



Lead in Water

**Guidance for Illinois childcare facilities to comply with new
Department of Children and Family Services (DCFS)
requirements and reduce lead in water**

August 14, 2019



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Learning Objectives

Lead in Water Workshop for Illinois Childcare Providers

This Lead in Water Workshop is designed to inform childcare providers on Illinois' requirements regarding lead in water testing and mitigation. In this workshop, you will learn about the impact of lead exposure, how to test your water for lead, and how to create a mitigation plan.

Learning Objectives

1. List the new licensing standard requirements
2. Define what a lead hazard is and why it's important to children's health
3. Understand how to complete lead in water sampling
4. Understand how to interpret lab test results
5. Determine when mitigation actions are needed
6. Develop a mitigation plan
7. List the types of immediate, interim, and permanent lead mitigation strategies
8. Find additional resources

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Activity 1: Pre-Assessment Quiz

1. Lead is a problem for children because:
 - a. Children under the age of six do not have a fully developed blood brain barrier to protect them from the impact of lead.
 - b. It can cause brain damage.
 - c. It can cause neurological damage.
 - d. All the above

2. Common sources of lead exposure include:
 - a. Soil/dust
 - b. Paint
 - c. Plumbing materials
 - d. All of the above

3. The concentration of lead in water that requires mitigation is:
 - a. 0 ppb or greater
 - b. 1 ppb or greater
 - c. 20.1 ppb or greater
 - d. 2.01 ppb or greater
 - e. 200.01 ppb or greater

4. Which of the following **is NOT** required by Illinois' lead in water testing rules for childcare facilities?
 - a. Test results and a mitigation plan (if needed) must be submitted to DCFS within 120 days of receiving test results.
 - b. Homes and facilities built *after* Jan. 1, 2000 must conduct lead in water testing.
 - c. If you find lead in your water at 2.01ppb or greater, you must complete follow up testing after implementing a mitigation plan.
 - d. All water sources used for drinking and cooking water purposes for childcare operations must be tested.

5. I have to hire someone to collect my lead in water samples for me.
 - a. True
 - b. False

6. What is the name for actions taken to reduce the level of lead in a water source?
 - a. Management
 - b. Mitigation
 - c. Monitoring
 - d. Interruption

7. You cannot see, smell, or taste lead in drinking water.
 - a. True
 - b. False

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Activity 1: Pre-Assessment Quiz (continued from previous page)

8. How many samples do you have to collect at each drinking/cooking water outlet?
 - a. 1
 - b. 2
 - c. 3
 - d. 4

9. Once you receive your test results, how many days do you have to report it to your DCFS licensing representative?
 - a. _____

10. Who should be informed about the lead testing results?
 - a. Parents, DCFS
 - b. The Media
 - c. No one. This is not a requirement.
 - d. All the above

11. If I find that some of my samples are 2.01ppb or greater, I should:
 - a. Take immediate action to ensure my children are provided with a safe drinking water source.
 - b. Share my test results with parents, staff, and DCFS.
 - c. Develop a mitigation plan.
 - d. All of the above.

12. I don't need to share my test results with parents, staff, or DCFS if all of my results come back below 2.01ppb.
 - a. True
 - b. False

13. I have an automatic ice machine and fridge water dispenser that my children use. I don't need to test these sources for lead.
 - a. True
 - b. False

Part I: New licensing standards

Activity 2: New licensing standard fill in the blank

Please fill in the blanks using the word bank on the bottom of this worksheet.

1. According to the Illinois DCFS licensing rules, all childcare centers and homes built on or before _____ will be subject to lead in water testing.
2. Childcare facilities must send their test results to an _____ run or approved laboratory.
3. Test results and a mitigation plan (if needed) must be sent to your local licensing office within _____ of receiving test results.
4. All test results must be posted in your center and submitted to your _____.
5. A mitigation plan shall be made available to parents and your local licensing office if test results come back at _____ or greater.
6. Retesting for lead test result levels of _____ **or greater** must occur no later than _____ after completion of the mitigation plan and a second test no later than _____ after completion of the mitigation plan.
7. If all tests come back below _____ more testing is only required when there is a change to the _____ of the building.

Word Bank (some words may be used twice)

1 year

Illinois EPA

2.01 ppb

Local licensing office

January 1, 2000

6 months

120 days

Water profile

Activity 2b: Who, What, Why – Pair off and take turns asking each other the following questions.

1. Who must test for lead? _____
2. What water sources must be tested? _____

Part II: Children & Lead

Activity 3: Lead Facts, Sources, and Health Effects

Matching Exercise – Match the phrase on the left with the word or phrase on the right that best completes it by drawing a line between the two.

Phrases:

- 1.- Lead is a...
- 2.- Lead can cause...
- 3.- The brain of a child is still...
- 4.- Lead can come from...
- 5.- Lead is most dangerous to children who are...
- 6.- When present, the biggest source of lead in drinking water is...
- 7.- Children are more susceptible to lead poisoning because of their...
- 8.- A safe level for lead exposure is...
- 9.- Lead can be removed from water by...
- 10.- Lead gets in our drinking water by our lead plumbing...

