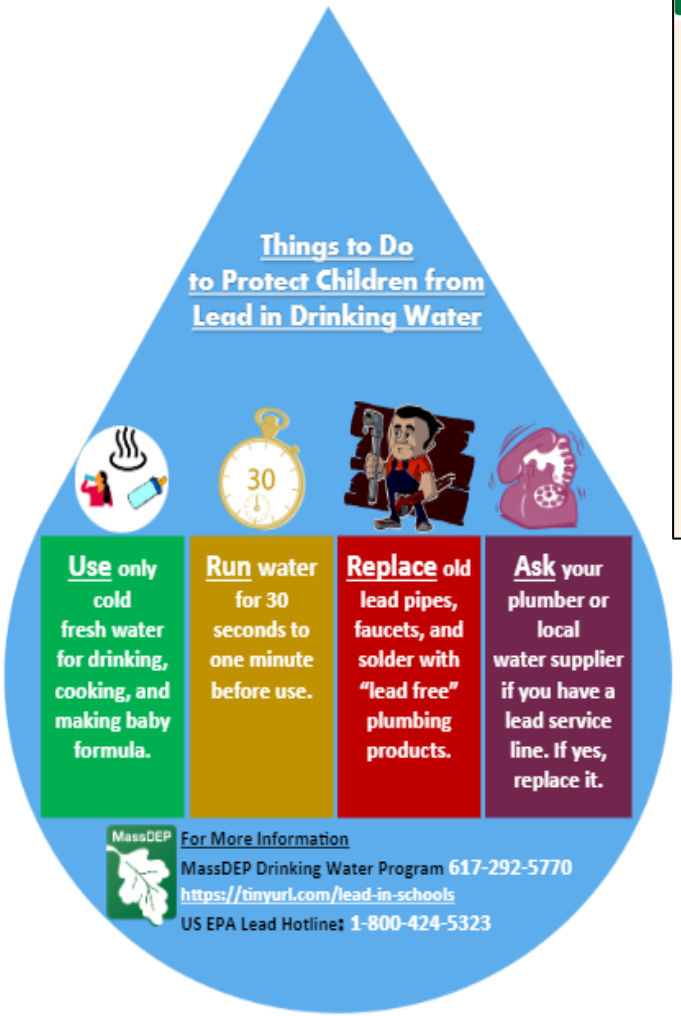


Trivia Night for Family Programs

BMP: Outreach, Education, and Training



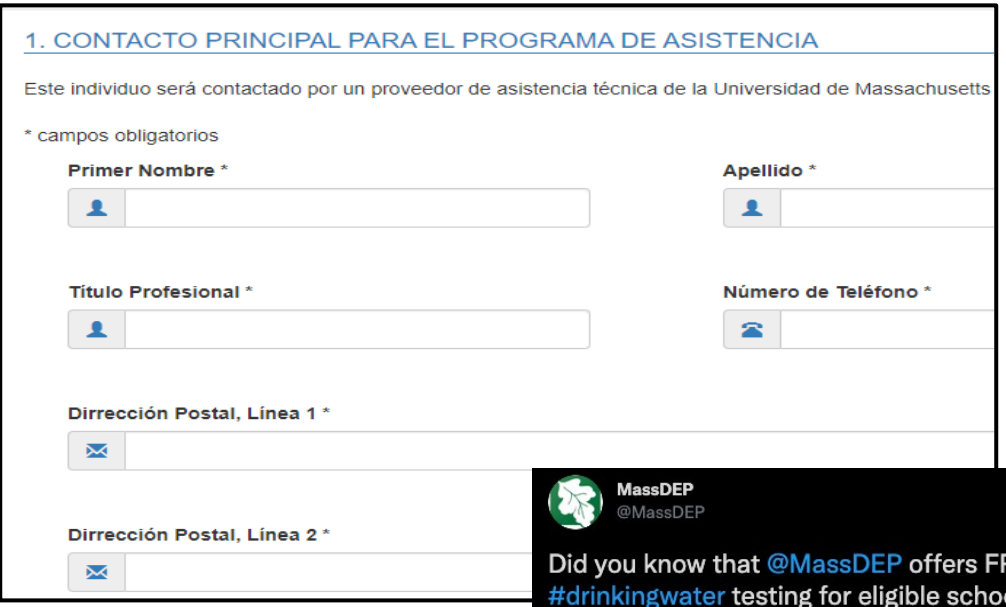
Flyers



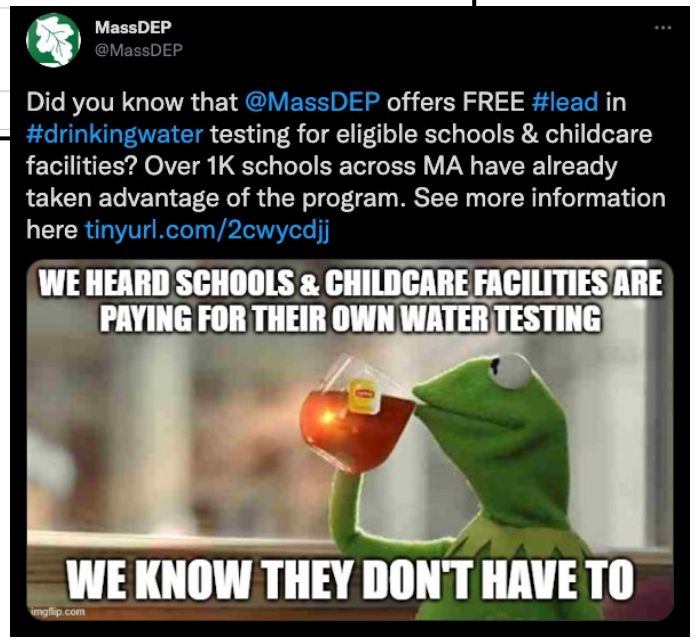
Magnet

Informational Guide for Parents

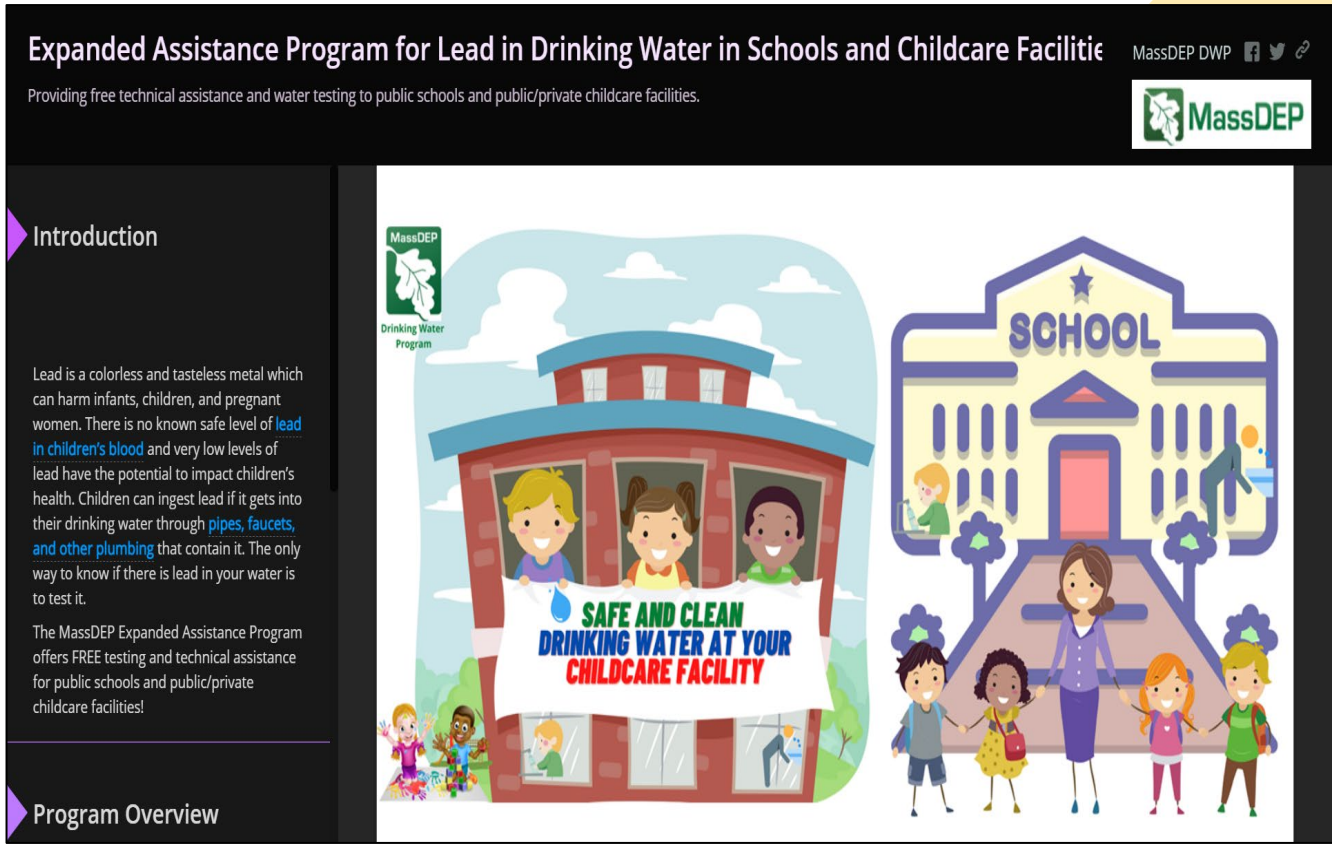
BMP: Outreach, Education, and Training



Spanish-language Application



Memes



Story Map

BMP: Remediation Options

Filtered Bottle Filling Stations

Filter Giveaway

Thanks!

- MassDEP Assistance Program website:

www.mass.gov/assistance-program-for-lead-in-school-drinking-water

- School/EECF test results and remediation action database:

https://eeaonline.eea.state.ma.us/portal#!/search/leadandcopper

- Clean Water Trust SWIG Program:

