



FAQS

Get the Lead Out of School Drinking Water

RSMo 160.077;

Get the Lead Out of School Drinking Water Act (2022)

What is lead and why is it a concern?

Lead is a heavy metal found naturally in the earth's crust. Once processed, lead is malleable, and has been historically used in many applications such as paints, gasoline, batteries, ammunition, plumbing pipes and fittings, cosmetics, coins, keys, and more. There is currently no safe blood lead level for children without some level of risk. Lead exposure in children may cause adverse health effects such as brain and neurological development, behavioral problems, reproductive and renal complications, and impaired growth.

Is lead banned in drinking water components?

Over the last few decades federal legislation has been passed to restrict or remove lead concentrations in plumbing pipes, fittings, solder, and fixtures, but has not been strictly prohibited for use. Under the 2011 amendment of the Safe Drinking Water Act, plumbing products are required to be "lead free" based on the weighted average not to exceed 0.25% lead calculated across the wetted surface of a pipe, pipe fitting, plumbing fitting, and fixture, and 0.2% lead for solder and flux.

Are there visual or other indicators a drinking water outlet or plumbing component may contain lead?

As a general rule, the older the building and/or plumbing component the more likely it will contain higher concentrations of lead. Lead pipes are generally a dull gray color and malleable. When scratched, the area will turn into a bright silver color. Further, the Environmental Protection Agency's [Training, Testing, and Taking Action program \(EPA 815-B-18-007\)](#) provides a list of water coolers, which have been banned from manufacturing, distribution, and use due to internal component lead concentrations. The Environmental Protection Agency has also developed a [publication](#) compiling information with accredited third-party certifications to satisfy "lead-free" requirements under the Safe Drinking Water Act.

What schools are subject to this Act?

Public schools, private schools, or providers of early childhood education programs, which receive state funding. Early childhood education programs only include state-funded prekindergarten school programs. This further includes any building or structure

which students may reasonably be present. Higher education institution or organizations are not included.

What constitutes a school building?

A structure owned, leased, or operated which is used for student instruction, housing, extracurricular activities, or other similar functions where students have access. This does not include off-site locations/structures owned or leased by other organizations used primarily to conduct their business including, but not limited to; healthcare and research, skilled trades, higher education, sport venues, or day or overnight camps, However, some situations may pose unique circumstances which may require additional considerations.

Are school buildings with no student access, such as a vacant building, required to be sampled?

School buildings, which currently do not provide student instruction, housing, extracurricular activities, or similar functions are not required to be sampled. However, such buildings must be sampled prior to student access or occupancy.

What constitutes a drinking water outlet?

A drinking water outlet includes any potable water fixture that is used or potentially used for drinking, food preparation, cooking, or cleaning kitchen utensils, including but not limited; to water fountains or coolers, bottle fillers, ice-machines, faucets, hydrants, spigots, or taps.

School administration maintains the responsibility to identify drinking water outlets. The school should develop a plan to ensure outlets outside the regulatory framework will be managed in a way to prevent unintended use.

Where can I locate general information on the health effects of lead contamination and additional informational resources?

The Department of Health and Senior Service's [webpage](#), the Environmental Protection Agency's [webpage](#), and the Centers for Disease Control and Prevention [webpage](#) offers many lead specific publications, guidance, and other resources. Additionally, city, county, or other local health organizations may have additional information or resources regarding lead.

What information should my inventory and sampling plan for testing each drinking water outlet include?

At a minimum, the plan must include an inventory of drinking water outlets, and all outlets that are used for dispensing water for cooking or for cleaning kitchen utensils. The Environmental Protection Agency's [Training, Testing, and Taking Action program](#) (EPA 815-B-18-007) provides guidance on sampling plan development.

How should testing be completed on drinking water outlets; first draw and flush draw?

Schools should implement the 2018 United States Environmental Protection Agency's [Training, Testing, and Taking Action program](#) (EPA 815-B-18-007). However, first

draw and flush draw samples must be 250 milliliters in volume and collected only after a stagnation period of at least eight hours.

How often does testing need to be completed?

All drinking water outlets must be initially tested prior to August 1, 2024, or the first day students are present in the building, whichever is later. Remediated sources must be tested prior to being placed back into service to ensure the remediation was effective.

- All drinking water outlets found to have lead concentrations less than 5 parts per billion must be tested every 5 years.
- New or replaced plumbing pipes, fittings, fixtures, or other components must be tested prior to being placed into service. Ensure to include all outlets, which may have been impacted by these efforts.
- Nothing precludes schools from completing sampling at a frequency greater than the sampling requirements listed above.

How are samples collected at drinking water outlets with filters, screens, or aerators?

These items should be left in place for initial testing if they are intended to be a permanent component of the outlet. However, if a sample result is equal to or greater than 5 parts per billion, these devices may need to be removed to further investigate the source through additional sampling.

Is follow-up testing required immediately after remediation?

Follow-up samples are necessary to ensure the remediation efforts were effective. Drinking water must be less than 5 parts per billion lead concentrations prior to serving or access to water for consumption, food preparation, and cleaning kitchen utensils.

Is training available for water sampling collection?

There is no specific training developed for this Act. The Environmental Protection Agency has developed the [Training, Testing, and Taking Action](#) program (*EPA 815-B-18-007*) for lead in schools, in addition to a [video](#) providing guidance on sampling preparation, collection, and handling.

What entities does the Department of Health and Senior Services approve for collecting water samples?

The Department of Health and Senior Services does not have a requirement for entities or individuals collecting water samples. However, the Department of Health and Senior Services recommends samples are collected by entities or individuals trained, experienced, or knowledgeable in water sample collection and familiar with the Environmental Protection Agency's [Training, Testing, and Taking Action program](#) (*EPA 815-B-18-007*). Consider contacting local public water suppliers, approved laboratories, or environmental consultants to assist in sample collection.