Match:

- Behavioral and learning problems
- Behaviors, size and physiology
- 6 years old and under
- Toxic Metal
- Boiling
- Paint chips, dust, drinking water
- Developing
- Bacteria
- Well water
- Zero
- Corroding
- Diabetes
- Lead service line
- Filtering
- Cuteness

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Childcare Scenario

ABC Childcare is an in-home childcare facility caring for 10 children ages 3 months to 7 years old. Most children are there from 7:30am to 6:30pm, M-F, with some children attending part-time. No evening or weekend care is provided. They are housed in a single-family home built in 1930 in Chicago, IL. Phone number is (555) 765-4321, email ABC@childcare.com. There is an addition built in 1999 that is used as a storage facility and has a bathroom for the outdoor playground. The address is 1234 Main Street, Chicago, IL 60600. The building receives its water from a public utility.

The childcare has been instructed to test all drinking and cooking water sources for lead in water. To do so, the owner first inventoried all water outlets and listed how each outlet is used. See the outlet inventory table below.

Activity 4: Outlet Inventory

After reading through the facility's inventory and use descriptions for each outlet, indicate which outlets are required to be tested (Yes or No) according to the new lead in water sampling requirements. Once you have determined which outlets need to be tested, give each location that requires sampling a unique sample ID/name.

Location	Outlet	Use	Test? (Y or N)	Client Sample ID
Main Building	Kitchen Sink	Food prep for the children	Y	KS
Main Building	Kitchen Utility Sink	Mopping and other cleaning activities		
Main Building	Main Restroom	Handwashing and tooth brushing by children		
Main Building	Employee Restroom	Used only by staff for handwashing		
Main Building	Basement Utility Sink	Sometimes used to clean art materials		
Main Building	Refrigerator water dispenser	Provides children drinking water		
Building Addition	Restroom	Handwashing and occasionally filling water pitchers for drinking		
Building Addition	Hose spigot	Watering plants/grass		

Activity 5: Filling in the Chain of Custody Form

Using the Chain of Custody (COC) Form below and the childcare scenario, fill in the COC form with the information provided.

HINT: Remember that you will need to collect two samples per outlet (a first draw and 30 second flush sample).

Client Name: _____		Account #: _____	
Address: _____		City/State/Zip: _____	
Phone: _____		Email: _____	
Project Name: _____			
Collection Address: _____		City/State/Zip: _____	
Approx. Age of Property: _____		Collected By: _____	
Water Source: <input type="checkbox"/> Public (check one) <input type="checkbox"/> Well		Well Tag# (if applicable)	

No.	Client Sample ID	Collection Location	Collection Date	Collection Time	Analyte
					Lead
1				AM / PM	
2				AM / PM	
3				AM / PM	
4				AM / PM	
5				AM / PM	
6				AM / PM	
7				AM / PM	
8				AM / PM	
9				AM / PM	
10				AM / PM	
11				AM / PM	
12				AM / PM	
13				AM / PM	

Released by: _____	Signature: _____ Date/Time: _____
Released by: _____	Signature: _____ Date/Time: _____

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Activity 6: Interpreting Your Lab Results

You shipped your samples off to an IEPA run or IEPA approved lab and received these results back.

Lab Lead in Water Results									
Sample #	Sample ID (your code)	Method	Parameter	Level detected	EPA Standard	Units	L R L	Date Sampled	Date Analyzed
1234	KS_S1 Kitchen Sink	200.8	Lead	ND	15	µg/L	1	3/1/19	3/15/19
1235	KS_S2 Kitchen Sink	200.8	Lead	1.8	15	µg/L	1	3/1/19	3/15/19
1236	MRR_S1 Main Restroom	200.8	Lead	6	15	µg/L	1	3/1/19	3/15/19
1237	MRR_S2 Main Restroom	200.8	Lead	4	15	µg/L	1	3/1/19	3/15/19
1238	F_S1 Refrigerator	200.8	Lead	1.55	15	µg/L	1	3/1/19	3/15/19
1239	F_S2 Refrigerator	200.8	Lead	1.00	15	µg/L	1	3/1/19	3/15/19
1240	ARR_S1 Addition Restroom	200.8	Lead	3	15	µg/L	1	3/1/19	3/15/19
1241	ARR_S2 Addition Restroom	200.8	Lead	ND	15	µg/L	1	3/1/19	3/15/19

1. What parameter did your lab test your water for? _____.
2. What does ND mean? _____.
3. When did you test your drinking water for lead? _____. When did the lab process your samples? _____.
4. Your lead in water test results came back in micrograms per liter (µg/L). Micrograms per liter is the same as _____.
5. Circle each sample result that came back at or above the action level for Illinois childcare facilities.
 - a. Did any of your first draw sample results come in at 2.01ppb or greater? _____.
If yes, list the sample location/s below:
 - b. Did any of your 30 second flush sample results come in at 2.01ppb or greater? _____.
If yes, list the sample location/s below:

Fill in the missing words below:

6. If a _____ sample tests positive for lead, there is probably lead in that fixture.
7. If a _____ sample tests positive for lead, there is probably lead in the internal plumbing.