www.mass.gov/school-water-improvement-grants

MICHIGAN DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY

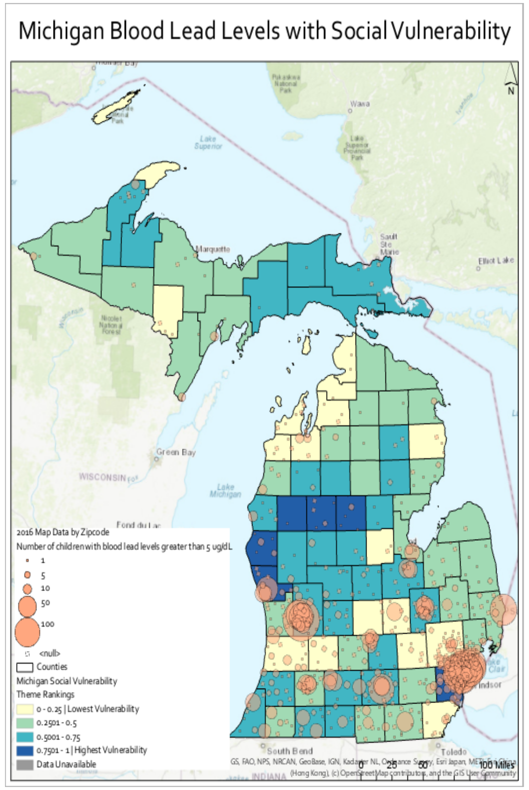
WIIN Best Management Practice Workshop

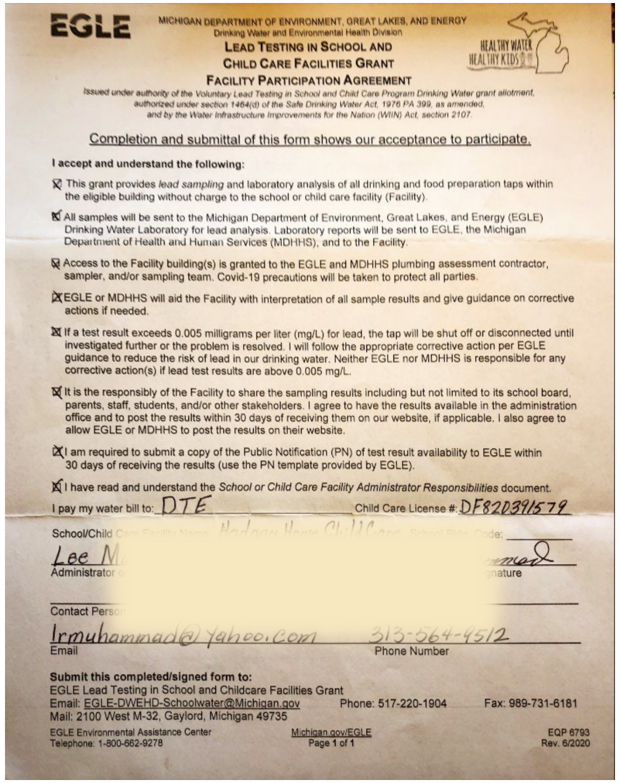
Holly Gohlke, R.S., M.S.A.
School Drinking Water Program
517-220-1904| Gohlkeh@Michigan.gov

Success Factors

- Program administration
- Partnerships
- Consistency

Program Administration





EGLE

MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY
Drinking Water and Environmental Health Division

LEAD TESTING IN SCHOOL AND CHILD CARE FACILITIES GRANT FACILITY PARTICIPATION AGREEMENT

HEALTHY WATER HEALTHY KIDS

Issued under authority of the Voluntary Lead Testing in School and Child Care Program Drinking Water grant allotment, authorized under section 1464(d) of the Safe Drinking Water Act, 1976 PA 399, as amended, and by the Water Infrastructure Improvements for the Nation (WIIN) Act, section 2107.

Completion and submittal of this form shows our acceptance to participate.

I accept and understand the following:

- ☒ This grant provides *lead sampling* and laboratory analysis of all drinking and food preparation taps within the eligible building without charge to the school or child care facility (Facility).
- ☒ All samples will be sent to the Michigan Department of Environment, Great Lakes, and Energy (EGLE) Drinking Water Laboratory for lead analysis. Laboratory reports will be sent to EGLE, the Michigan Department of Health and Human Services (MDHHS), and to the Facility.
- ☒ Access to the Facility building(s) is granted to the EGLE and MDHHS plumbing assessment contractor, sampler, and/or sampling team. Covid-19 precautions will be taken to protect all parties.
- ☒ EGLE or MDHHS will aid the Facility with interpretation of all sample results and give guidance on corrective actions if needed.
- ☒ If a test result exceeds 0.005 milligrams per liter (mg/L) for lead, the tap will be shut off or disconnected until investigated further or the problem is resolved. I will follow the appropriate corrective action per EGLE guidance to reduce the risk of lead in our drinking water. Neither EGLE nor MDHHS is responsible for any corrective action(s) if lead test results are above 0.005 mg/L.
- ☒ It is the responsibly of the Facility to share the sampling results including but not limited to its school board, parents, staff, students, and/or other stakeholders. I agree to have the results available in the administration office and to post the results within 30 days of receiving them on our website, if applicable. I also agree to allow EGLE or MDHHS to post the results on their website.
- ☒ I am required to submit a copy of the Public Notification (PN) of test result availability to EGLE within 30 days of receiving the results (use the PN template provided by EGLE).
- ☒ I have read and understand the *School or Child Care Facility Administrator Responsibilities* document.

I pay my water bill to: DTE Child Care License #: DF820391579

School/Child School Bldg. Code:

Lee M

Administrator ... nature

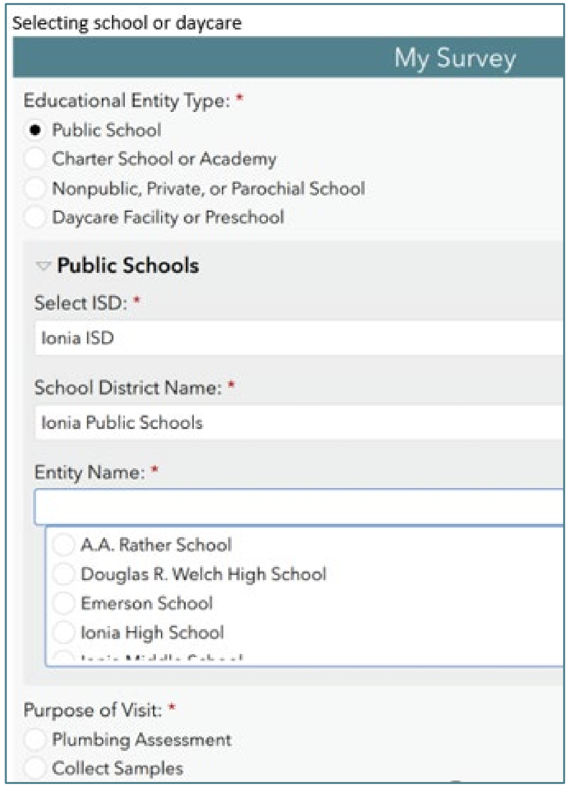
Contact Pers...

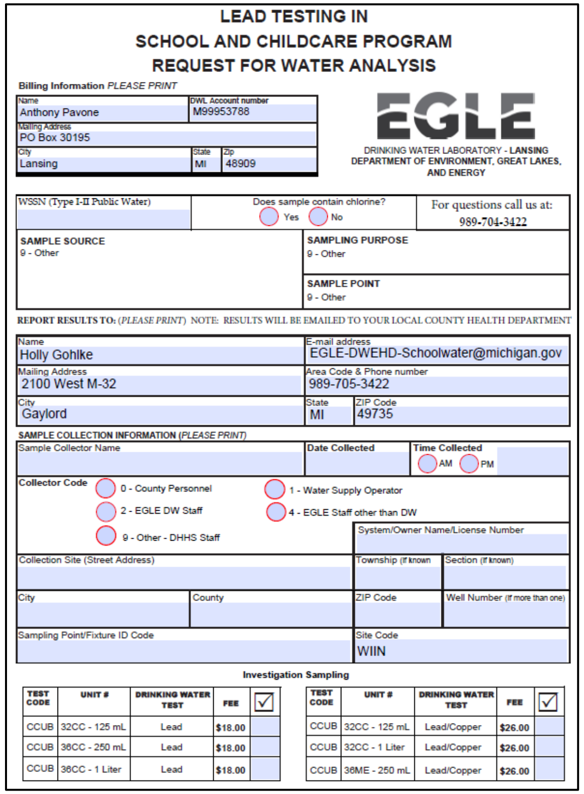
lrmuhammad@yahoo.com 313-564-4512

Email Phone Number

Submit this completed/signed form to:
EGLE Lead Testing in School and Childcare Facilities Grant
Email: EGLE-DWEHD-Schoolwater@Michigan.gov Phone: 517-220-1904 Fax: 989-731-6181
Mail: 2100 West M-32, Gaylord, Michigan 49735

EGLE Environmental Assistance Center
Telephone: 1-800-662-9278
Michigan.gov/EGLE
Page 1 of 1
EQP 6793
Rev. 6/2020





LEAD TESTING IN SCHOOL AND CHILDCARE PROGRAM REQUEST FOR WATER ANALYSIS

EGLE
DRINKING WATER LABORATORY - LANSING
DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY

Billing Information *PLEASE PRINT*

Name: Anthony Pavone | DWL Account number: M99953788
Mailing Address: PO Box 30195
City: Lansing | State: MI | Zip: 48909

WSSN (Type I-II Public Water) | Does sample contain chlorine? ○ Yes ○ No | For questions call us at: 989-704-3422

SAMPLE SOURCE 9 - Other | **SAMPLING PURPOSE** 9 - Other | **SAMPLE POINT** 9 - Other

REPORT RESULTS TO: (*PLEASE PRINT*) NOTE: RESULTS WILL BE EMAILED TO YOUR LOCAL COUNTY HEALTH DEPARTMENT

Name: Holly Gohlke | E-mail address: EGLE-DWEHD-Schoolwater@michigan.gov
Mailing Address: 2100 West M-32 | Area Code & Phone number: 989-705-3422
City: Gaylord | State: MI | ZIP Code: 49735

SAMPLE COLLECTION INFORMATION (*PLEASE PRINT*)

Sample Collector Name | Date Collected | Time Collected ○ AM ○ PM

Collector Code: ○ 0 - County Personnel ○ 1 - Water Supply Operator ○ 2 - EGLE DW Staff ○ 4 - EGLE Staff other than DW ○ 9 - Other - DHHS Staff

System/Owner Name/License Number
Collection Site (Street Address) | Township (If known | Section (If known)
City | County | ZIP Code | Well Number (If more than one)
Sampling Point/Fixture ID Code | Site Code: WIIN

Investigation Sampling

TEST CODE	UNIT #	DRINKING WATER TEST	FEE	☑	TEST CODE	UNIT #	DRINKING WATER TEST	FEE	☑
CCUB	32CC - 125 mL	Lead	$18.00		CCUB	32CC - 125 mL	Lead/Copper	$26.00	
CCUB	36CC - 250 mL	Lead	$18.00		CCUB	32CC - 1 Liter	Lead/Copper	$26.00	
CCUB	36CC - 1 Liter	Lead	$18.00		CCUB	36ME - 250 mL	Lead/Copper	$26.00	

No facility application, no upfront costs

EGLE

Partnerships

TRIMEDIA ENVIRONMENTAL & ENGINEERING

MDHHS Michigan Department of Health & Human Services

LARA LICENSING AND REGULATORY AFFAIRS CUSTOMER DRIVEN. BUSINESS MINDED.

