



Needs Assessment

Because every school is different, it is important to spend time thinking through what specific changes to water accessibility are needed. Consider the resources available to make the changes, and what training and promotion will help ensure that the changes to provide and encourage water intake are successful.

The needs assessment process includes the following: (a) assessing policies and practices related to water access; (b) reviewing water testing requirements and recommendations; (c) conducting an assessment of the school's water access points; (d) assessing students' and other stakeholders' perceptions about the drinking water; and (e) identifying key personnel to become water access champions.

Key individuals who might be involved in the needs assessment process include school administrative personnel, the school business office staff, the facilities division staff of the school, school food service staff, school nurses, students, families, community members, members of the school health council or school health team, and other health and nutrition agency representatives. The School Drinking Water Needs Assessment Checklist and Planning Guide (Appendix 1) can be used to review key questions about current drinking water policies, practices, and environments.

Although the needs assessment process outlined in this tool kit is specifically focused on improving drinking water access, CDC's School Health Index (http://www.cdc.gov/healthyschools/shi) can be used to assess overall school health policies and practices, including some aspects related to drinking water access. The School Health Index and the Water Access in Schools Tool Kit can complement each other and help schools address water access, in addition to other school health priorities.

Step 1: Assess state, district, and school policies and practices related to water access.

Overview

Policies about water access before, during, and after school may be established at the federal, state, and local levels. For example, there is a federal requirement for schools to provide drinking water during breakfast and lunch meal periods. Most states have plumbing codes that establish a minimum number of water fountains per number of students. Districts participating in the NSLP are required to have a local school wellness policy (LWP), which may include goals for drinking water, such as making drinking water available in multiple locations throughout the school environment—not just in eating areas—and ensuring that students and staff have access to safe drinking water throughout the school day, including after-school settings. 19,20

Federal, state, and local water policies may address food service areas (e.g., cafeterias) or the entire school campus. Policies that address food service areas can be found on local school district Web sites or by contacting the nutrition services division for the entire school district. To learn more about building-wide policies, the district environmental health officer, business office, or the facilities division of the school may be contacted.

The School Drinking Water Needs Assessment Checklist and Planning Guide (Appendix 1) can be used to assess school policies and practices for the following areas:

Food Service Areas

- Availability of water during meal periods (as required by USDA).
- State laws or policies requiring drinking water to be provided during meals and snacks that exceed USDA requirements.
- School district policies requiring water to be provided during meals and snacks that exceed USDA requirements.
- Sanitary code specific to food service areas.
 - » The state may have requirements for how to properly clean and maintain water access points, which are implemented by the local health departments.
- Standard Operating Procedures (SOPs) for placement, filling, and cleaning of water dispensers in the cafeteria.
 - » Schools may have SOPs that detail how to properly clean, sanitize, and maintain water access points, specifically in food service areas, including who is responsible for conducting each step. SOPs should align with sanitary code requirements, including cleaning and flushing the fountains, bulk water dispensers, or other water access points.

Campus-Wide

- Safe Drinking Water Act (SDWA).
 - » Federal regulations for schools that have their own water source (i.e., a well).
- State and local plumbing codes.
 - Most state and some local municipalities have plumbing codes for schools that require a specific number of water access points based on the number of students (e.g., 1 fountain per 100 students). Schools can contact their local building inspector for plumbing code information and standards.
- State laws or regulations relevant to water access in schools.
 - » Some states (e.g., Massachusetts, West Virginia) have policies that require students to have access to drinking water during the school day, as well as during before-school and after-school activities.
- School district policies.
 - » School districts may also have policies related to drinking water access, including allowing students to bring fillable water containers to class, providing cups at water access points, and marketing or promoting drinking water during the school day or at school-sponsored events and activities. Schools that have known water quality problems may also have district policies governing the purchase, placement, and distribution of bottled water dispensers needed to replace plumbed fountains that have been taken out of service.

- SOPs for water delivery devices.
 - » For water access points outside the food service areas, schools may have SOPs outlining the steps needed to properly clean, sanitize, and maintain water access points, including who is responsible for conducting each step.
- State or local laws or regulations that support community water fluoridation.
 - » Reporting requirements to state or local authorities about facilities that include plumbing systems.
 - » Schools may have an annual facilities inventory or have an annual building condition report that can be referenced.

