

IMPORTANT NOTE: This guidance is for schools served by a public water system. This testing is not for schools that are public water systems.

Please read the *entire* brochure *before* testing.

1 Preparation is the Key to Success

Understanding how to get results that represent the water students and staff consume under normal building use is the first and most important step in testing drinking water for lead in schools. **We recommend all schools review EPA's *3Ts for Reducing Lead in Drinking Water in Schools*** guidance to help in your planning and follow-up actions.

3Ts for Reducing Lead in Drinking Water in Schools will help you identify plumbing materials and flow patterns in your buildings, understand how lead gets into water, and how to use this information to prepare a representative sampling plan. It also provides guidance on developing a communication plan.

2 Before You Sample

Ensure all sample collectors read this brochure so they have a clear understanding of how to sample.

Call the public water system that supplies water to your facility. Discuss your plans to sample in your school, and ask about the lead levels in the water distribution system.

Contact a laboratory accredited to perform lead analysis. Discuss the samples you plan to take, and request the proper bottles for collecting samples. While public water systems must collect 1-liter samples, schools collect 250-milliliter (ml) samples. Be sure to tell your laboratory that the samples are from a school and not a public water system.

For More Information

If you have questions about sample collection procedures or sample results, call your Office of Drinking Water Regional Office:

- ◆ **Eastern Region**
Spokane Valley
509-329-2100
- ◆ **Northwest Region**
Kent
253-395-6750
- ◆ **Southwest Region**
Tumwater
360-236-3030

Related Publications

Our publications are online at www.doh.gov/eph/dw.

3 Ts for Reducing Lead in Drinking Water in Schools (US EPA)

Lead in School Drinking Water (331-255)



DOH PUB #331-261
May 2016

If you need this publication in an alternative format, call 800.525.0127 (TDD/TTY call 711).
This and other publications are available at www.doh.gov/eph/dw.



Testing for Lead in School Drinking Water Systems

3 Initial First-Draw Sampling

Select drinking water fixtures in the building. Prioritize fixtures based on how likely and how frequently someone could drink from them. For example, people are more likely to drink from water fountains or kitchen faucets than bathroom sinks. The more fixtures you sample, the better you will understand lead levels in your building.

Pick a day to sample when school is in session. DO NOT sample the morning after a weekend, vacation, or holiday because this doesn't represent normal use.

Get "first-draw" samples. First-draw water must sit in the plumbing system at least 8 hours, but no more than 18 hours. The fixture should not be used during that time. It is easiest to collect samples first thing in the morning before school starts.

Only sample cold water. If you are testing fixtures that mix hot and cold water, make sure cold water is the last water to run through the tap before it sits overnight.

Do not remove the aerator from the fixture at any time during the sampling process.

First thing in the morning, place a sample bottle under the faucet and open the cold-water tap to a steady flow. Fill the bottle to the shoulder or the line marked "250 ml" and then turn the water off. Cap the bottle tightly.

Fill out the laboratory form and bottle label. Be sure to include the:

- ◆ School or building name
- ◆ Sample type (first-draw)
- ◆ Collection date and time
- ◆ Name of the person collecting the sample
- ◆ Sample location (uniquely identify each fixture on the form and the label)
- ◆ Contact and billing information

Repeat this process for each fixture you test, and send the samples to the lab for analysis.

4 Follow-up Monitoring

Select fixtures for follow-up testing. We recommend "Follow-up" monitoring for all fixtures where initial first-draw sampling shows lead in excess of 20 micrograms per liter ($\mu\text{g}/\text{l}$) or 20 parts per billion (ppb). Follow-up samples are flushed samples designed to show whether lead content is coming from the fixture or the plumbing behind the wall. The key difference between initial and follow-up sampling is allowing the water to run for 30 seconds before taking the sample.

Pick a weekday to sample. Remember, DO NOT sample the morning after a weekend, vacation, or holiday because this doesn't represent normal use.

Only sample cold water. Make sure cold water is the last water to run through the tap before it sits overnight.

If the fixture was shut off or taken out of service, turn the water back on and flush it using a moderate flow of water for at least 2 minutes the afternoon before sampling.

Sample first thing in the morning. Allow the water to sit at least 8 hours, but no more than 18 hours before collecting your follow-up samples.

Allow the cold water to run at a steady flow for 30 seconds before you take the sample. After 30 seconds place the sample bottle in the water stream and fill the bottle to the shoulder or the line marked "250 ml." Cap the bottle tightly.

Fill out the lab form and bottle label. Include all of the information you included for first draw samples, except mark the sample type as "follow-up" or "flush".

Repeat this process for each fixture requiring follow-up testing, and send the samples to the laboratory for analysis.

250 ml bottle used for lead testing in schools served by a public water system.