MICHIGAN Department of Education

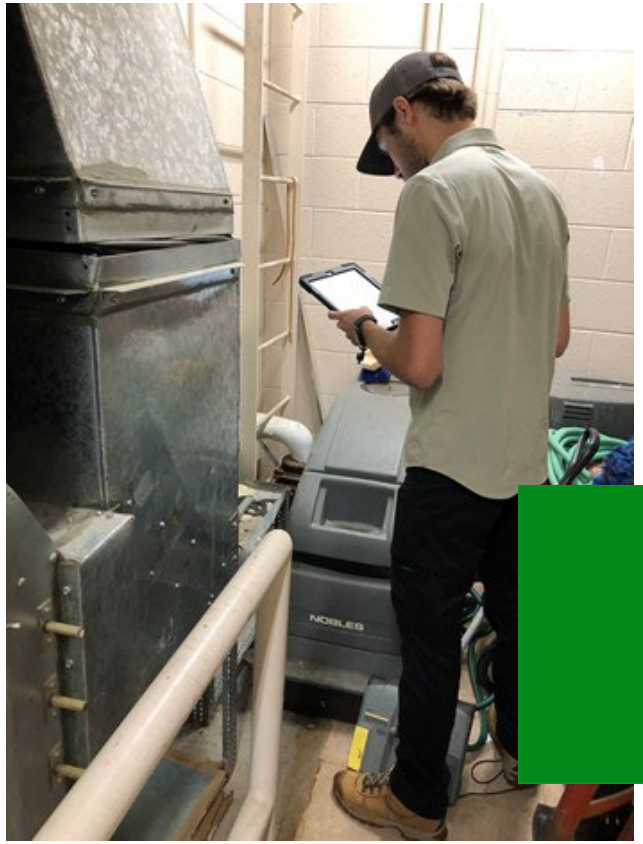
MSBO Michigan School Business Officials

American Water Works Association Michigan Section

RCAP

EGLE

Consistency

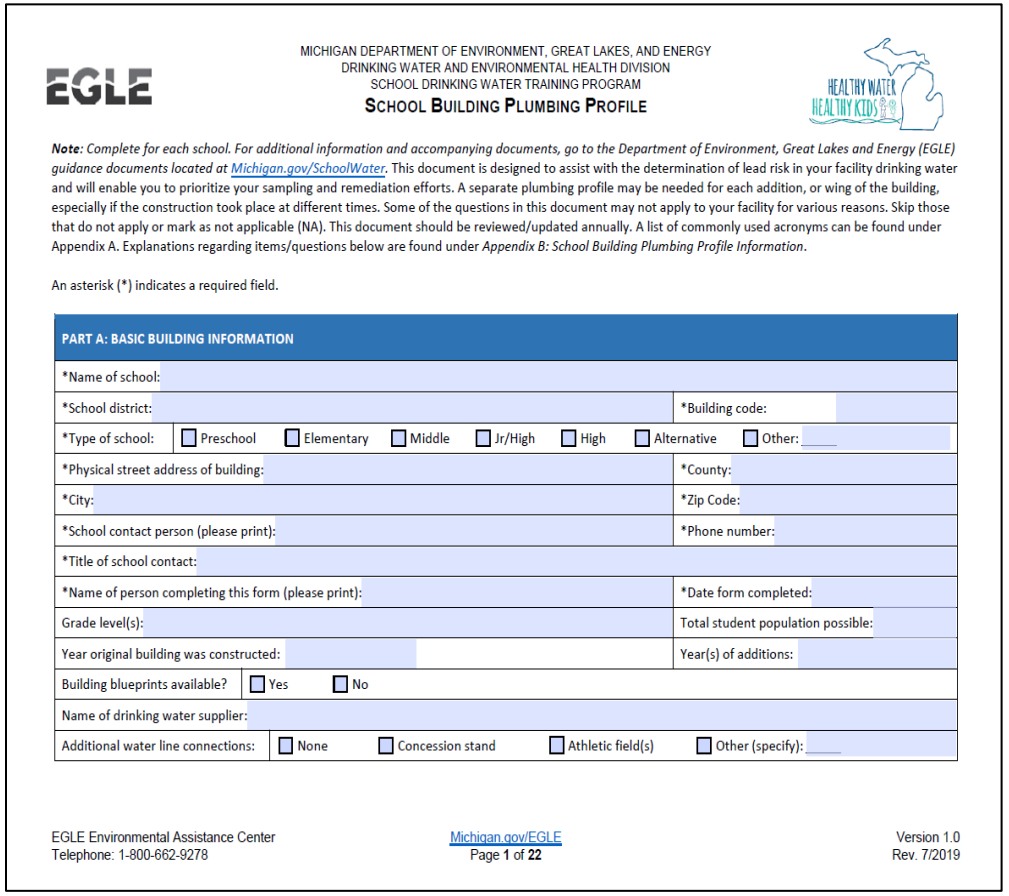


Survey123
for ArcGIS

Best Management Practices

- Program promotion by others
- Develop user friendly tools
- Guidance documents
- Outreach & training

User Friendly Tools



EGLE

MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY
DRINKING WATER AND ENVIRONMENTAL HEALTH DIVISION
SCHOOL DRINKING WATER TRAINING PROGRAM

SCHOOL BUILDING PLUMBING PROFILE

HEALTHY WATER HEALTHY KIDS

***Note**: Complete for each school. For additional information and accompanying documents, go to the Department of Environment, Great Lakes and Energy (EGLE) guidance documents located at Michigan.gov/SchoolWater. This document is designed to assist with the determination of lead risk in your facility drinking water and will enable you to prioritize your sampling and remediation efforts. A separate plumbing profile may be needed for each addition, or wing of the building, especially if the construction took place at different times. Some of the questions in this document may not apply to your facility for various reasons. Skip those that do not apply or mark as not applicable (NA). This document should be reviewed/updated annually. A list of commonly used acronyms can be found under Appendix A. Explanations regarding items/questions below are found under Appendix B: School Building Plumbing Profile Information.*

An asterisk (*) indicates a required field.

PART A: BASIC BUILDING INFORMATION							
*Name of school:							
*School district:						*Building code:	
*Type of school:	☐ Preschool	☐ Elementary	☐ Middle	☐ Jr/High	☐ High	☐ Alternative	☐ Other: ____
*Physical street address of building:						*County:	
*City:						*Zip Code:	
*School contact person (please print):						*Phone number:	
*Title of school contact:							
*Name of person completing this form (please print):						*Date form completed:	
Grade level(s):						Total student population possible:	
Year original building was constructed:						Year(s) of additions:	
Building blueprints available?	☐ Yes	☐ No					
Name of drinking water supplier:							
Additional water line connections:	☐ None	☐ Concession stand	☐ Athletic field(s)	☐ Other (specify): ____			

EGLE Environmental Assistance Center
Telephone: 1-800-662-9278

Michigan.gov/EGLE
Page 1 of 22

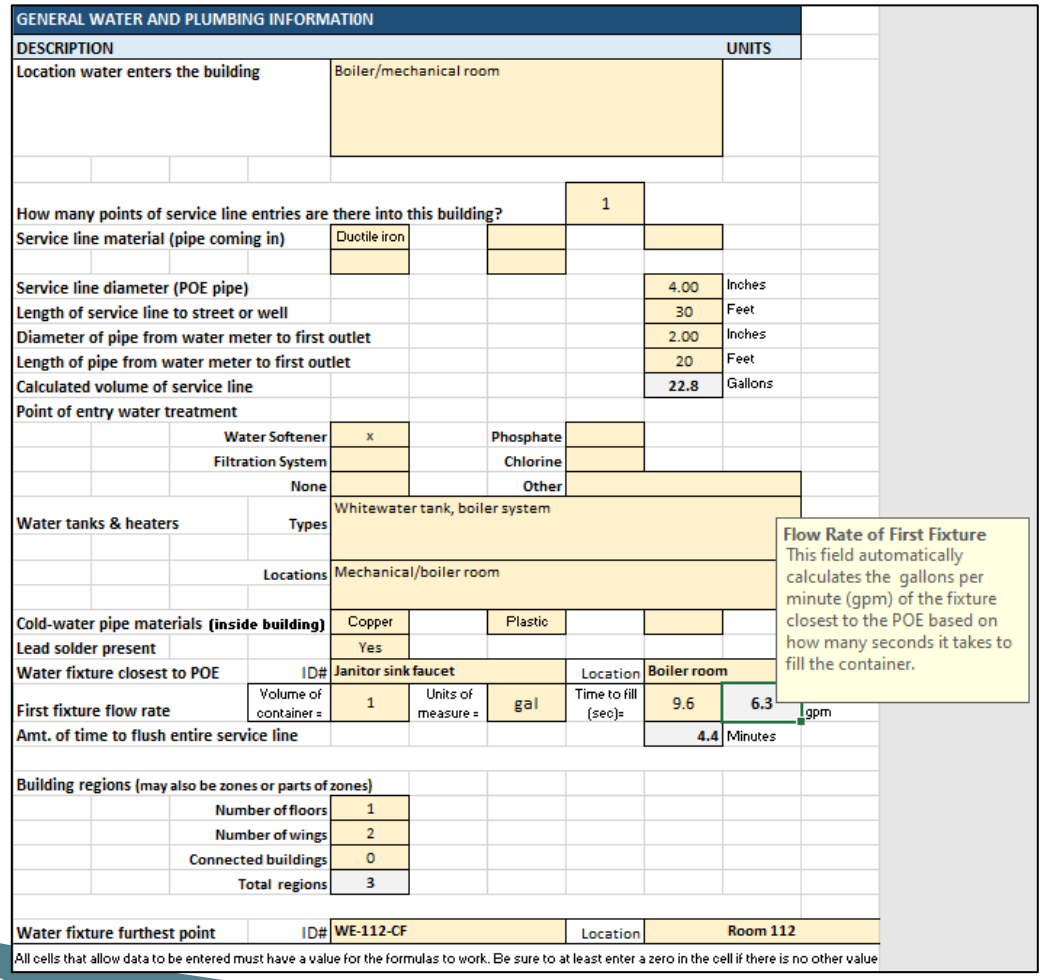
Version 1.0
Rev. 7/2019

PLUMBING ASSESSMENT - BASIC BUILDING INFORMATION	
DESCRIPTION	DATA ENTRY
SCHOOL DISTRICT	ABC Public Schools
SCHOOL BUILDING NAME	West Elementary
BUILDING CODE	1234
STREET ADDRESS	123 West M
CITY	ABC
ZIP	49000
COUNTY	River
SCHOOL TYPE	Elementary
GRADE LEVELS	K-6
TOTAL STUDENT POPULATION	200
ORIGINAL YEAR BUILT	1950-1959
DATES OF ADDITIONS	1989, 1994
ADDITIONAL CONNECTIONS	
BLUE PRINTS AVAILABLE	No
NAME OF WATER SUPPLIER	ABC Municipal Water
BUILDING CONTACT PERSON	Chris Manager
TITLE	Facility Director
PHONE (OFFICE)	123-456-7899
PHONE (CELL)	123-999-9999
DATE FORM COMPLETED	4/13/2022
FUTURE REVIEW DATE	4/13/2023
ADDITIONAL INFORMATION OR COMMENTS	

Building Code
This is the unique identifier for the building or the child care license number. The school building code is the 5-digit Entity Code assigned by the State. The child care license is a 2-digit letter followed by 9 numbers.

EGLE

User Friendly Tools



GENERAL WATER AND PLUMBING INFORMATION								
DESCRIPTION							UNITS	
Location water enters the building		Boiler/mechanical room						
How many points of service line entries are there into this building?					1			
Service line material (pipe coming in)		Ductile iron						
Service line diameter (POE pipe)						4.00	Inches	
Length of service line to street or well						30	Feet	
Diameter of pipe from water meter to first outlet						2.00	Inches	
Length of pipe from water meter to first outlet						20	Feet	
Calculated volume of service line						22.8	Gallons	
Point of entry water treatment								
	Water Softener	x		Phosphate				
	Filtration System			Chlorine				
	None			Other				
Water tanks & heaters	Types	Whitewater tank, boiler system						
	Locations	Mechanical/boiler room						
Cold-water pipe materials (inside building)		Copper		Plastic				
Lead solder present		Yes						
Water fixture closest to POE	ID#	Janitor sink faucet			Location	Boiler room		
First fixture flow rate	Volume of container =	1	Units of measure =	gal	Time to fill (sec)=	9.6	6.3	gpm
Amt. of time to flush entire service line						4.4	Minutes	
Building regions (may also be zones or parts of zones)								
	Number of floors	1						
	Number of wings	2						
	Connected buildings	0						
	Total regions	3						
Water fixture furthest point	ID#	WE-112-CF			Location	Room 112		

All cells that allow data to be entered must have a value for the formulas to work. Be sure to at least enter a zero in the cell if there is no other value

Flow Rate of First Fixture
This field automatically calculates the gallons per minute (gpm) of the fixture closest to the POE based on how many seconds it takes to fill the container.