(Activity continued next page)

Activity 6: Interpreting Your Lab Results (continued from previous page)

8. Using your lab results, fill in the table below for each sample location which will require mitigation.

Sample Location	Sample Date	First Draw Result	30 Second Flush Result
Insert sample location here, such as [First Floor Bathroom, Left Faucet]	Enter date sample was collected, such as [1/1/2019]	Insert sample result in ppb, such as [3 ppb] OR [non-detect]	Insert sample result in ppb, such as [3 ppb] OR [non-detect]

Part V: Mitigation strategies

Video 4: Mitigation Overview

NOTES:

Activity 7: Mitigation Strategies

Using the sample results you received from the lab, please complete the following exercise.

Based on the sample results received, which of the following actions does your facility need to take? Circle all that apply. *(Complete after watching the mitigation overview video)*

- a. Take immediate action to ensure children are supplied with safe drinking water.
- b. Shut off all faucets in the facility and bring in bottled water.
- c. Post test results for parents and staff to see; share results with DCFS.
- d. Send children home immediately.
- e. Immediately put filters on all faucets.
- f. Stop allowing children to drink water from the refrigerator's water dispenser.
- g. Create a mitigation plan and share it with DCFS, parents, and staff.

Video 5: Mitigation Options

NOTES:

Resources

Helpful Organizations and Resources

1. Department of Children and Family Services (DCFS) -
<https://sunshine.dcf.illinois.gov/Content/Licensing/LeadTesting.aspx>
2. Illinois Department of Public Health (IDPH) lead mitigation strategies:
<http://www.dph.illinois.gov/sites/default/files/publications/school-lead-mitigation-strategies-050917.pdf>
3. U.S. EPA resources on lead in drinking water:
 - a. EPA's 3Ts guidance on lead in water testing in child care:
<https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockkey=20017JVA.txt>
4. Factsheets for residents on lead in water:
 - a. <http://ww2.wkkf.org/2016/digital/Water-FS-Homeowner4.pdf> (English)
 - b. <http://ww2.wkkf.org/2016/digital/Water-FS-Homeowner-Sp4.pdf> (Spanish)
5. Elevate Energy - <https://www.elevateenergy.org/leadtesting>
6. Environmental Defense Fund: <https://www.edf.org/health/lead-toxic-legacy>
7. Illinois Action for Children: <https://www.actforchildren.org/lead-water/>
8. Illinois Network of Child Care Resources and Referral Agency (INCCRRA):
<https://courses.inccrra.org/login/index.php>

Videos

1. Lead Testing Video:
 - a. English: https://www.dropbox.com/s/ejww10nen8m0t1x/Lead%20in%20Water%20Sampling_10_02.18.mp4?dl=0
 - b. Spanish: <https://www.dropbox.com/s/1jnl5tff00y04at/Lead%20in%20Water%20Samplingv2.mp4?dl=0>
2. How to read your test results:
<https://www.dropbox.com/s/pjrom5ce349ieus/How%20to%20Read%20your%20Test%20Results.mp4?dl=0>
3. Mitigation Overview Video:
<https://www.dropbox.com/s/nz7yvv9br69sl28/Mitigation%20Overview.mp4?dl=0>
4. Mitigation Strategies Video:
<https://www.dropbox.com/s/date77mj6th5ymu/Mitigation%20Options.mp4?dl=0>

Factsheets

1. Basic Lead Overview Fact Sheet:
 - a. English: http://www.actforchildren.org/wp-content/uploads/2019/02/Basic-Lead-Overview-Factsheet_02.22.19.pdf
 - b. Spanish: http://www.actforchildren.org/wp-content/uploads/2019/02/Basic-Lead-Overview-Factsheet-SPANISH-Updated_2-25-19.pdf
2. Water Sampling Dos and Don'ts:
 - a. English: <http://www.actforchildren.org/wp-content/uploads/2019/02/Water-Sampling-Dos-and-Donts.pdf>
 - b. Spanish: <http://www.actforchildren.org/wp-content/uploads/2019/02/Sampling-Dos-and-Don-ts-Spanish-1.pdf>

3. Certified Labs and DCFS Fact Sheet: <https://sunshine.dcf.illinois.gov/Documents/3-11-19%20Lab%20List%20from%20IEPA.pdf>
4. FAQ Sheet – Lead in Water
 - a. English: <http://www.actforchildren.org/wp-content/uploads/2019/02/FAQ-sheet-lead-in-water-rules-1.pdf>
 - b. Spanish: <http://www.actforchildren.org/wp-content/uploads/2019/04/FAQ-sheet-lead-in-water-rules-Spanish-2.pdf>
5. Elevate Energy’s Lead in Water Resource Program
 - a. English: <https://www.elevateenergy.org/wp/wp-content/uploads/0319-EE-lead-in-water-infosheet-v6.pdf>
 - b. Spanish: <https://www.elevateenergy.org/wp/wp-content/uploads/0319-EE-lead-in-water-spanish-infosheet-v2.pdf>

Additional Materials



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Day Care Home and Group Day Care Home Lead Testing Questionnaire

This questionnaire must be completed and returned to your licensing representative. Even if you care for only school-age children, or you know your home was constructed after January 1, 2000, you must complete and return this questionnaire.

