



WATER QUALITY DURING COVID-19 IN CHILD-CARE FACILITIES AND SCHOOLS

For Basic Sanitation Purposes and Drinking Water

✓ WHO IS RESPONSIBLE?

There are no federal laws mandating filtering and testing for lead and many other contaminants in these facilities. Less than half of states require schools to test for lead.

School districts and early childcare facilities are responsible for overseeing water quality in their buildings and should be in compliance with [National Primary Drinking Water Regulations](#) under the [Safe Drinking Water Act](#). The EPA recommends that these facilities develop a water management program

⚠ WHAT ARE THE CONCERNS?

Water stagnation in sparsely used school facilities can lead to buildup of harmful pathogens and contaminants including:

- Microorganisms (e.g. Legionella, E. coli, Cryptosporidium, etc)
- Inorganic chemicals (e.g. Lead, copper, arsenic, nitrates etc)
- Disinfection and disinfection byproducts (e.g. chlorine, chloramines, bromate, chlorite, etc)
- Organic chemicals and radionuclides

Different opening scenarios will affect water use and water quality degradation during the year. Factors that affect water quality include:

- Older water age: how long water sits in pipes before use
- Water temperature and velocity
- Age and condition of plumbing
- Change in water chemistry (e.g. pH, alkalinity, disinfectants, disinfection by-products, disturbances in corrosion control)

🧪 FACILITY WATER TESTING

All water sources should be tested prior to school opening and results should be publicly available and communicated to parents. Flushing should not be done before testing for lead or legionella as it can artificially lower test results.

Abatement: Any drinking water source that tests above the federal or local drinking water maximum contaminant levels should be turned off until remediated and tested again to ensure the source is safe.

Testing for lead only provides a snapshot. Lead leaches erratically due to many factors like changes in water chemistry, disinfectant levels, warmer temperatures, etc. Assuming every tap is a risk and filtering at POU before testing is the best way to prevent lead exposure until all lead is out of drinking water infrastructure.

🚰 KEEP THE WATER MOVING AT FACILITIES

Regularly replace water in buildings' plumbing prior to reopening childcare facilities and schools to remove dissolved contaminants and particulates. After flushing check water quality parameters including temperature, pH, and disinfectant levels. Resources for schools on flushing:

- [Pre-Flushing Event Guidance for School Plumbing- How to Determine Flushing Zones](#)
- [EGLE Guidance for Flushing School Plumbing](#)
- [ESPRI Building Water Quality and Coronavirus: Flushing Guidance for Periods of Low or No Use](#)

🏠 FILTER OR PROVIDE ALTERNATIVES

- According to the [American Academy of Pediatrics](#), the [CDC](#), and the [EPA](#), there is no safe level of lead but even “lead-free” fixtures and plumbing are still allowed to contain trace levels of lead
- NSF/ANSI 53 and 42 certified for lead point-of-use (POU) filters, including hydration stations, are the best defense against lead and other contaminants internal to building plumbing and service lines. Filters should be maintained regularly to protect against biofilms.
- Bottled water is a safer temporary solution when no filters are available.



WHAT PARENTS CAN DO TO PROTECT THEIR CHILDREN

- Send your children to school with a water bottle with clean drinking water
- If your child will be filling up their water bottle at school, consider a [water bottle that filters lead](#) and other contaminants.
- Donate a NSF/ANSI 53 and 42 certified for lead water pitcher, tank with filters or faucet-mounted filter for your child's classroom.
- Engage other parents, PTA's, school officials, and community members to raise awareness and garner multiple stakeholder support to advocate for a water management plan.



QUESTIONS PARENTS CAN ASK

Ask school districts and childcare facilities questions now and find out what they're doing. Here are some sample questions:

- Does the facility have a water management program? If so, who is overseeing it and can you see it?
- Does the plan include flushing prior to school opening, filtering, and testing?
- Does the school provide public records of water tests? If yes, what are the protocols and how do they communicate results?
- What control methods (e.g. super heat and flush, hyperchlorination, ultraviolet light sterilization, ozonation etc) are the facilities using for microorganisms detected such as Legionella?
- More questions specific to lead can be found in [here](#).
- Ask how facilities are following federal, state, and local guidance and best practices. Here are some guidelines you should know about.
 - [NRDC: Get the Lead out of Drinking Water in Schools and Child Care Centers](#)
 - [Environment America Get the Lead Out: Back to School Toolkit](#)
 - [EPA guidance on Maintaining or Restoring Water Quality in Buildings with Low or No Use](#)
 - [CDC Guidance for Reopening Buildings After Prolonged Shutdown or Reduced Operation](#)



RESOURCES

1. [ASHRAE Guideline 12-2020 – Managing the Risk of Legionellosis Associated with Building Water Systems](#)
2. [CDC Guidance for Reopening Buildings After Prolonged Shutdown or Reduced Operation](#)
3. [CDC Water Management Program](#)
4. [CDC Water Management Program Toolkit](#)
5. [Environment America Get the Lead Out: Back to School Toolkit](#)
6. [EPA Legionella: Drinking Water Fact Sheet](#)
7. [EPA National Primary Drinking Water Regulations](#)
8. [EPA Drinking Water Best Management Practices for Schools and Childcare Facilities with Their Own Drinking Water Sources](#)
9. [EPA RTRC State Implementation Guidance](#)
10. [EPA guidance on Maintaining or Restoring Water Quality in Buildings with Low or No Use](#)
11. [Environmental Science Policy Research Institute. Building Water Quality and Coronavirus: Flushing Guidance for Periods of Low or No Use](#)
12. [Michigan Department of Environmental Quality and Michigan Department of Education School Drinking Water Training Program: 10 Basic Steps to School Water Testing](#)
13. [NRDC Back-to-School: Lead in Drinking Water Questions Answered](#)
14. [NRDC: Get the Lead out of Drinking Water in Schools and Child Care Centers](#)