## 3Ts Frequently Asked Questions

The following is a list of frequently asked questions following the release of EPA’s revised 3Ts for Reducing Lead in Drinking Water toolkit. These questions were received from states, schools and other stakeholders through the EPA hotline, EPA webinars and presentations.

**1. What is EPA’s 3Ts for Reducing Lead in Drinking Water in Schools and Child Care Facilities?**

EPA’s *3Ts for Reducing Lead in Drinking Water in Schools and Child Care Facilities* was developed to assist schools and child care facilities with lead in their drinking water, implement prevention programs using a “3Ts” approach: Training, Testing, and Taking Action. It is intended for use by school personnel interested in reducing lead exposure.

**2. Why did EPA revise the 3Ts?**

[​](https://www.epa.gov/dwreginfo/lead-drinking-water-schools-and-childcare-facilities#tab-1) EPA’s 3Ts – Training, Testing, and Taking Action – provides user friendly tools for schools, child care facilities, states and water systems to implement voluntary lead in drinking water testing programs. The revised version provides a new interactive web-based format and includes modules, customizable templates, and tools that can help schools and child care facilities when implementing their lead testing programs.

To showcase examples of lead testing programs in different states, EPA has also published a map linking to state programs. This map highlights both voluntary and regulatory efforts across the country.

**3. Are schools and child care facilities required to test for lead in drinking water?**

There are no federal regulations that require testing of drinking water in schools and childcare facilities, except for those that are public water systems and therefore are subject to comply with the National Primary Drinking Water Regulations (NPDWR). States and local jurisdictions may establish their own voluntary or mandatory programs for testing drinking water in schools and child care facilities.

**4. How do I find out if my child’s school or child care facility has tested the drinking water for lead?**

Contact your school administrator or your local public water system to learn more about previous or ongoing efforts to test for and reduce lead in drinking water.

If your school or child care facility is a public water system subject to the Safe Drinking Water Act (SDWA), it may be required to test for lead in drinking water under the federal Lead and Copper Rule. You can request to view these sample results and other water quality data by contacting the public water system.

**5. Are public water systems required to implement a 3Ts program in schools and child care facilities?**

No, public water systems are not federally required to implement a 3Ts program. However, many states have provided schools with technical guidance regarding sampling plans, analysis, and support in communicating monitoring results. In addition, some states have also published their own guidance and have enacted laws and/or regulations on the testing and notification of lead sampling in these facilities.

[**View EPA’s 3Ts for Public Water Systems factsheet**](https://www.epa.gov/sites/production/files/2018-09/documents/3ts_for_pwss_draft_final_9-5-2018_508.pdf)

**6. Are States required to implement a 3Ts program?**

No, states are not federally required to implement a 3Ts program.

Although there is no federal requirement for states or tribes to implement a 3Ts program, many states have provided schools with technical guidance regarding sampling plans, analysis, and support in communicating monitoring results. Some states have also published their own guidance and have enacted laws and/or regulations on the testing and notification of lead sampling in these facilities.

[**View EPA’s Leaders in Reducing Lead in Drinking Water map to see links to state programs**](https://epa.maps.arcgis.com/apps/Cascade/index.html?appid=989f006a15f14256ad8bdfd837016453)

**7. Is lead in drinking water the only potential source of lead exposure for kids?**

No. Children can be exposed to lead from paint, dust, soil, air, and food, as well as drinking water. Lead can also be brought into homes on clothes and shoes after exposure from leaded dirt, and industrial processes that involves lead. Be sure to change and wash clothes, remove shoes, and shower to avoid tracking lead into the home from soil, work sites, or hobbies. If a child has an elevated blood lead level, it is likely due to lead exposures from a combination of sources.

[**View EPA’s Basic Information about Lead in Drinking Water page**](https://www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water)

**8. What should I do if I am concerned about my child’s exposure to lead?**

There is no safe blood lead level. In children, even low levels of exposure have been linked to damage to the central and peripheral nervous system, learning disabilities, shorter stature, and impaired hearing. If you are concerned about your child’s exposure to lead, contact a health provider to learn more about blood lead testing. The only way to determine a child’s lead level is to have the child’s blood tested.

**9. I’ve heard that the federal level for lead in drinking water is 15 parts per billion (ppb). Where does the 15 ppb come from?**

Recognizing that there is no safe level of lead in drinking water, the Lead and Copper Rule (LCR) set a health-based maximum contaminant level goal of zero. The LCR uses the action level of 0.015 mg/L (15 ppb) for lead to evaluate drinking water systems, not individual facilities.  The action level triggers actions that water systems must take if the concentration of lead in more than 10 percent of tap water samples is greater than 15 ppb. Some of the actions include installing corrosion control treatment, public education, lead service line replacement and source water monitoring. Only schools and child care facilities that are public water systems subject to the National Primary Drinking Water Regulations are required to meet the requirements of the LCR.

