

3Ts for Public Water Utilities

A TRAINING, TESTING, TAKING ACTION Approach



What are the 3Ts?

The 3Ts toolkit was developed for schools and child care facilities to help them implement a voluntary program for reducing lead in drinking water. It includes a training, testing, and taking action approach.

How does it differ from sampling under the Lead and Copper Rule?

Lead and Copper Rule (LCR)	3Ts for Reducing Lead in Drinking Water
<p>Required for: all community and non-transient non-community water systems.</p>	<p>Voluntary Program: to assist schools with training, testing, and taking action.</p>
<p>Sampling Protocol: The LCR takes a system-wide approach. If the 90th percentile lead level concentration of tap samples exceeds the 15 µg/L action level, water systems must take additional actions. The sampling protocol under the LCR includes a 1-L first draw sample after a stagnation period of 6 hours.</p>	<p>Sampling Protocol: Only schools and childcare facilities that own and/or operate a public water system must meet the requirements of the LCR. Under the 3Ts, EPA recommends sampling and follow-up actions be taken at each individual outlet. The 3Ts consists of a 2-step sampling protocol, which includes two 250-mL samples: (1) first draw after an 8 to 18 hour stagnation, and (2) a flush sample after 30 seconds.</p>
<p>Follow-Up Actions: Water systems are required to undertake treatment actions, depending upon system size and corrosion control treatment status. These include corrosion control, public education, water quality monitoring, and lead service line replacement.</p>	<p>Follow-Up Actions: The initial sample and the follow-up flush sample will help determine the source of the lead (e.g., the fixture or behind the wall). Then remediation measures can be implemented as appropriate to address that outlet. This includes removing fixtures and repairing/replacing water coolers, to minimize exposure.</p>

Note: EPA recommends a smaller sample in the 3Ts because it is more effective at identifying the sources of lead at an outlet because it represents a smaller section of plumbing. A 250-mL sample from a faucet would be less likely to include portions of the plumbing behind the wall that the faucet is mounted on. There is no known safe level of lead for children. EPA encourages schools to prioritize remediation efforts based on lead sample results and to use the steps in the 3Ts to pinpoint potential lead sources to reduce their lead levels to the lowest possible concentrations.



Office of Water
EPA 815-F-18-002
October 2018

How Can Water Systems Help?

Public water systems are critical partners in helping schools conduct testing for lead. Although water systems may not be under a legal obligation to do so, assistance could be provided through technical guidance, sampling and/or sharing in sampling costs, sample analysis, assistance developing sampling plans and plumbing profiles, and support in communicating with the school community.



Provide information that may be helpful: Schools and child care facilities might benefit from viewing the results of the water system's required monitoring under the Lead and Copper Rule and from having a copy of the latest consumer confidence report. Public water systems should be able to tell schools whether lead monitoring is current, the monitoring results are below the lead action level, and corrosion control treatment is provided.



Assist with determining if lead is present: Lead pipes within the school and lead service lines can be replaced. Child care facilities in small buildings are at a higher likelihood of being served by lead lines. Provide schools with information about whether there is a lead service line or help identify the service line material.



Support the school in developing their sampling plan: Tell school officials whether you have conducted lead monitoring at the school, and talk with them about factors that may indicate whether lead could be a problem within building(s).



Collect and analyze samples: School personnel are unlikely to be familiar with sample collection procedures. You can assist with sample collection or train school staff on how to collect samples for lead testing. You can also help the school identify a certified laboratory for sample analysis.



Help interpret results and determine potential lead sources: Solutions to lead problems typically need to be made on a short-term and on a permanent basis. Schools and child care facilities are encouraged to work closely with water professionals and the water system when making repairs to ensure that the chosen remediation options will remove lead from the water and to understand the benefits and considerations of each option.



Communicate with the school and the public: Some schools may be uncertain about developing a 3Ts program due to concerns about how to communicate with and engage the school community as a whole and the general public. You can provide expertise to help schools develop communication materials and attend public meetings to answer questions, provide information about lead in drinking water and encourage community partnerships to help support the school throughout the process.

Resources:

- View the full 3Ts Toolkit:
www.epa.gov/safewater/3Ts
- View Lead and Copper Rule Resources:
www.epa.gov/dwreginfo
- Assisting Schools and Child Care Facilities in Addressing Lead in Drinking Water:
<http://www.awwa.org/portals/0/files/legreg/documents/assistingchoolslead2005.pdf>