Provider ID/License Number: _____

Name: _____

Address: _____

City, State, Zip: _____

YES NO

_____ **Does your license age range include children from Birth to 6 years?**

_____ **Was your home constructed on or before January 1, 2000?**

_____ **I understand that if the answer to both of the above questions is yes, I must submit results of water testing for lead.**

Mo. Day Year **On what date was your home constructed?**

How did you verify the construction date of your home?

_____ Title Search

_____ Checked Deed

_____ Asked Landlord or Building Owner

_____ (other): _____

**Return this questionnaire to your licensing representative.
Please insure that testing, if required, is conducted by an IEPA-certified lab.**

Day Care Center Lead Testing Questionnaire

This questionnaire must be completed and returned to your licensing representative. Even if you care for only school-age children, or you know your building was constructed after January 1, 2000, you must complete and return this questionnaire.

Provider ID/License Number: _____

Name: _____

Address: _____

City, State, Zip: _____

YES NO

_____ **Does your license age range include children from Birth to 6 years?**

_____ **Was your building constructed on or before January 1, 2000?**

____ _ **On what date was your building constructed (entire building, not remodeling or construction of just the portion that houses the child care program)?**
Mo. Day Year

How did you verify the construction date of the building housing your center?

_____ Title Search

_____ Checked Deed

_____ Asked Landlord or Building Owner

_____ (other): _____

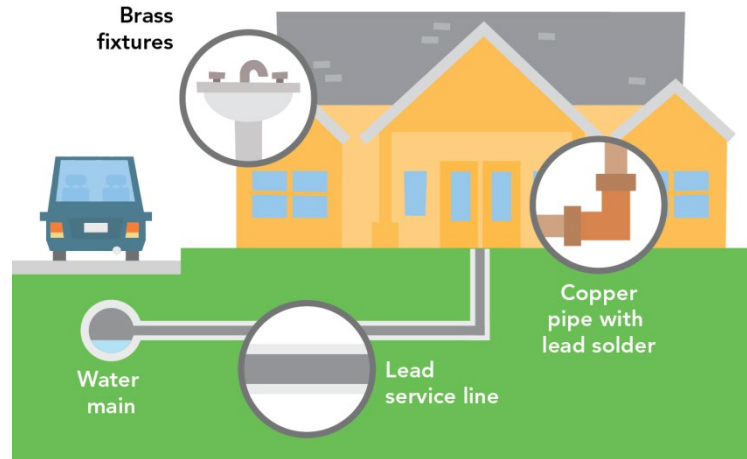
Return this questionnaire to your licensing representative.

Please insure that testing, if required, is conducted by an IEPA-certified lab.

Lead in Drinking Water in Childcare Facilities

Common sources of lead exposure include contaminated soil, lead-based paint chips, and paint dust. However, lead exposure among children can also come from an everyday source: our drinking water. In fact, for formula-fed infants, an estimated 40 to 60 percent of lead exposure comes from drinking water that is used to prepare their formula.¹

It's rare for lead to occur naturally in drinking water or for lead in water to originate from a water treatment plant. Most often, lead ends up in drinking water through lead service lines or plumbing materials like lead solder and brass fixtures that leach lead into drinking water through a process called corrosion.



What is a lead service line?

A service line is a pipe that delivers water to your childcare facility from the water main under the street. These lines may be made of lead if the home or building was constructed before 1986, which is when the Safe Drinking Water Act banned the use of lead service lines. Smaller, home-based childcare facilities are more likely to have lead service lines than bigger facilities. This is because bigger facilities require the use of larger service pipes which were typically not made of lead.

An estimated 730,000 lead service lines exist in Illinois², which is more than any other state. To find out if a lead service line exists at your childcare facility, contact your facility's water provider or a licensed plumber. You can also investigate if your facility's service line is made of lead by using a visual inspection guide like the one created by National Public Radio: npr.org/pipes.

Health Implications of Lead Exposure in Children

While lead exposure has health implications for all people, the effects are especially adverse among infants, children under the age of six, and pregnant women. Children's developing bodies absorb more of the lead they are exposed to than their adult counterparts.

The Centers for Disease Control and Prevention (CDC) states that no safe blood lead level in children has been identified.³ Exposure at even low levels can damage the brain and nervous system, impair a child's development, and contribute to learning and behavior problems, in and out of the classroom. It can also lower a child's IQ and contribute to hearing loss.

Why is it important to test the drinking water at my childcare facility?

Children spend a lot of time at childcare facilities and likely drink tap water and eat food prepared with water in these homes or buildings. Testing your water for lead will help you identify potential lead sources and take appropriate action to protect the children in your facility.

¹ EPA: <https://www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water>

² National Survey of Lead Service Line Occurrence: <https://awwa.onlinelibrary.wiley.com/doi/full/10.5942/jawwa.2016.108.0086>

³ CDC: https://www.cdc.gov/nceh/lead/acclpp/blood_lead_levels.htm

Licensed day care homes, day care centers, and group day care homes serving children under six years of age and built on or before January 1, 2000, will need to test their water for lead in 2019 to comply with recent Illinois law.