FRESH TAP FLUSHING METHOD PROCEDURE							
The fresh tap flushing method involves bringing fresh cold water to every fixture used **for drinking or food preparation**.							
The procedure is to open the tap one at a time and let the water run for a specified time to get fresh cold water to the tap.							
Reference: *EGLE School Building Flushing Best Practices (Fresh Tap Method)* for detailed information. ***READ THOUGHLY BEFORE CONDUCTING FLUSHING**							
Use the building floor plan with fixture locations to assist in this process and make sure every drinking/food prep tap is flushed.							
STEP	**ACTION**						
1	Go to fixture closest to POE	ID#	**WE-BR-SC**		Location	**Boiler room**	
2	Remove aerator or screen						
3	Fully open the cold water side of fixture						
4	Run cold water for	4	minutes				
5	Turn off fixture						
6	Clean and replace aerator or screen and re-install						
7	Go to fixture farthest from POE	ID#	**WE-112-CF**		Location	**Room #112**	
8	Remove aerator or screen						
9	Fully open the cold water side of fixture						
10	Run cold water for	**30**	minutes (can determine precise amount of time based on calculation of lenth of pipe and flow rate of this tap)				
11	Turn off fixture						
12	Clean and replace aerator or screen and re-install						
	If multiple floors and/or wings, conduct steps 7-12 on each						
13	Working your way back to the POE, flush every consumptive fixture except for the non-filtered refrigerated fountains one at at time for:			30	seconds		
14	Flush **non-filtered refrigerated** fountains for 15 minutes						
15	Run water through appliances connected to the water supply such as pop machines, coffee machines, etc.						
DETERMINING TOTAL FLUSHING EVENT TIME							
	Number of consumptive fixtures (not including non-filtered refrigerated):			**28**			
	Time to flush consumptive fixtures:	**14**	minutes				
	Number of **non-filtered** refrigerated drinking fountains:			2	Time to flush:	30	minutes
	Total flushing event time	**78**	minutes	*Note: Include about five minutes for aerator removal/replacement at each fixture*			
	Estimated time to walk to each fixture during the process		**30**	minutes			
	Estimated time from beginning to end including walk time		**108**	minutes	Time in hours:	**1.8**	
Do not use filtered refrigerated bottle fill drinking fountains for a 15 minute flushing point.							
Note: Be aware not to overload wastewater drains during tap flushing. Record event on the Flushing Log (see FlushingLog tab).							
All cells that allow data to be entered must have a value for the formulas to work. Be sure to at least enter a zero in the cell if there is no other value.							

Flushing Guidance

EGLE MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY

SCHOOL DRINKING WATER PROGRAM

FLUSHING SCHOOL PLUMBING (HIGH VELOCITY METHOD)

HEALTHY WATER HEALTHY KIDS

INTRODUCTION

Flushing of school facility plumbing reduces exposure to contaminants associated with sediment and water age such as bacteria, lead, and copper. Flushing is a method intended to systematically remove both aged water and particulates from the system. This method is based on maintaining a flushing water velocity of at least 3 feet per second (ft/sec) in the building's service line once to twice per year. Flushing should occur after school dismisses for summer break (June)) and before the start of the next school year (August). By following the procedure outlined in this document, the school facility administrator can reduce the risk of elevated drinking water pollutants associated with stagnant water conditions, which are created during periods of inactivity such as weekends and summer or winter breaks.

This guidance is for school facilities having typical water fixtures such as sink faucets, toilets, urinals, and water fountains.

PROCEDURE

1. Flushing of school plumbing should be a planned event. Notify anyone with access to the building of the flushing plans well ahead of time. It is encouraged to place signs alerting people of the flushing plans.
2. Have a school layout drawing to help identify the anticipated flushing zones and the required flushing order based on their proximity to the service line entering the building (see the *EGLE Pre-Flushing Event Guidance for School Plumbing – How to Determine Flushing Zones* document).
3. Make sure you have coordinated enough people to participate in operating and monitoring flushing activities simultaneously, keeping in mind those fixtures that require constant activation during flushing like toilets, urinals, or sensor operated devices (see pre-flushing event guidance).
4. Based on the flushing plan, make sure to have access to all areas of the building.
5. Determine the size of the service line entering the building. Use Table 1 (below) to locate the minimum flow required to achieve an average water velocity of at least 3 ft/sec during flushing.
6. Do not use filtered bottle fill drinking fountain units as a flushing point for this process. After all zones are flushed, refresh these units by running water for 30 seconds to a minute and then change out the filter cartridge if required per the manufacturer's recommendations. Do not remove filters when running the water through these units.

EGLE MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY

SCHOOL DRINKING WATER PROGRAM

FLUSHING SCHOOL PLUMBING (FRESH TAP METHOD)

HEALTHY WATER HEALTHY KIDS

Even though source water entering the building may meet federal and state standards, the water pipes and plumbing fixtures within a building can affect the quality of drinking water. Therefore, it is important to perform routine water management practices to limit bacteria, lead, or other contaminations and ensure quality drinking water for students and staff. One of those best management practices is flushing. An ongoing flushing program is one of the quickest and easiest solutions to ensure the water quality is preserved by decreasing water age (stagnation).

Flushing is a tool, but only when used appropriately. In general, EGLE recommends a two-method flushing program that can be incorporated in an overall school water management program; the "Fresh Tap Method" and the "High Velocity Flushing Method." This document explains the Fresh Tap Method; the High Velocity Method is explained in a separate document found at Michigan.gov/SchoolWater.

Flushing should be conducted for all drinking water or food preparation taps that have not been used for an extended period, such as after a long weekend, seasonal breaks, or other long term shut down. EGLE recommends the high velocity flush to remove particulates and sediments at least once a year before the beginning of the school year (August) and a frequent potable tap flush occurring daily, weekly, or monthly to refresh the water. The following is a general process or template, and every building and water system is unique. A water management plan with flushing tailored to each building should be developed.

What is Fresh Tap Flushing?

Fresh Tap flushing involves:

1. Refreshing the drinking and food preparation taps (cold-water side of the building plumbing). Hot tap water should never be used for drinking or cooking purposes.
2. Knowing where the water enters and how it flows to each tap through the building. Every building is different, and the order of tap flushing is important.
3. Knowing and documenting the locations of all water taps.
4. Opening the cold-water side of drinking water and food preparation taps one at a time and letting the water run for a specified time to remove water that has been standing in the interior pipes and/or the taps. Flushing times can vary by the type of tap being cleared.

EGLE

Outreach & Training

Michigan.gov/SchoolWater

Questions?

Holly Gohlke
Gohlkeh@Michigan.gov
517-220-1904

OREGON
DEPARTMENT OF
EDUCATION

Testing for Lead in Water

Overview of Oregon's Water Testing Program

- Voluntary testing program in 2016
- Mandatory testing set in statute in 2017 – Testing began in 2019
- Program consists of
  - Healthy and Safe Schools Plan that ensures public transparency
  - Mandatory water testing and reimbursement for testing costs
    - Reimbursement for direct lab testing costs plus shipping
    - Reimbursement of additional amount on a per sample basis as partial offset to collection costs

Overview of Oregon's Water Testing Program

- Testing requirements
  - Specified testing schedule – Repeated every 6 years
  - Must test all fixtures unless specifically included in list of fixtures exempt by type
  - Specified protocol for numbering fixtures
- Reporting of test results within 10 business days
  - Posted to District website
  - Emailed to staff/students/parents of minor students
  - Available in hardcopy in main office

Overview of Oregon's Water Testing Program

- Reimbursement requires:
  - Complete reimbursement template as Excel document
  - Invoices
  - Lab reports
  - Summary of request

Recommendations

- Planning
  - Make plans that are specific and detailed
    - What fixtures will you test and how often
    - Requirements for tracking and reporting results
    - Requirements for verifying data and issuing reimbursement
  - Think both short term AND long term
    - How often will testing be repeated?
  - Incorporate stakeholders in development of plans
    - Give stakeholders an appropriate amount of say in program development

Recommendations

- Build buy-in from stakeholders – educate the public
  - Hear stakeholder concerns, and address them
    - For instance many may believe lead in paint is the key concern but lead in water is insignificant. Explain that lead builds up in the body and effects are cumulative, so all sources of lead ingestion are important
  - Highlight health risks – especially those of immediate interest to schools
    - Developmental delays
    - Lower IQ
    - Hyperactivity
    - Learning disabilities
    - Behavioral problems

Recommendations

- Emphasize value of transparency and reassuring parents that you are looking out for the health and safety of their children
- Highlight costs associated with lead ingestion

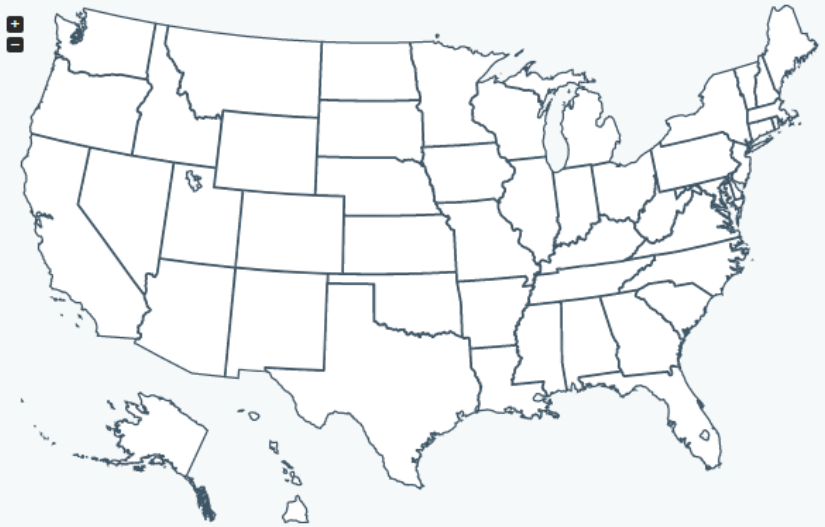
VALUE of Lead Prevention ALTARUM

Preventing Childhood Lead Exposure: Costs and Benefits

Use this tool to calculate the cost of lead exposure and the economic benefits of key interventions to reduce lead exposure where you live. Data are available for each of the 50 states and 10 cities.

Enter state

or select from the map below



Oregon

Estimate Exposure Burden | Calculate Intervention Impacts

Total Cost

$876.1M

Lifetime economic burden of childhood lead exposure in Oregon.

Calculated for the 2019 birth cohort. Includes costs of reduced lifetime productivity; increased health care, education, and social assistance spending; and premature mortality.