Additional Resources

- Environmental Protection Agency (EPA)—*Water in Schools and Childcare Facilities*. http://water.epa.gov/infrastructure/drinkingwater/schools/guidance.cfm
- USDA—Memorandum on Water Availability During Meal Service. http://www.fns.usda.gov/sites/default/files/SP28-2011_osr.pdf
- USDA—Local School Wellness Policy. http://www.fns.usda.gov/tn/Healthy/wellnesspolicy.html
- CDC—Local School Wellness Policy. http://www.cdc.gov/healthyschools/npao/wellness.htm
- CDC—My Water's Fluoride.
 https://nccd.cdc.gov/DOH_MWF/Default/Default.aspx
- WellSAT—School Wellness Policy Evaluation Tool, by Robert Wood Johnson Foundation. http://wellsat.org/
- ChangeLab Solutions—How to Enforce a Wellness Policy: A Fact Sheet for Parents and Community Advocates.

 http://www.changelabsolutions.org/publications/enforce-wellness-policy
- ChangeLab Solutions—Water Access in Schools: Model Wellness Policy Language. http://changelabsolutions.org/publications/wellness-policy-water

Examples of Successful Water Access Wellness Policies

Schools throughout the country have adopted a variety of policies and practices to improve access to drinking water on campus. The following example illustrates a district that includes language on access to drinking water in the district wellness policy:

Earlimart School District in California adopted a wellness policy that requires water
to be accessible throughout the school day, as well as during before-school and
after-school activities. It allows students to take water into the classroom in capped
containers, and it also includes provisions on periodic maintenance of water fountains
and testing of water sources.

http://www.californiaprojectlean.org/docuserfiles/Case%20Studies_Earlimart-Final.pdf

Step 2: Review federal, state, and local water testing requirements and recommendations.

Overview

Schools are responsible for providing safe drinking water. Drinking water comes into the school facilities from either (a) a public water supplier (e.g., water utilities or water suppliers, such as cities, towns, and water districts) or (b) an on-site water system (e.g., a well). In the United States, most school districts (80%) get their drinking water from a community or municipal source.²¹ There are different testing requirements for schools depending on the source of the drinking water.

Schools using local public water supplier

Federal law does not require schools using a local public water supplier (e.g., municipal water system) to regularly test the water because the public water supplier is required to regularly test the water to ensure that it meets federal and state drinking water standards for contaminants, including bacteria and certain chemicals. However, even if the water meets federal and state standards, the water pipes and plumbing fixtures in the schools can affect the quality of the water. Therefore, the Environmental Protection Agency (EPA) recommends that all schools routinely test drinking water for lead and perform regular maintenance to ensure that drinking water is safe.

Schools that would like to test water for lead should contact the lead officer for the local health department or the municipal water provider for information about certified laboratories that can test for lead. In some cases, the municipal water



provider may be able to conduct the lead testing for schools. Schools could conduct their own testing by having the facilities division take samples from the school and sending the samples to a private laboratory. The EPA has guidance for schools that use a local public water supplier: https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P100HGM8.txt.

Schools that are a public water system

Schools that get drinking water from an on-site water source (e.g., well) and serve at least 25 people are considered a *public water system* and required to comply with a series of federal testing rules and regulations under the Safe Drinking Water Act (SDWA), including the EPA's Lead and Copper Rule requirements. At minimum, states have to meet the federal SDWA requirements but may have stricter requirements. If lead and copper levels exceed specified levels, then other actions may need to be taken, such as water quality parameter testing or corrosion control treatment. The EPA has guidance for schools that are a public water system: https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P100GOT8.txt.

Guidance for all schools

Students, parents, teachers, or other administrative officials may want to learn about the quality of the water within their school, especially if the school is in an older building. If there are concerns about water quality, contact the school district's facilities division to determine if a plumbing inspection is warranted, or if further action such as testing needs to be conducted. A list of resources for how to pursue water quality testing is provided at the end of this section. In addition, Appendix 2 provides an overview of how to get started on testing water in schools.

Additional Resources

- EPA's 3Ts Training, Testing, and Taking Action provides tools for schools, child care facilities, states, and water systems to implement voluntary lead in drinking water testing programs:
 https://www.epa.gov/ground-water-and-drinking-water/3ts-reducing-lead-drinking-water-toolkit
- EPA quick reference guide for lead and copper testing in schools: https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P10058C5.txt
- 3Ts for Public Water Utilities A Training, Testing, Taking Action Approach: https://www.epa.gov/sites/production/files/2018-09/documents/3ts_for_pwss_draft_final_9-5-2018_508.pdf

Examples of District Water Testing Procedures

 Los Angeles Unified School District has a Web site dedicated to lead testing results: http://achieve.lausd.net/Page/3450

Step 3: Learn more about the school water environment.