Remember: Lead is invisible. You cannot see, taste, or smell lead in drinking water. The only way to confirm that a facility's drinking water contains lead is to have it tested.

How can I reduce lead exposure?

Please see the box at right for steps you can take **today** to reduce lead exposure. Other ways to reduce lead exposure include replacing brass fixtures installed before 2014 or your entire service line if it is made of lead. A licensed plumber can provide you with a cost estimate for removing sources of lead in your facility's plumbing system. Your investment in safe drinking water will help ensure the healthy development of children.



Resources for More Information

- CDC's overview on lead: [cdc.gov/nceh/lead/](https://www.cdc.gov/nceh/lead/)
- Basic information from the EPA on lead in drinking water: [epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water](https://www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water)
- EPA's 3T's for reducing lead in drinking water in childcare facilities: [epa.gov/ground-water-and-drinking-water/3ts-reducing-lead-drinking-water-toolkit](https://www.epa.gov/ground-water-and-drinking-water/3ts-reducing-lead-drinking-water-toolkit)
- EPA's guidance on identifying lead-free certification marks: nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P100LVYK.txt
- The Environmental Defense Fund's resource on the threat of lead: [edf.org/health/lead-toxic-legacy](https://www.edf.org/health/lead-toxic-legacy)
- Illinois Department of Public Health's "Lead in Water" resource: dph.illinois.gov/topics-services/environmental-health-protection/lead-in-water
- NSF International's guide to choosing a certified lead filtration device: [nsf.org/info/leadfiltrationguide](https://www.nsf.org/info/leadfiltrationguide)
- Department of Children and Family Services' "Lead Testing of Water" resource: <https://sunshine.dcf.illinois.gov/Content/Licensing/LeadTesting.aspx>

About Elevate Energy

Elevate Energy is a 501c3 nonprofit organization with a mission to design and implement energy and healthy housing programs that lower costs, protect the environment, and ensure the benefits of energy efficiency reach those who need them most. In the process, we improve building health and safety for occupants.

About the Environmental Defense Fund

Environmental Defense Fund is a 501c3 nonprofit organization with a mission to preserve the natural systems on which all life depends. EDF has more than two million members and a staff of 700 scientists, economists, policy experts, and other professionals around the world. Its Health Program seeks to safeguard human health by reducing exposure to toxic chemicals and pollution, including lead in drinking water.

What can I do right now?

Keep the following tips in mind to help reduce lead in your childcare facility today.

- If you haven't used water in your facility in more than a few hours, **flush your cold-water tap** (let the water run) for at least 30 seconds before use. If your facility has a lead service line, flush your water for longer to ensure that water sitting in the service line is flushed out of the system.
- **Clean your faucet aerators** (the removable screen located at the tip of your faucet) to remove built-up sediment and debris. Soaking the aerator in vinegar can help dissolve and remove particulate lead.



- Use **cold tap water** for drinking, cooking, and preparing baby formula and cereal. Hot tap water may contain more lead than cold water.
- If you need hot water, draw cold water and heat it on the stove. **Boiling water does not remove lead.**
- If there is concern about lead at a specific faucet, install a **water filter** that is approved to remove lead (look for one that is NSF/ANSI Standard 53 certified). These come in a variety of shapes, sizes, and prices.



Water Sampling at Child Care Facilities in Illinois: Dos and Don'ts

Dos

- » Assemble a team to help plan and implement lead in water testing and mitigation (if lead is found)
- » Communicate with parents before, during, and after sampling occurs
- » Conduct a walkthrough of your facility to identify all drinking water sources and give each sampling location a unique name
- » Contact an IEPA or IEPA approved lab to order sampling instructions and supplies
- » Fill out your chain of custody form throughout the sampling process
- » Ensure your water stagnates for at least 6 hours but no longer than 18 hours before beginning sampling
- » Shut off icemakers and any devices that use water during the stagnation period
- » Tape off fixtures so your water is not disturbed prior to testing
- » Collect samples early in the morning before children and staff arrive
- » Collect cold water samples using a pencil sized flow
- » Collect a First Draw and 30 second flush sample at each drinking water outlet
- » Collect a sample from your automatic ice machine
- » Send your samples to an IEPA or IEPA approved for processing as soon as possible
- » Keep a personal record of which sample ID corresponds to each fixture
- » Tightly close bottle lids before mailing or delivering them back to the lab as they can come loose in transit
- » Analyze your test results and develop a mitigation plan if any outlets have lead at or above 2.01 ppb
- » Post your results and mitigation plan (if needed) in your facility
- » Share your test results and mitigation plan with your DCFS licensing representative

Don'ts

- » Do not collect samples after a long holiday or weekend
- » Do not remove aerators prior to testing
- » Do not open bottles until you are ready to collect a sample