Number of Children Exposed

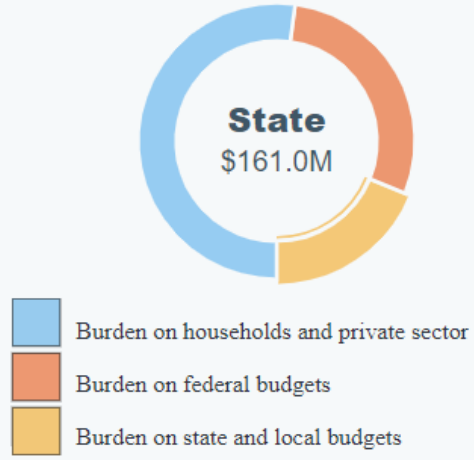
3,343

Blood levels >2 µg/dL

Children in the 2019 birth cohort predicted to have blood lead levels >2ug/dL. This is 7% of all births in Oregon.

Cost Breakdown

Hover for additional detail



From "The Value of Lead Prevention"- A state-by-state data source funded by the Rober Wood Johnson Foundation
http://valueofleadprevention.org/

Recommendations

- Address concerns about costs of testing and remediation
  - Assumptions many districts make
    - Often assume worst case scenario will be reality
      - If tested the result will be high and require remediation
      - Remediation will be expensive
  - Develop training materials and templates
    - Standardization makes administration of the program easier

Available Resources

Healthy and Safe Schools Plan (HASS) / Water Testing Webpage

- https://www.oregon.gov/ode/schools-and-districts/grants/Pages/Healthy-and-Safe-Schools.aspx

Brian Hodges-French (he/him/his)
Program Analyst
Healthy and Safe Schools Program Administrator
Office of Finance & Information Technology | Office of School Facilities
(503) 947-5970
Brian.French@ode.oregon.gov | www.oregon.gov/ode
https://www.oregon.gov/ode/schools-and-districts/grants/Pages/Healthy-and-Safe-Schools.aspx

OREGON DEPARTMENT OF EDUCATION
Oregon achieves . . . together!

LeadCare Illinois
Healthy water for healthy kids

Lead in Water Testing at Child Care Facilities in Illinois

Presented by Elevate and the Illinois Department of Public Health

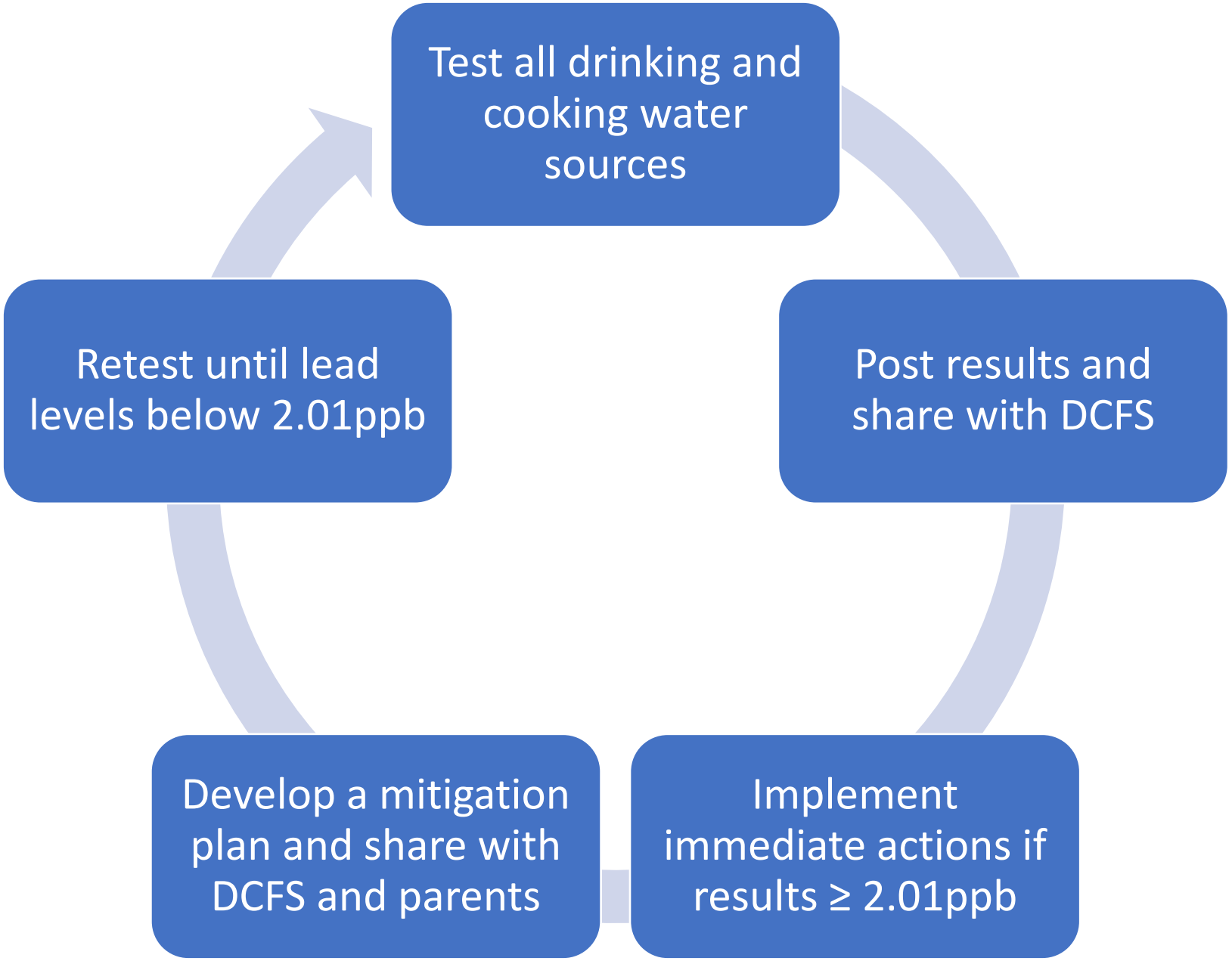
Overview

- Illinois background: early challenges with testing requirements
- LeadCare Illinois program offerings
- Marketing strategy and results
- Top tips from the Illinois experience
- Q&A

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



Challenges Providers Faced

- Financial strain of testing costs
- Support selecting a lab and receiving consistent prices
- Need for easy-to-read lab reports
- Need for individualized support to understand how to test and act when results come through
- Guidance on communicating test results and follow up actions with parents

What Is LeadCare Illinois?