What laboratories can be used for testing and analysis of samples?

Analysis must be conducted by a laboratory using Environmental Protection Agency approved methods for lead in drinking water, and certified or accredited to conduct lead sampling in drinking water as provided below.

- Missouri Department of Natural Resources Certified Laboratories;
- NELAC Institute Accredited Laboratories; or
- Any state with a certification program with EPA oversight.

The Department of Health and Senior Services recommends schools contact multiple laboratories to determine availability, costs, and other services offered.

Are schools with their own water systems required to resample those outlets for lead concentrations?

Drinking water outlets where lead samples were conducted as compliance monitoring as required by the Missouri Department of Natural Resources are not required to be sampled provided the stagnation period is at least 8 hours, occurred in the last 5 years, and meets all other obligations provided in the Act.

What is considered remediation?

Remediation includes decreasing lead concentrations below 5 parts per billion using methods such as replacement of plumbing, solder, fittings, or fixtures, installation of filters and filter devices, or other effective methods. Flushing as a standalone action shall not be considered remediation.

When does remediation have to occur?

When sample analysis indicate a lead level of 5 ppb or greater, remediation must be completed before August 1, 2024 or the first day which students are present, or occur prior to serving or dispensing water for drinking, food preparation, cooking, or cleaning kitchen utensils.

Are there requirements for outlets that are not considered a drinking water outlet?

If a water outlet is determined not to be a drinking water outlet, sampling is not required. The Department of Health and Senior Services recommends –

- Signage or other notices indicating the purpose and/or restrictions of the outlet, which can be reasonably identified by students and staff. Examples may include, “hand washing only”, or “not for drinking or food preparation”.
- Implementing controls to restrict access. Examples may include locking doors, outlet use oversight, training staff members, and shutting water off during specific periods.
- Maintaining an inventory of non-potable water outlets and indicate this on the sampling plan.

What do I do if a drinking water outlet tests equal to or greater than 5 parts per billion?

Restrict access and use of the drinking water outlet until remediation can be completed. Supply suitable drinking water should there not be enough water (in the building/campus) to meet the needs of students and staff. Lastly, provide sample results, remediation plans, and general lead awareness information to parents and staff. See the FAQ on communications and reporting.

Are there methods to determine if a plumbing component or fixture is lead-free?

The Environmental Protection Agency has developed a [publication](#) with tips and recommendation on identifying “lead free” drinking water systems and plumbing products.

What are the different types of filtration devices which can be installed in a school?

A point-of-entry (POE) filtration device is typically installed to treat all water entering the building. Installation and operation of these devices may be regulated under the Safe Drinking Water Act by the Missouri Department of Natural Resources (DNR). Prior to purchase or installation of a POE filtration device, the Department recommends the school contact the Missouri Department of Natural Resources, Public Drinking Water Branch. Contact information and additional resources for DNR is locate [here](#). A Point-of-Use (POU) filtration device is designed to only treat water used for direct consumption (drinking and cooking) and typically located on a single outlet or limited number of outlets. Any filtration device must satisfy the requirements of third-party accreditation as discussed elsewhere in this frequently asked question document.

What type of filters are approved?

The Department of Health and Senior Services does not approve filter equipment or devices. However, filters must be capable of reducing lead to less than 5 parts per billion lead. The Environmental Protection Agency and Department of Health and Senior Services recommends water filters compliant with NSF/ANSI Standard 53 or NSF/ANSI Standard 42 or similar third-party accreditations. Schools should establish an operation and maintenance schedule according to manufacturer’s instructions and recommendation. Failure to replace the filter at the recommended interval may lead to reduced filter performance or failure, causing the potential of access to water with elevated lead levels.

- [NSF Filter Product Listing: Lead Reduction](#)
- [Identifying Point of Use Drinking Water Filters](#)

What are schools required to communicate to the public, parents, students, and staff?

On or before January 1, 2024, sampling plans must be available to the public, and upon request, schools must provide general information of lead contamination and additional resources for staff and parents of children at each school.

Within two weeks after receiving sample results, make all testing results and any remediation plans available on the school's website.

Further, schools are also required to contact and provide written notification to parents and staff if a test result exceeds 5 parts per billion concentration within 7 business days after receipt of sample results. The notification must include test results and summary, remedial actions, general health effects of lead contamination and community specific resources.

The Department of Health and Senior Services offers many lead specific publication and resources on our [webpage](#). Additionally, many city, county, or other local health agencies may have additional information or resources regarding lead.

What is considered contact and written notification for elevated lead results?

An official notice should be either provided to the parent's via email, mailed to child's permanent address, or given to the parent through hand delivery. Staff may be notified by email or hand delivery of such notice. Posting on bulletin boards, websites or social media platforms, or other similar means does not satisfy this requirement alone.

What is the process for reporting to the State?

The Department of Health and Senior Services has developed an online reporting platform for schools to submit their sampling results. The platform can be located on our [webpage](#) where additional guidance and information is provided for schools on the reporting process.

How long are schools required to maintain the testing records?

The Department of Health and Senior does not require a specific period of record retention, but recommends records remain available through the life the drinking water outlet.

Are funds available to assist schools in compliance with this Act?

Yes, the State of Missouri has allocated a one-time amount of \$27 million to distribute to public school districts to testing, remediation, and filtration of drinking water to protect against lead exposure. The Department of Health and Senior Services continues to evaluate methods and procedures for funding distribution. In addition to these funds, schools may elect to pursue other funding sources as permitted by federal law. Please continue to monitor for updates regarding funding.