[**View information about the federal Lead and Copper Rule (LCR) here**](https://www.epa.gov/dwreginfo/lead-and-copper-rule)

**10. What is the remediation level for lead in schools and child care facilities?**

There is no recommended remediation level in the updated guidance.  EPA encourages schools to prioritize remediation efforts based on the highest lead sample results and to use the steps in the toolkit to pinpoint potential lead sources to reduce their lead levels. In establishing and conducting programs for lead in drinking water in schools, states have the discretion, but are not required, to identify a remediation levels for their program. Schools and child care facilities are encouraged to check with state and local health department as they may have guidance or requirements.

**11. Does EPA recommend a specific remediation level?**

The revised 3Ts does not specify a remediation level for lead; rather, EPA encourages schools to prioritize remediation efforts based on the highest lead sample results and to use the steps in the toolkit to pinpoint potential lead sources to reduce their lead levels. States have the discretion, but are not required, to identify a remediation level for their program. A state may choose to use the 20 ppb1 or designate a different remediation level based on a variety of factors (e.g., age of plumbing, population, water corrosivity, type of sampling, available resources, and other school and child care program priorities). Schools and child care facilities are encouraged to check with state and local health departments as they may have guidance or requirements that include a lead remediation level.

1. In 2006, EPA developed the 3Ts for voluntary testing at schools and recommended that a remediation level of 5ug per a 250mL sample (or 20ug/L or 20ppb) be used to identify sources of lead at individual outlets.

**12. What does the 3Ts mean when it encourages "schools to prioritize remediation efforts?"**

EPA encourages schools to reduce lead exposure by prioritizing remediation efforts based on lead sample results and to use the steps in the toolkit to pinpoint potential lead sources. Prioritizing actions based on the highest lead sample results will help schools and child care facilities work towards achieving their goal of removing lead sources and reducing lead exposure. The 3Ts includes examples that can help schools and child care facilities interpret results and determine lead sources. They are meant to illustrate what one might see and how to determine whether the source of lead is in the fixture or the plumbing upstream.

In addition, EPA recommends that 3Ts samples be taken at all locations used for consumption, and schools and child care facilities prioritize water outlets that are used by children under the age of 6 years or pregnant women (e.g., drinking fountains, nurses’ office sinks, classrooms used for early childhood education, kitchen sinks, teachers’ lounges).

**13. What does the 3Ts mean when it says to “reduce to the lowest possible concentrations?”**

EPA maintains that there is no safe level of lead. The goal of 3Ts testing is to prioritize lead sources so that remediation measures (e.g. removing the lead source) can be taken to reduce exposure to lead in drinking water. The 3Ts encourages schools and child care facilities to establish a plan, before sampling, which may include a remediation level. Remediation levels can be adjusted over time depending upon the schools’ ability to pursue continuous improvement in the detection and remediation of lead sources.

**14. Is flushing no longer recommended as a long-term remediation measure?**

Flushing involves opening valves and faucets and letting the water run to remove water that has been standing in the interior pipes and/or the outlets. Flushing can be a short-term solution to high lead levels, especially when contamination is localized in a small area or in a small building, and when follow-up flush samples indicate low or non-detect lead levels. It can be used as a short-term solution as more permanent solutions are being implemented.

An important consideration when utilizing flushing for remediation is how often flushing should occur throughout the week and possibly throughout the day, and whether it is feasible for your facility. Depending upon the age and condition of the plumbing and the corrosiveness of the water, elevated lead levels can return relatively quickly following flushing.

Unless you can ensure lead in drinking water levels remain low throughout the day, it is not recommended to flush only once a day or once a week as a solution to high lead levels. Flushing immediately prior to use may be a short-term solution, in conjunction with signage and schedules.

If your facility chooses to implement a flushing program, EPA recommends that you collect samples after implementing this remediation, so you can ensure the water being provided does not contain elevated lead levels. See the 3Ts toolkit and the [**Flushing Best Practices Factsheet**](https://www.epa.gov/sites/production/files/2018-09/documents/flushing_best_practices_factsheet_508.pdf) for more information on how to sample to ensure your flushing program is a success:

**15. Should schools and child care facilities flush when conducting sampling?**

EPA does not typically recommend flushing for the sole purpose of sampling but rather as a routine practice to ensure the water is not becoming stagnant, not moving, in buildings.  Flushing before sampling may cause results showing lower than representative lead levels in the water.

The 3Ts provides further clarification on when flushing is appropriate during sampling events, for example when conducting 30 second follow-up flush sampling or sequential sampling to identify potential lead concerns related to building interior plumbing.