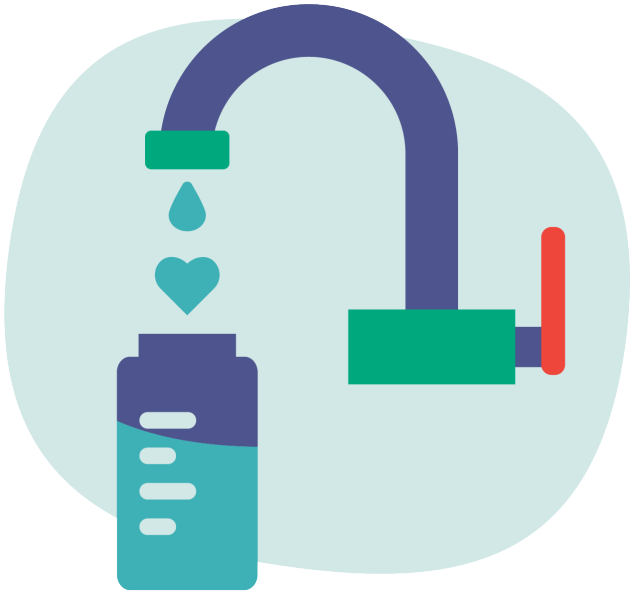
LeadCare Illinois

Healthy water for healthy kids

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

Program Offerings

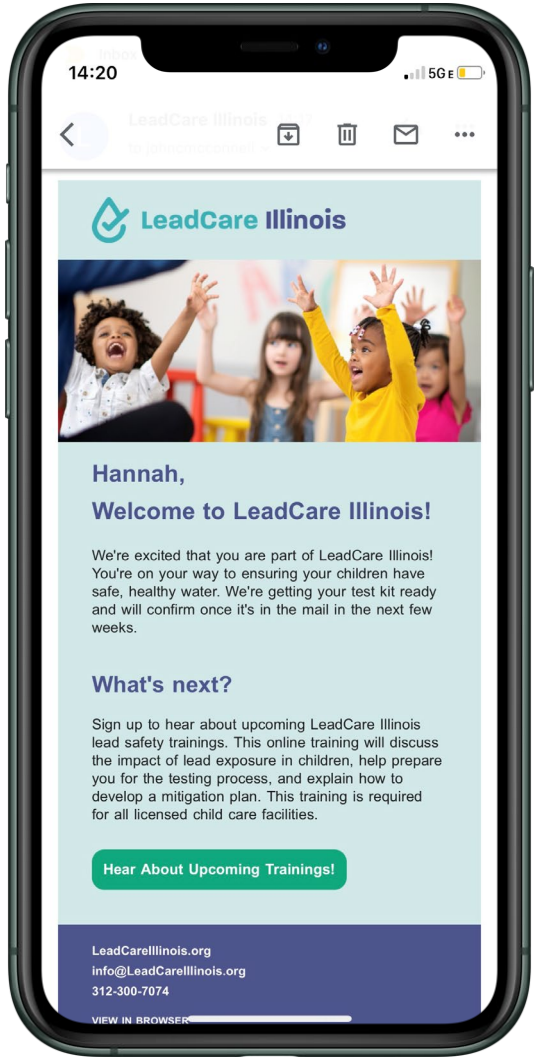
Training

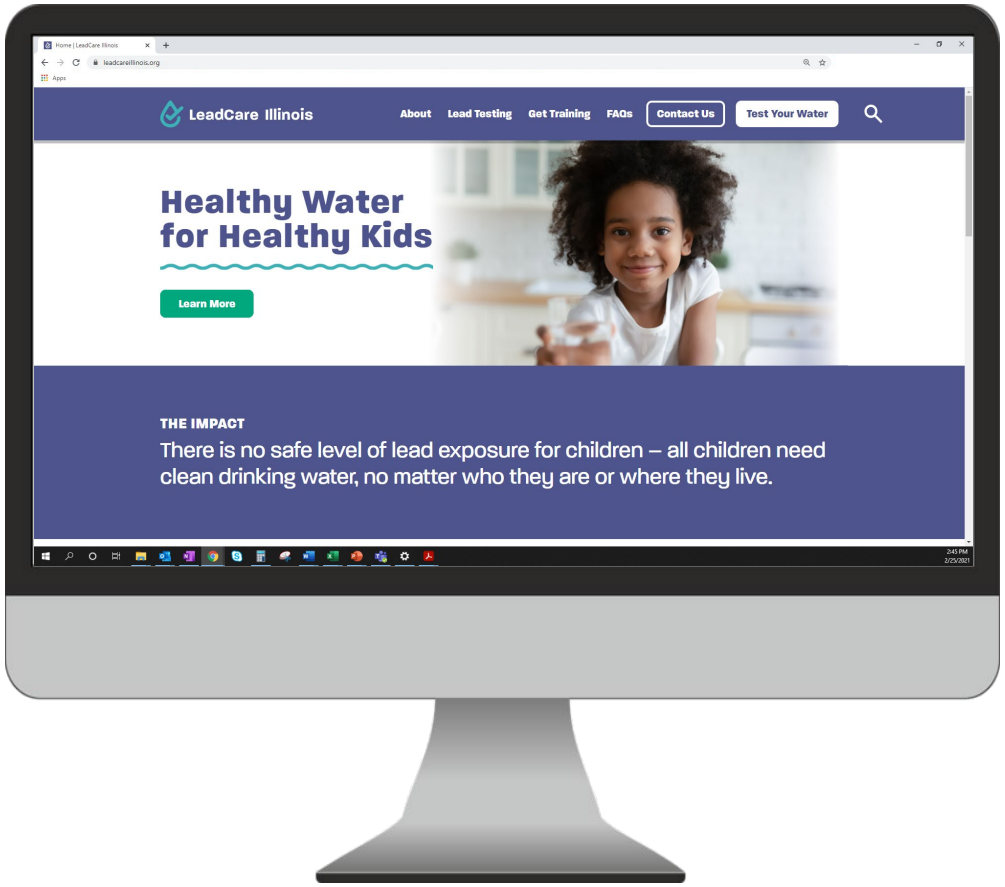


Testing

Support

Program Offerings: Communications

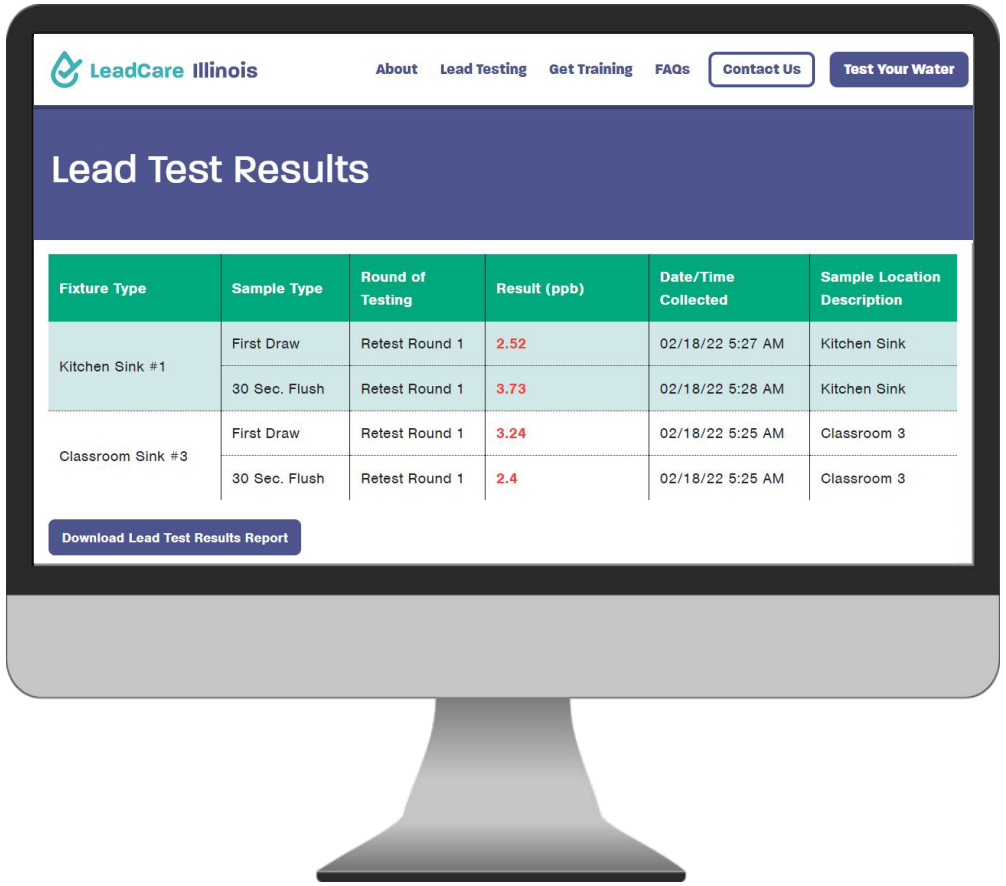




Leadcareillinois.org/videos

Program Offerings: Lead Test Results Page

- Easy to understand results page
- Downloadable lab report
- Outline of next steps
- Link to communication templates



Organizational Roles

- **Elevate**
  - Program administrator
  - Responsible for all program education, marketing, application intake and coordination, trainings, and customer service
- **Illinois Department of Public Health (IDPH)**
  - Program funder, expertise
- **Illinois Environmental Protection Agency Lab (IEPA)**
  - Sample analysis and data coordination
- **Illinois Action for Children**
  - Expertise and connection to child care community

Marketing and Communications Strategy

Build Program Awareness

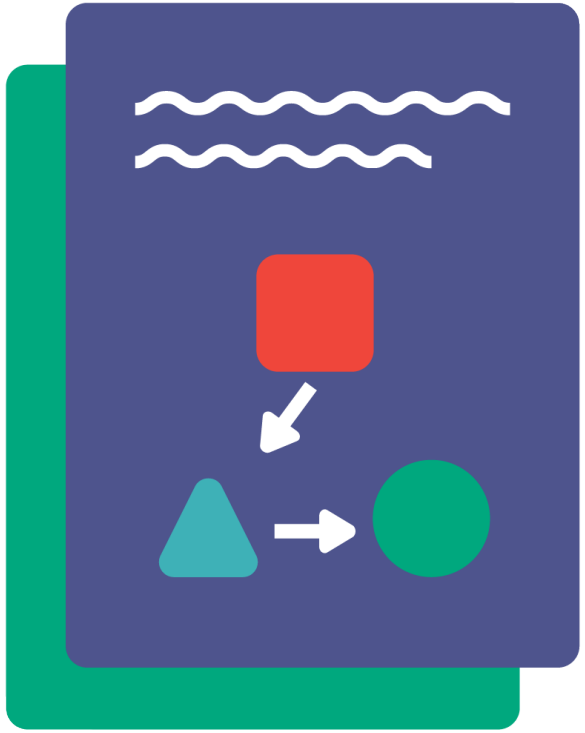
- Leverage key partnerships and their digital tools such as social media and email newsletters
- Find and engage program and child care advocates

Traditional Marketing

- Direct mail and postcards with targeted messaging and multiple touches
- Print materials

Improve the Participant Experience

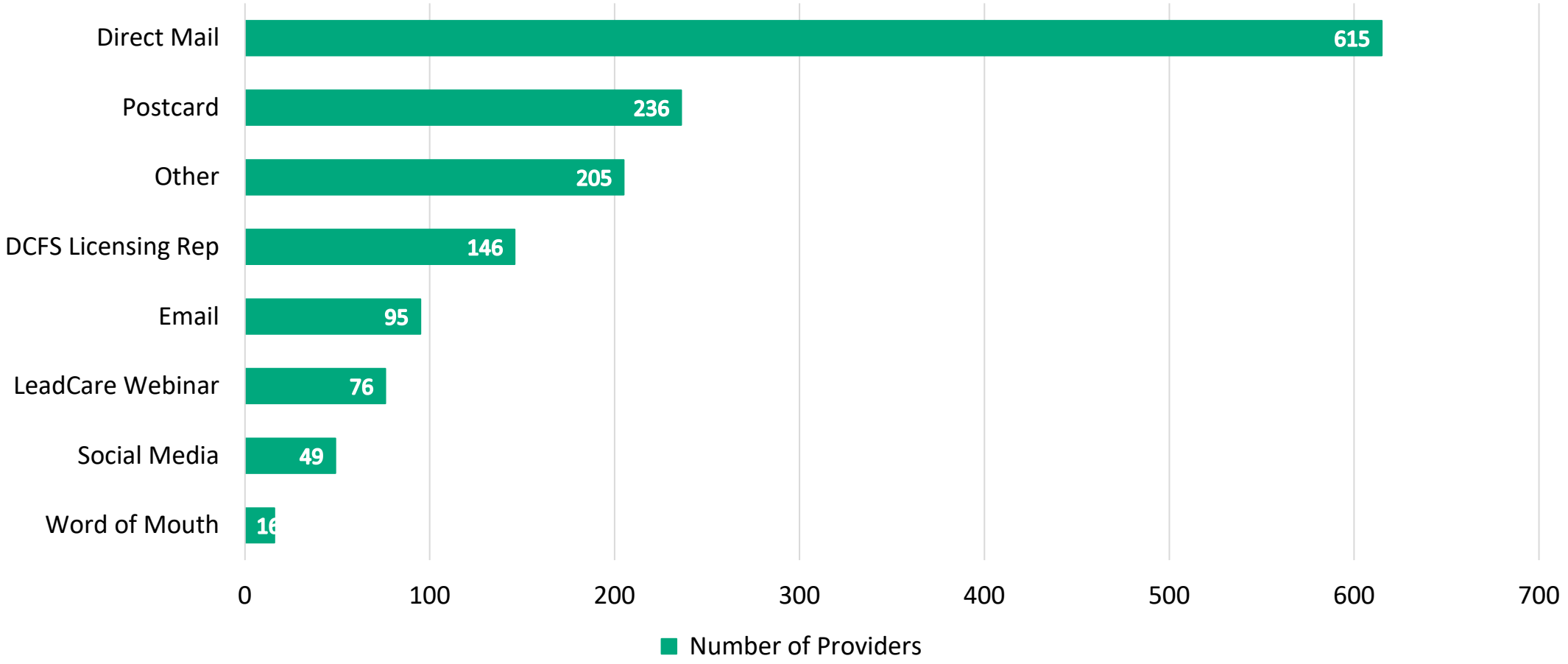
- Spanish-language rollout to support all providers
- Lead test results page
- Gathering insights and applying learnings



Leverage Key Partnerships: Child Care Provider Network

- Illinois Action for Children
  - Coordinated social media
  - Email newsletters
- INCCRRA
  - Training Child Care Resource and Referral (CCR&R) agencies
- Child Care Provider Conferences
- Trusted messengers to build trust
  - DCFS licensing representatives
  - Child care advocacy groups

Program Enrollments



Top Tips from the Illinois Experience

- Talk with providers to shape your efforts
- Encourage streamlined communications from all parties
- Partner with child care groups and leaders to get the word out
- Create materials in multiple languages
- Simplicity in participant communications
- Robust training and support
- Continue to learn and adapt

Program Offerings

“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

LeadCare Illinois
Healthy water for healthy kids

Q&A

Contact Information

- LeadCareIllinois.org
- info@LeadCareIllinois.org
- 312.300.7074

PENNVEST

PENNSYLVANIA INFRASTRUCTURE INVESTMENT AUTHORITY

Overcoming Challenges in Pennsylvania:

Testing for lead in drinking water at schools and child care programs

Background

- Pennsylvania first applied for WIIN 2107 funding in 2019 with the submission of a multi-agency workplan

- The plan allocated $1,740,000 in EPA funding for initial testing and follow-up sampling at 1,000 public schools and 2,000 child care facilities

- The award was delivered to Pennvest as the lead grantee agency on February 4, 2020

- Pennvest was created as a state-affiliated agency by Act 16 of 1988 to provide financial assistance to clean water projects

Challenge #1: Multi-agency involvement

pennsylvania
DEPARTMENT OF EDUCATION

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

pennsylvania
DEPARTMENT OF HEALTH

PENNVEST
PENNSYLVANIA INFRASTRUCTURE INVESTMENT AUTHORITY

pennsylvania
DEPARTMENT OF HUMAN SERVICES

COMMONWEALTH OF PENNSYLVANIA
THE GOVERNOR

PA pennsylvania
OFFICE OF CHILD DEVELOPMENT AND EARLY LEARNING

Challenge #1: Multi-agency involvement

- Because of PENNVEST's financial background, Pennvest was identified as the lead grantee
- PENNVEST lacks staff capability or technical expertise to perform the volume of outreach or water testing required
- With no sole agency able to perform the entirety of the scope of work, a third-party contractor would be selected
- This approach also maximized the financial investment, eliminating administrative costs

Challenge #1: Multi-agency involvement

- The trade-off for no admin funding is the public procurement process

- Grant Award Date: February 2020

Challenge #1: Multi-agency involvement

- The trade-off for no admin funding is the public procurement process

- Grant Award Date: February 2020
- Creation and advertisement of the bid
- Technical review
- Financial and cost proposal review
- Small/disadvantaged business review
- Contractor selection
- Contract review/modification

Challenge #1: Multi-agency involvement

- The trade-off for no admin funding is the public procurement process

- Grant Award Date: February 2020
- Creation and advertisement of the bid
- Technical review
- Financial and cost proposal review
- Small/disadvantaged business review
- Contractor selection
- Contract review/modification
- Contract finalized date: September 2020

Challenge #2: No Remediation Funding

- Would schools/child care facilities voluntarily participate if there is no remediation funding available for potential exceedances?