LABORATORY NAME	FOT	Address	CITY	STATE	e-mail	PHONE NUMBER
Illinois EPA Laboratory*	DWI	825 North Rutledge	Springfield	IL	tom.weiss@illinois.gov	(217) 782-9780
Alpha Analytical Mansfield MA	DWI	320 Forbes Blvd.	Mansfield	MA	ghall@alphalab.com	(508) 898-9220
American Water Central Laboratory	DWI	1115 South Illinois St.	Belleville	IL	bill.deckelmann@amwater.com	(618) 222-4053
ARRO Laboratory, Inc.	DWI	P.O. Box 686	Joliet	IL	joan.serdar@arrolab.com	(815) 727-5436
Carbondale Central Laboratory	DWI	2401 South McLafferty Road	Carbondale	IL	kcole@ci.carbondale.il.us	(618) 457-8613
City of Chicago, Water Purification Laboratories	DWI	1000 East Ohio St.	Chicago	IL	alan.stark@cityofchicago.org	(312) 744-7733
Culligan Analytical Laboratory	DWI	9399 West Higgins Rd. Suite 1100	Rosemont	IL	rcook@culligan.com	(847) 430-1219
Environmental Monitoring and Technologies, Inc.	DWI	8100 North Austin Ave.	Morton Grove	IL	sstankevicius@emt.com	(847) 324-3341
Environmental Science Corp.	DWI	12065 Lebanon Rd.	Mt. Juliet	TN	-	(615) 773-9755
Eurofins Eaton Analytical, Inc.	DWI	110 South Hill Street	South Bend	IN	TraciChlebowski@eurofinsUS.com	(574) 233-4777
Eurofins Eaton Analytical, Inc. - CA	DWI	750 Royal Oaks Dr., Suite 100	Monrovia	CA	davidtripp@eurofinsUS.com	(626) 386-1158
First Environmental Laboratory	DWI	1600 Shore Rd. # D	Naperville	IL	firstinfo@firstenv.com	(630) 778-1200
GEL Laboratories, LLC	DWI	2040 Savage Rd., P.O. Box 30712	Charleston	SC	tasha.horton@gel.com	(843) 556-8171
Lake County Environmental Laboratory	DWI	500 W. Winchester Rd. #103	Libertyville	IL	sladao@lakecountyil.gov	(847) 377-7744

PDC Laboratory, Inc. - Chicago	DWI	4314-A, Crystal Lake Rd.	McHenry	IL	kstepping@pdclab.com	(815) 344-4044
Microbac Laboratories, Inc.	DWI	250 West 84th Dr.	Merrillville	IN	microbac_info@microbac.com	(219) 769-8378
National Testing Laboratories	DWI	556 South Mansfield	Ypsilanti	MI	efujs@ntllabs.com	(734) 483-8333
Pace Analytical Services, Inc. - FL	DWI	8 East Tower Circle	Ormond Beach	FL	bob.dempsey@pacelabs.com	(386) 676-4803
Pace Analytical Services, LLC. - MN	DWI	1700 Elm Street SE Suite 200	Minneapolis	MN	Sarah.cherney@pacelabs.com	(612) 607-6352
PDC Laboratories, Inc. - Peoria	DWI	2231 W. Altorfer Drive	Peoria	IL	sraper@pdclab.com	(309) 683-1736
PDC Laboratories, Inc. - Springfield	DWI	1210 Capital Airport Drive	Springfield	IL	jsolomon@pdclab.com	(217) 753-1148
Rock River Water Reclamation District	DWI	3333 Kishwaukee Street	Rockford	IL	mjohnson@rrwr.dst.il.us	(815) 387-7523
SGS Accutest - Dayton	DWI	2235 U.S. Route 130	Dayton	NJ	nicholas.straccione@sgs.com	(732) 329-0200
SGS Accutest - Marlborough	DWI	50 De'Angelo Drive	Marlborough	MA	trent.temperly@sgs.com	(508) 481-6200
STAT Analysis Corporation	DWI	2242 West Harrison St.	Chicago	IL	frank@statanalysis.com	(312) 733-0551
Suburban Laboratories, Inc.	DWI	1950 S. Batavia Ave., Suite 150	Geneva	IL	dan@suburbanlabs.com	(708) 544-3260
Summit Environmental Technologies, Inc.	DWI	3310 Win Street	Cuyahoga Falls	OH	rtand@settek.com	(330) 253-8211
Teklab, Incorporated	DWI	5445 Horseshoe Lake Rd.	Collinsville	IL	cbogner@teklabinc.com	(618) 344-1004
TEST, Inc.	DWI	2323 4th St.	Peru	IL	tmccauley@testinc.com	(815) 224-1650

TestAmerica Buffalo	DWI	10 Hazelwood Drive	Amherst	NY	david.orlowski@testamericainc.com	(716) 504-9832
TestAmerica Chicago	DWI	2417 Bond Street	University Park	IL	nadine.jernberg@testamericainc.com	(708) 534-5200
TestAmerica Savannah	DWI	5102 LaRoche Avenue	Savannah	GA	benard.kirkland@testamericainc.com	(912) 354-7858
*Only provides testing for State & Federally Funded, Non-for-Profit Facilities List supplied by IEPA, effective 3-11-2019.						

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Frequently Asked Questions: New Lead in Water Testing and Mitigation Requirements for Child Care Facilities in Illinois

Q. What is the testing deadline for the new lead in water rules?

A: If your home or facility was built on or before January 1, 2000, and you serve children birth to six years of age, you must complete lead in water testing by May 1, 2019. We encourage all providers to conduct testing as soon as possible to ensure children have safe drinking water.