See the 3Ts toolkit and the [**Flushing Best Practices Factsheet**](https://www.epa.gov/sites/production/files/2018-09/documents/flushing_best_practices_factsheet_508.pdf) for more information, including flushing dos and don’ts.

See the [**Establishing Routine Practices factsheet**](https://www.epa.gov/sites/production/files/2018-09/documents/module_6_establishing_routine_practices_508.pdf) of the newly revised 3Ts toolkit to learn ways to improve water quality throughout the year and after long breaks.

**16. Why does the 3Ts recommend a sample volume that is smaller than the sample volume required under the Lead and Copper Rule (LCR)?**

A smaller sample (e.g., 250-mL) is used for identifying the sources of lead at an outlet because it is representative of a smaller section of plumbing. For example, a 250-mL sample from a faucet would not include larger portions of the plumbing behind the wall that the faucet is mounted on. Under the Lead and Copper Rule (LCR), public water systems are required to collect a 1-liter sample, which is representative of larger portions of plumbing in the home.

**17. Where should samples be taken at schools and child care facilities?**

Samples for 3Ts should be collected at locations used for drinking water. This may include water a fountain, a kitchen sink, or a bathroom sink. EPA recommends prioritizing sampling for lead at potable water sites over non-potable sites (e.g., mop bucket sinks, utility sinks, outdoor hoses, or eye wash stations). If there is potential that these non-potable sites may be used (e.g., the outdoor hoses are used to fill water jugs for sports activities), use clear signage to notify people that the faucet should not be used for drinking or cooking, or include the fixture in your sampling plan.

View the 3Ts Toolkit and [***Module 4: Developing a Sampling Plan***](https://www.epa.gov/ground-water-and-drinking-water/3ts-module-4) here.

**18. Who should collect 3Ts Samples?**

It is important that water samples be collected properly. Some certified laboratories provide both collection and sample analysis services. If the laboratory is not collecting the sample, be sure to either identify an individual who is adequately trained to collect lead samples or read the sampling instructions on how to collect the sample provided by the laboratory carefully to help avoid sampling errors. Make sure to check the sampling instructions to confirm they are following the 3Ts sampling protocol, as there are different sampling protocols for different contaminants. Many laboratories work regularly with the water systems and are used to sending out kits with instructions for sampling procedures under the Lead and Copper Rule (e.g., 1L sample bottles). Some state drinking water programs or public water systems may provide both services, although there is no federal requirement that they do so.

**19. When should samples be collected?**

Collect all water samples before the facility opens and before any water is used. Remember not to use the facilities’ restrooms or sinks that morning prior to sampling.

Unless specifically directed to do so, do not collect samples in the morning after vacations, weekends or holidays because the water will have remained stagnant (not moving) for too long and will not represent the water used for drinking during most of the days of the week.

See the [**Establishing Routine Practices factsheet**](https://www.epa.gov/sites/production/files/2018-09/documents/module_6_establishing_routine_practices_508.pdf)of the newly revised 3Ts toolkit to learn ways to improve water quality throughout the year and after long breaks.

**20. What can schools and child care facilities do if they find lead?**

Solutions to lead problems typically should be made both on a short-and long-term basis. Schools and child care facilities should consider the advantages and disadvantages of each before choosing what is most appropriate for them and should consider the benefits of remediation that removes the risk of lead contamination (e.g. removing the source of lead). Communication and follow-up sampling is recommended as remediation efforts are being implemented.

*The 3Ts for Reducing Lead in Drinking Water* identifies ways to reduce lead exposure:

* **Immediate Steps** (e.g., shutting of problem outlets, sharing results, and posting signage);
* **Short-Term Control Measures** (e.g., filters, flushing, and providing bottled water); and
* **Permanent Control Measures** (e.g. fixture replacement, pipe replacement, and use of a filter).

When selecting a remediation provider, it is important for schools and child care facilities to engage with the local health department, public water system and other available resources to ensure the organization performing remediation is reputable. 3Ts partners can provide essential technical expertise, resources, or may be able to provide assistance in testing and remediating lead in drinking water.

View the revised 3Ts Toolkit and [***Module 6: Remediation and Establishing Routine Practices***](https://www.epa.gov/ground-water-and-drinking-water/3ts-module-6) for more information.

**21. How often should a school test for lead in drinking water?**

How frequently your facility can and should test for lead in drinking water depends on a variety of factors (e.g., plumbing, water quality, lead results, budget, and competing priorities). 3Ts does not recommend a set frequency for sampling schools and child care facilities, but does note that annual monitoring provides information regarding  changes in the lead levels and the effectiveness of remediation or treatment efforts as well as timely notice of lead levels that need to be addressed.  
  
Regardless of the frequency set by your facility, EPA recommends that the sampling frequency be documented, and that schools and child care facilities make testing drinking water a part of their regular building operations.