PENNVEST
PENNSYLVANIA INFRASTRUCTURE INVESTMENT AUTHORITY

Challenge #2: No Remediation Funding

- Potential options:

✓ WIIN Reducing Lead in Drinking Water Program

✓ Redevelopment capital Assistance Program (RCAP) for public schools

✓ Private assistance


Penn pledges $100 million to the School District of Philadelphia

Penn
University of Pennsylvania
THE SCHOOL DISTRICT OF PHILADELPHIA

niversity of Pennsylvania President Amy Gutmann, Philadelphia Mayor Jim Kenney, School Board President Joyce Wilkerson, and Superintendent of the School District of Philadelphia William R. Hite Jr., today announced that Penn will contribute $100 million to the School District of Philadelphia, representing an unprecedented commitment to the City

DATE
November 17, 2020

SUBTOPICS
President, Outreach, Primary Education, Secondary Education, Penn Compact

SCHOOLS
Graduate School of Education

SHARE

Challenge #2: No Remediation Funding

- Potential options:

✓ WIIN Reducing Lead in Drinking Water Program

✓ Redevelopment capital Assistance Program (RCAP) for public schools

✓ Private assistance

✓ Infrastructure Investment and Jobs Act (IIJA) Changes!

Challenge #3: No Requirement for Testing

- Pennsylvania's testing program is 100% voluntary
- Burden on contractor/state agencies to encourage facilities to self-test
- No "road map" to target outreach

How to begin?

Challenge #3: No Requirement for Testing

- Pennsylvania's testing program is 100% voluntary
- Burden on contractor/state agencies to encourage facilities to self-test
- No "road map" to target outreach

- Act 39 of 2018 mandates that schools can:
  - ✓ Test for lead in drinking water
  - ✓ Discuss lead Issues at a Public Meeting

PENNVEST
PENNSYLVANIA INFRASTRUCTURE INVESTMENT AUTHORITY

Challenge #3: No Requirement for Testing

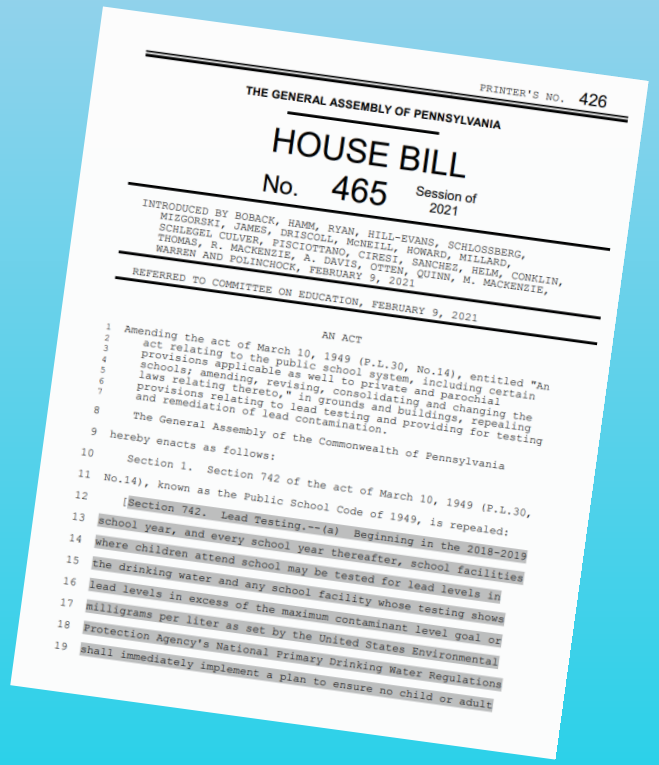
- Pennsylvania's testing program is 100% voluntary
- Burden on contractor/state agencies to encourage facilities to self-test
- No "road map" to target outreach

- Philadelphia School District's Safe Water Testing Program
  - ✓ Started in 2018
  - ✓ Requires Philadelphia schools to test drinking water every 5 years

PENNVEST
PENNSYLVANIA INFRASTRUCTURE INVESTMENT AUTHORITY

Challenge #3: No Requirement for Testing

- Pennsylvania's testing program is 100% voluntary
- Burden on contractor/state agencies to encourage facilities to self-test
- No "road map" to target outreach
- Pending Legislation



PRINTER'S NO. 426

THE GENERAL ASSEMBLY OF PENNSYLVANIA

HOUSE BILL

No. 465 Session of 2021

INTRODUCED BY BOBACK, HAMM, RYAN, HILL-EVANS, SCHLOSSBERG, MIZGORSKI, JAMES, DRISCOLL, McNEILL, HOWARD, MILLARD, SCHLEGEL CULVER, PISCIOTTANO, CIRESI, SANCHEZ, HELM, CONKLIN, THOMAS, R. MACKENZIE, A. DAVIS, OTTEN, QUINN, M. MACKENZIE, WARREN AND POLINCHOCK, FEBRUARY 9, 2021

REFERRED TO COMMITTEE ON EDUCATION, FEBRUARY 9, 2021

AN ACT

Amending the act of March 10, 1949 (P.L.30, No.14), entitled "An act relating to the public school system, including certain provisions applicable as well to private and parochial schools; amending, revising, consolidating and changing the laws relating thereto," in grounds and buildings, repealing provisions relating to lead testing and providing for testing and remediation of lead contamination.

The General Assembly of the Commonwealth of Pennsylvania hereby enacts as follows:

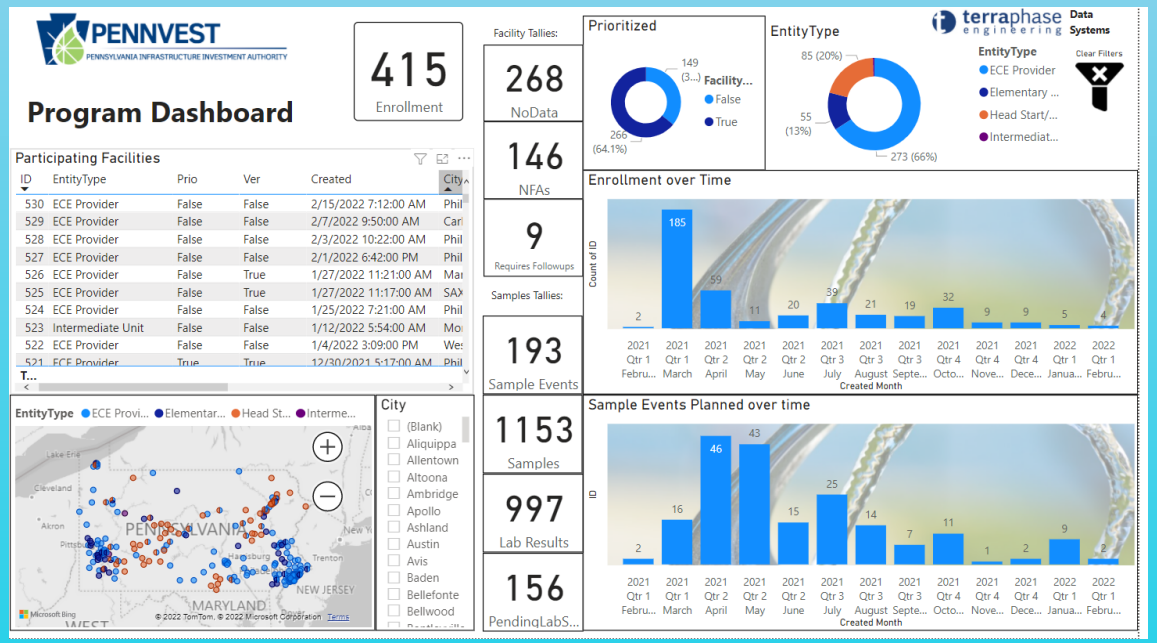
Section 1. Section 742 of the act of March 10, 1949 (P.L.30, No.14), known as the Public School Code of 1949, is repealed:

[Section 742. Lead Testing.--(a) Beginning in the 2018-2019 school year, and every school year thereafter, school facilities where children attend school may be tested for lead levels in the drinking water and any school facility whose testing shows lead levels in excess of the maximum contaminant level goal or milligrams per liter as set by the United States Environmental Protection Agency's National Primary Drinking Water Regulations shall immediately implement a plan to ensure no child or adult

Challenge #3: No Requirement for Testing

- Pennsylvania's testing program is 100% voluntary
- Burden on contractor/state agencies to encourage facilities to self-test
- No "road map" to target outreach

- Environmental Justice Areas Prioritization



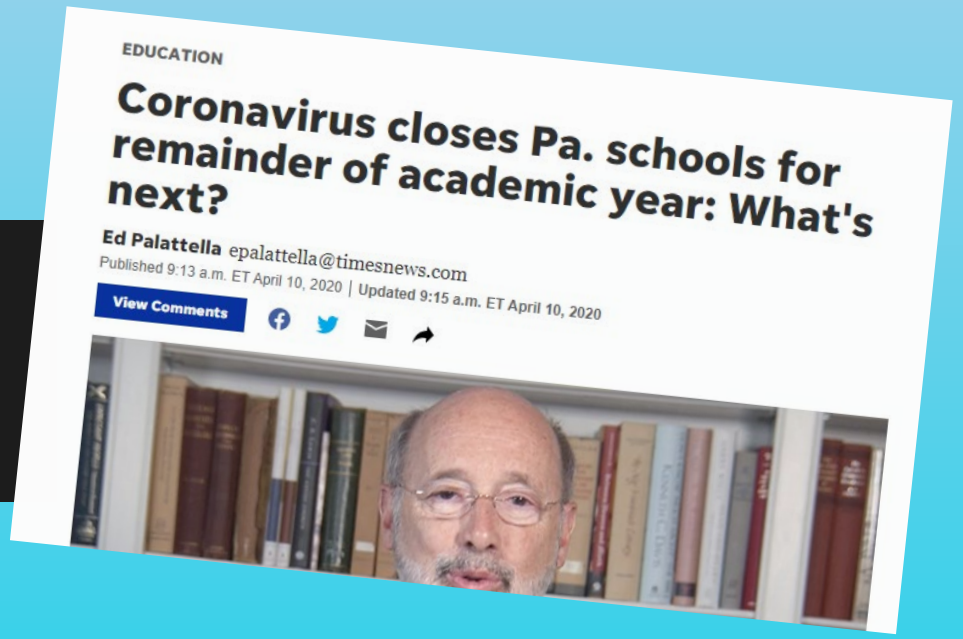
Challenge #4: COVID-19

- Pennsylvania's COVID Emergency Declaration was signed into law in March 2020

PENNVEST
PENNSYLVANIA INFRASTRUCTURE INVESTMENT AUTHORITY

Challenge #4: COVID-19

- Pennsylvania's COVID Emergency Declaration was signed into law in March 2020
- The declaration severely limited state agency response time, school staff