Q. How long do we have to mitigate if lead is found at or above 2.01 parts per billion (ppb) at one of our drinking water outlets?

A: Mitigation plans must be submitted to DCFS within 120 days of receiving results indicating lead at or above 2.01 ppb. However, you must take immediate steps to ensure children have a safe drinking water supply while you develop and implement a mitigation plan.

Q. What if I tested my water before the rules were finalized? Do I need to test again?

A: Read the final rules to make sure that the testing and subsequent actions you took are in compliance with the final rule. If so, you do not need to test again. DCFS will accept test results, no matter how old, as long as all requirements were met (i.e. all required outlets were tested, two samples were taken, etc.)

Q. How frequently are we expected to conduct lead testing? How long are results valid?

A: If you find lead in any of your samples at 2.01 ppb or above, you will need to develop a mitigation plan and collect follow up samples within six months AND within 1 year after implementing your plan. If both of your follow up tests reveal lead levels below 2.01 ppb, then you only need to conduct follow up testing in the event there is a change to your building's water profile. Your water profile may change if you replace your water heater, replace the water service line connected to your facility or change your water source.

Q. How soon do providers need to get samples to the lab after collecting them?

A: IEPA or IPEA approved labs must chemically preserve your samples within 14 days, so it is important to send or deliver your water samples to the lab as soon as possible (ideally, on the same day). Also, be sure to ask your lab if they have any special instructions for sending or delivering your water samples.

Q. What water sources do we need to test under the new rules?

A: According to the new rules, lead in water testing will need to occur at water sources that are used for “drinking or food preparation for day care operations.” This likely includes your kitchen and bathroom faucets, refrigerator dispensers and automatic ice machines, and drinking fountains and bubblers. If children drink from other sources in your building such as hoses or bathtubs, test those sources as well.

Q. Our child care is located in a larger facility with other rooms that are *not used* by our child care program. Do we need to test these areas?

A: The new rules only require you to test **water sources used for drinking or food preparation for day care operations**. Therefore, you do not need to test areas of your building that are unused by your child care program.

Q. Where can we find the list of companies that are certified to conduct lead testing? What certifications should they have?

A: Under the new rules, you will need to use an IEPA laboratory or an IEPA approved lab to process your water samples. You can find a list of approved labs on the DCFS Sunshine website [here](#). Not all approved labs are located in Illinois.

Q. As a child care provider, am I able to collect lead in water samples on my own? Or does someone need to come out to my facility to collect the samples?

A: You are able to conduct lead in water testing on your own as long as you use an IEPA lab or IEPA approved lab to process your samples. To learn more about how to test your water for lead, watch this [short video](#) or view [this webinar](#) on the lead in water sampling process. Your IEPA or IEPA approved lab will also send you specific sampling instructions and sampling bottles.

Q. How can we determine where the source of lead is?

A: Source water from the treatment plant rarely contains lead. However, lead can get into water from corrosion of leaded plumbing. Sources of lead in water include lead service lines, brass fixtures containing lead, and lead solder connecting internal copper piping.

The first step in determining the source of lead is to investigate for the presence of a lead service line. To do so, contact your water utility who may have records. Another option is to conduct a visual inspection by checking the service line as it enters the building either on your own or with assistance from a licensed plumber (see [NPR's interactive web-based tool](#) for guidance on visually inspecting for a lead service line).

Next, the water samples you collect will help you identify if lead is present in your facility's internal plumbing system.

- If there is lead in the first draw sample but not the 30 second flush, then the lead is most likely coming from a fixture like a sink faucet or a drinking fountain.
- If there is lead in the 30 second flush sample, then the situation is more complicated, as the lead is likely coming from a source further upstream in the internal plumbing system (e.g., lead solder, internal lead piping). In this case, read [EPA's 3Ts guidance](#) for reducing lead in drinking water and contact your water utility for additional guidance.

Q. What mitigation strategies do you recommend for child care facilities? How do we know when to use a certain strategy?

A: The most effective methods include removing the source of lead (i.e., remove the lead service line, replace brass fixtures containing lead). There are also a variety of effective interim strategies, including flushing at the tap or installing [point of use NSF 53 certified filters](#). Watch [webinars 3 and 4](#) for more detail or review the immediate, interim, and permanent mitigation option tables at the end of this FAQ sheet. Also see [EPA's 3Ts guidance](#) for additional information on mitigation strategies.

Q. Can we use bottled water or filtered water as a mitigation strategy?

A: Use of bottled water or a water delivery program as a mitigation strategy will need to be approved by DCFS. Installing [NSF 53 certified filter\(s\)](#) can be used as an interim mitigation strategy until a permanent mitigation strategy can be employed. Some facilities may also choose to use NSF 53 certified filter(s) as a permanent control measure; if you use this approach, be sure to create a maintenance schedule and identify a point of contact to be in charge of making sure the filters are properly maintained or replaced.

Q. When does it make sense to use manual flushing as a mitigation strategy? How long do we flush the water at the start of the day?