Conducting an assessment of the current drinking water environment will help identify where changes may be needed. The following list of questions can be used to begin thinking through an assessment process. Schools can use the <u>School Drinking Water Needs Assessment Checklist and Planning Guide provided in Appendix 1</u> to conduct a more detailed assessment of the current drinking water environment.

Key Assessment Questions (reference the School Drinking Water Needs Assessment Checklist and Planning Guide)

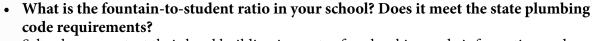
 What kind of information does your school or district already collect regularly about the condition of the school building? Does your facilities, maintenance, or environmental health division collect or maintain records of water access points or water quality testing results in your school district or individual school building?

Some states require annual facilities inventories, and some cities require annual school building condition reports to the city council. Therefore, information on the current school water environment may already be available.

 How many drinking water access points are there within the school? Where are the water access points currently located within the school? How many are accessible to students during the school day and during after-school hours?

Water access points may include water fountains, water coolers, hydration stations, and other water filling stations, but should not include bottled

water for sale because not all students may be able to purchase bottled water. Examples of different types of drinking water access points can be found in <u>Appendix 3</u>.



Schools can contact their local building inspector for plumbing code information and standards.

• Are drinking water access points clean and operating properly?

Important elements to assess here include (a) clarity of the water; (b) cleanliness (i.e., any visible dirt, gum, or trash); (c) actual delivery of water (i.e., Is water coming out?); (d) temperature of the water (i.e., Is it cold?); and (e) sufficient water pressure to maintain an adequate stream of water to drink from or fill a cup or water bottle. If the school relies on bulk bottled water dispensers, determine if they are routinely sanitized, and if cups are provided and routinely restocked.

Are cups provided at water access points?
 Students tend to drink more water when cups are provided.²²



Step 4: Assess students' and other stakeholders' perceptions about current drinking water and about providing drinking water in the school.

Overview

An assessment of students' and other stakeholders' (e.g., school administrators, staff, health and nutrition agency representatives, and families) perceptions about the current drinking water can help guide what changes are needed, as well as address misperceptions about drinking water. Students have expressed a variety of opinions about drinking water at school, including concerns about inadequate numbers of fountains, inconvenient fountain locations, water safety, broken or dirty water fountains, poor water taste, warm water, unappealing water color, and possibly some general bias against tap water.²²⁻²⁵ School officials also express a variety of concerns about improving drinking water in schools, including costs for labor and equipment to update and maintain existing fountains and for introducing new water access points (e.g., serving water in pitchers at lunch, installing filters on fountains), a possible decrease in competitive beverage sales that often fund school extracurricular activities, and a reduction in milk consumption among students.²³ Suggestions for addressing some common concerns are listed in Appendix 4.

Key assessment components

- Depending on available resources, schools may want to conduct a general survey about perceptions of drinking water among students and other stakeholders. Questions can include accessibility of school drinking water, attitudes about drinking water, including perceptions of tap water taste, health, and safety, barriers to drinking water, and ways to promote drinking water, in particular, tap water.²³ An example of a stakeholder interview questionnaire that can be adapted and used is provided in Appendix 5.
- Schools can engage existing student groups who might be interested in water issues. Sports teams, environmental clubs, and other groups may be interested in gathering information from their fellow students to share with the school about how they perceive water access and what changes they would like to see happen to improve water access.

Example of Engaging Students

• At Del Norte High School in Crescent City, California, a group of students came together to help improve access to drinking water in their school. The group came together in response to the poor status of water fountains in their schools. Students reported that there was gum, trash, and sometimes tobacco spit in the water fountains, and that the water was often lukewarm, leaving the students to buy water rather than drink from the fountain. The group met with the school board to present several alternate solutions to improving drinking water consumption, such as installing water-bottle filling stations, and is investigating funding sources to implement possible solutions.

Step 5: Identify key water access champions.

Overview

Water access champions are individuals or groups who support student access to drinking water before, during, and after school. These champions can help develop and implement a drinking water access plan.

Key assessment components

• Who are the water access champions in the school?

Key water access champions may include parents, school wellness coordinators, facilities managers, teachers, nurses, principals, health education and physical education teachers, students, food service directors, and community members including physicians, dentists, and other dental health care personnel.

What are the potential roles of the water access champions?

There are many important roles that water access champions can have to support drinking water access. For example, the school wellness coordinator could bring together a group of individuals to conduct the needs assessment process, develop the school water access plan, and implement the plan. The school principal can help get staff and community support and commitment for the water access plan, and allocate resources to implement the plan.