Challenge #4: COVID-19

- Pennsylvania's COVID Emergency Declaration was signed into law in March 2020
- The declaration severely limited state agency response time, school staff
- Schools were inundated with daily essential communications from the Department of Education and Department of Health

Challenge #4: COVID-19

- Pennsylvania's COVID Emergency Declaration was signed into law in March 2020
- The declaration severely limited state agency response time, school staff
- Schools were inundated with daily essential communications from the Department of Education and Department of Health

✓ Masking

✓ Unmasking

✓ Testing

✓ Closures

✓ Openings

✓ Exposures

✓ Social Distancing

Challenge #4: COVID-19

- Pennsylvania's COVID Emergency Declaration was signed into law in March 2020
- The declaration severely limited state agency response time, school staff
- Schools were inundated with daily essential communications from the Department of Education and Department of Health
  - ✓ Masking
  - ✓ Unmasking
  - ✓ Testing
  - ✓ Closures
  - ✓ Openings
  - ✓ Exposures
  - ✓ Social Distancing

Leaving little room for Communications related to lead testing

Challenge #4: COVID-19

- Despite outreach from the Office of the Governor, Department of Education, and the Office of Childhood Development and Early Learning (OCDEL), response rates remained very low

Challenge #4: COVID-19

- Despite outreach from the Office of the Governor, Department of Education, and the Office of Childhood Development and Early Learning (OCDEL), response rates remained very low
- Outreach was initially focused on program education and participation encouragement

Challenge #4: COVID-19

- Despite outreach from the Office of the Governor, Department of Education, and the Office of Childhood Development and Early Learning (OCDEL), response rates remained very low
- Outreach was initially focused on program education and participation encouragement
- Shifting techniques to direct communication with responsible staff

Summary

- Despite critical challenges that created program delays, testing stands at approximately 500 facilities

- Rapid increases in participation are expected as:

Summary

- Despite critical challenges that created program delays, testing stands at approximately 500 facilities

- Rapid increases in participation are expected as:

✓ The Contractor continues to evolve outreach strategies

Summary

- Despite critical challenges that created program delays, testing stands at approximately 500 facilities

- Rapid increases in participation are expected as:

✓ The Contractor continues to evolve outreach strategies

✓ IIJA alterations allow for remediation resources

Summary

- Despite critical challenges that created program delays, testing stands at approximately 500 facilities

- Rapid increases in participation are expected as:

✓ The Contractor continues to evolve outreach strategies

✓ IIJA alterations allow for remediation resources

✓ COVID restrictions continue to lift

Summary

- Despite critical challenges that created program delays, testing stands at approximately 500 facilities

- Rapid increases in participation are expected as:

✓ The Contractor continues to evolve outreach strategies

✓ IIJA alterations allow for remediation resources

✓ COVID restrictions continue to lift

✓ Potential legislation encourages more lead testing

Montana's Lead In School Drinking Water Program – Challenges

WIIN 2107 BMP Workshop

05/17/2022

Montana's Lead Sampling Program

- In January 2020, the Montana Department of Public Health and Human Services (DPHHS) adopted amendments to the administrative rules regarding the matter of health in Montana schools. The amendments included requirements pertaining to reducing lead in schools' drinking water. It requires all schools accredited by the Montana Board of Public Education to sample for lead in schools' drinking water by December 31, 2022.
- MT Department of Environmental Quality (DEQ) implements the program on behalf of DPHHS.
- All drinking water fountains and kitchen fixtures used for drinking or food preparation must be sampled using 250ml bottle. As well as all other fixtures that have the potential of being used for food prep or drinking (classroom sinks, bathroom sinks, nurse's office, concession stands, etc..).
- Required information prior to sampling
  - Fixture inventory
  - General school Information (plumbing info, age of schools, type of schools, student population)
  - Site plan showing fixture locations
  - Water flushing plan

DEQ
Montana Department of Environmental Quality

Montana's Lead Sampling Program

- Sample Results will be placed into 1 of 3 bins (categories)
  - The follow-up actions will be dependent on the bin placement

Bin 1	>15.0 ug/L	Corrective action required. Immediately discontinue use of the affected fixture.
Bin 2	5.0 and 15.0 ug/L	Corrective action required. Interim flushing plan must be developed if fixture is to remain in service.
Bin 3	<5.0 ug/L	No corrective action is required, conduct routine sampling.

  - Follow up samples are required before a fixture can return to service and again one year following the fixture replacement or repair.
- Routine Sampling every 3 – 5 years depending in results and plumbing inventory

DEQ
Montana Department of Environmental Quality

Challenges/Lessons Learned

- We have had many challenges and Lessons Learned in the last few years of the program

- Focused on 2 areas related to Program Development
  - Preparation
  - Communication

- Other Challenges/Lessons Learned
  - Determining the exact source of lead (plumbing vs fixture).
  - New “Lead Free” fixtures still can contain lead.
  - Filters work great but have a number of drawbacks
  - Covid
  - Fixture Usage
  - Funding especially for remediation

DEQ
Montana Department of Environmental Quality

Program Development - Preparation

- Build your team early
  - Project Lead
  - Staff to answer Health questions (you will get the questions like “is the water safe to drinking”, “can I wash my hands with it”)
  - Staff to answer and provide support for funding
  - Technical support (internal staff, consultants, etc)
  - PR to address media requests and press releases
  - Staff to provide trainings
- Have as much as possible ready for the Rollout
  - Have Procedures, Guidance, forms, and templates finalized
  - Webpage ready to go
- Where is the data going to be stored (database)
  - Montana uses EQUiS database (Earthsoft)
  - Select the right database from the beginning (Switching databases after you start is a nightmare)
  - Can data be displayed to public?
  - Can data be easily accessed and visualized?
- What data are you collecting
  - plumbing information, contact info, school info, fixture inventory, site plan, etc
  - Multiple types of sample results (MT ie. initial, remediation, follow-up and routine)
  - If you ask for too much, schools wont do it (if they are providing it)
- How are you going to collect the data
  - If schools are providing the information, it has to be simple and easy.
  - Montana uses an App and accepts via email for inventories and school info. We get lots of handwritten inventories.
  - Have multiple ways to accept data
    - Online through website, app, electronic, paper, etc

DEQ Montana Department of Environmental Quality

Program Development - Preparation

- Who's collecting the samples and supporting information
  - Schools, consultant, agency, etc
  - Montana has schools submit the initial setup information and collect their own samples.
    - Need lots of simple guidance doc, forms, templates, and patience.
    - Not everyone is tech savy. Apps sound great but may not be as easy as we think.
    - Schools short-staffed and overloaded
  - If you can afford or have the resources collect the data yourself or have consultant(s) do it.
- Work with Laboratory(s) ahead of time
  - Choose a lab(s), using one lab if you can. It may give you more consistency and less headaches
  - Determine format of results (EDD)
  - Setup pricing and turnaround
  - Chain of custody, if custom one is needed
  - Work flow
- How to deal with Schools that are a Public Water Supply (LCR vs state program)
  - Montana treats them as separate rules. Schools have to sample separately for the LCR.
  - Remediation activities such as premise plumbing replacement, fixture replacement and POUs may be problematic under the current LCR.
  - Causes a lot of confusion for schools and their water operators.

DEQ
Montana Department of Environmental Quality

Program Development - Communication

- Stakeholder Communication/Involvement
  - Other state agencies that are involved with Schools or funding
    - Initially – DEQ, DPHHS and MT Office of Public Instruction (OPI)
    - Currently – DEQ DPHHS, OPI, MT Department of Natural Resources and Conservation, and MT Dept of Commerce.
  - School associations and advocacy groups
    - Montana School Board Association, Montana Parent Teacher Association, MT Association of School Board officials, MT Rural Education Association, Montana Quality Education Coalition, and School Administrators of Montana.
  - Quarterly Meetings with "Working Group"
    - Working Group includes representatives from most of the agencies and associations above.
    - Provided input for guidance and procedures
    - Program updates
    - Provided guidance and assistance on ways to communicate with schools
  - Public Relations
    - Keep your PR folks in the loop
    - There will be media requests (newspapers, TV, Radio, and online news)
    - Use press releases

DEQ
Montana Department of Environmental Quality

Inter-Agency Collaboration

What agencies (State or Federal) and Organizations can help

- State Agencies
  - DPHHS
    - Requirement was part of a School Safety Rule Revision(Jan 2020)
    - Enforcement authority
    - Provide Health related assistance
  - DEQ
    - Developed and implement the program
    - Provide technical assistance
    - Primary contact for schools
    - Manages the data
  - Office of Public Instruction (OPI)
    - All outgoing communications to schools
    - Manage a limited Remediation Grant Program (with DEQ funding)
  - MT Department of Natural Resources and Conservation (DNRC)
    - Assistance with funding for remediation (State Revolving Fund and ARPA)
  - MT Department of Commerce
    - Assistance with funding (grants and loans)
- Federal Agencies
  - EPA
    - WIIN Grant Funding
    - 3Ts program
  - USDA Rural Development
    - Assistance with funding (grants and loans)
- Other
  - MT Rural Water
    - Contract with DEQ to provide technical assistance to schools
    - Communication
  - Midwest Assistance Program (RCAP)
    - Contract with DEQ to provide technical assistance to schools
    - Communication

DEQ Montana Department of Environmental Quality

Program Development - Communication

- School Communication and Training
  - Get information out to schools in multiple ways
    - Don’t rely on one method for communication
    - Webpage, emails, direct mailing, school conferences, in-person trainings, phone calls, etc
    - Webinars are great, Record them and post on website.
    - Reach out to
      - School organizations
      - Cities & Towns
      - Water depts
      - Water operators
      - Health depts
      - Media

DEQ
Montana Department of Environmental Quality

Questions or Comments?

Greg Montgomery
Lead in School Drinking Water Rule Manager
Montana Department of Environmental Quality
406-444-5312
Gregory.Montgomery@mt.gov

DEQ
Montana Department of Environmental Quality

5 Minute Break

Round Table Discussion and Q&A Session

Break Out Room Topics

EPA
OFFICE OF GROUND WATER AND DRINKING WATER

- **Room 1 – Communication and Outreach BMPs (IL, OR, NC, PA)**
  - E.g., Getting participants, communications to public, test results and taking actions communications, etc.
- **Room 2 – Resource Management BMPs (NC, MI, MA)**
  - E.g., Personnel/staffing, funding allocation, supply chain challenges, logistics on sampling errors, data management, etc.
- **Room 3 – Solutions & Challenges BMPs (NC, MT)**
  - E.g., COVID hinderances, lack of partnership, lead remediation questions/concerns, etc.


Next Steps

EPA Point-of-Contact

- **Ying Tan (WIIN Grants State Program):** Tan.ying@epa.gov
- **Yvonne Gonzalez (Team Lead, WIIN Grant Program**): Gonzalez.Yvonne@epa.gov
- **Cindy Mack (3Ts and MOU):** mack.cindy-y@epa.gov; 3Ts@epa.gov
- **Laura Montoya (WIIN Tribal Grants Program):** Montoya.laura@epa.gov