A: Manual flushing is an interim strategy that can be employed while developing a permanent solution. There are two types of manual flushing, which should be utilized under different scenarios:

- If the lead is coming from a faucet or fountain (i.e., lead detected in first draw sample but not in 30 second flush sample), flush at the tap for 30 seconds at the beginning of the day as well as 5 seconds before each use (installing signage can help institute this practice).
- Whole system flushing can be used if there is a lead service line present or if there is a widespread contamination issue from several fixtures or internal plumbing sources. Conduct a whole system flush at the beginning of the day by running the faucet furthest away from the service line on each floor that is NOT used for drinking water for 10 minutes. Next, let the water run at all drinking water fountains without refrigeration for 30 seconds to 1 minute. After that, flush your drinking water fountains with refrigeration for 30 seconds to 1 minute. Finally, run the kitchen faucets for 30 seconds to 1 minute, making sure the water is cold. For more detail, watch [this webinar](#) or check out [EPA's factsheet on flushing](#).

Q. How do you mitigate at a drinking water fountain?

A: Removing the lead source is always the best strategy, when possible. However, drinking water fountains (especially water coolers) can be expensive to replace. One effective way to reduce lead levels at a drinking water fountain is to install an automatic/mechanical flushing device, which will automatically flush water at pre-determined times to reduce lead levels. You can [speak with a professional](#) for more details on the feasibility of this mitigation strategy for your facility. Also note that since this strategy does not remove the source of lead, you would likely want to retest lead levels every 5 years.

Q. What are some every day, best practices my facility can follow to reduce lead in water?

A: There are many best practices child care facilities should consider adding to standard building operating procedures to help reduce lead at water taps. While these should not be used in lieu of a permanent mitigation plan, you should consider following these routine practices to help reduce lead exposure. These include:

- Avoid using hot water for cooking or drinking.
- Avoid using hose bibs (outdoors or at utility sinks) for drinking.
- Clean your faucet aerators (the removable screen located at the tip of your faucet) to remove built-up sediment and debris. Soaking the aerator in vinegar can help dissolve and remove particulate lead.
- Flush fixtures for 30 seconds at the beginning of the day and 5 seconds before each use to reduce lead levels.
- Follow the manufacturer’s instructions for routine flushing of the hot water heater.

Immediate, Interim, and Permanent Mitigation Options for Child Care Facilities

Immediate Mitigation Actions

Action	Situation	Pro	Con
Shut off problem outlet/s	If any sample is > 10 ppb	+No cost solution +Easy to implement	-Need to find another drinking water source
Install Signage: <i>“Do not drink water”</i>	The 30 second flush sample is between 2.01 ppb and 10 ppb AND the first draw sample is < 10 ppb	+Low cost/no cost +Easy to implement	-Requires a behavior change -Temporary solution -Need to find another drinking water source
Install Signage: <i>“Run water for 5 seconds before use”</i>	The first draw sample is between 2.01 ppb and 10 ppb AND your 30 second flush sample is < 2.01 ppb	+Low cost/no cost +Easy to implement	-Requires a behavior change -Temporary solution
Notice to parents and staff	After receiving test results and after implementing mitigation actions	+Builds trust +Provides important public health info.	*Required

Interim Mitigation Actions

Action	Situation	Pro	Con
Point of Use Filters	Always helpful, especially if the 30-second flush sample is 2.01 ppb or greater	+Ensures lead levels are low	-Must be maintained -Cost -Some types may require plumber assistance to install
Manual Flushing: <ul style="list-style-type: none"> • Step 1: Flush for 30 seconds at the beginning of the day • Step 2: Flush for 5 seconds before each use 	If the 30-second flush sample is less than 2.01 ppb (i.e., lead source is fixture)	+Low cost/no cost +Easy to implement	-Requires a behavior change -Temporary solution
Whole System Flushing	<ul style="list-style-type: none"> • LSL is present • If several 30-second flush samples are at 2.01 ppb or greater (i.e., widespread problem/unknown sources) 	+Low cost/no cost +Can be implemented immediately	-Lead levels may increase over day -Time intensive -Wastes water
Bottled Water	Use in extenuating circumstances (i.e., issues at many faucets/outlets in the building)	+Ensures lead levels are low	-Cost and waste -Subject to Department approval

Permanent Mitigation Actions

Action	Situation	Pro	Con
Lead Service Line Replacement	If utility records and/or visual inspection reveal a LSL	+Removes largest contributor of lead in water	-May be cost prohibitive
Replace faucet or drinking fountain	Prioritize if first draw is > 10 ppb and the 30 second flush sample is less than 2.01 ppb	+Long term solution to address lead source	-Lead levels may increase temporarily post replacement -Upstream fitting or valve may be lead source -Larger upfront cost



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Automatic mechanical flushing	Good option if you have multiple problem outlets or replacement is cost prohibitive (e.g., drinking water fountain)	+Reduces lead levels automatically	-Larger upfront cost -Need to retest periodically -Wastes water
Water bottle filling station with filter	Good option if you have multiple problem outlets	+Easy way to access drinking water +Avoid use of filters at multiple faucets	-Requires regular maintenance (filter replacement) -Cost