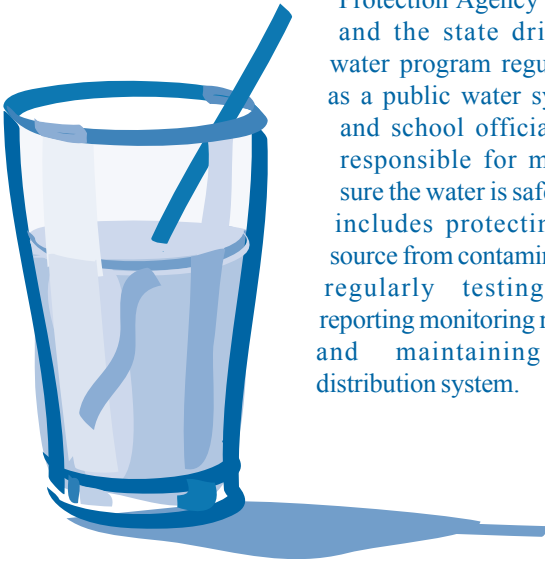


Are You Providing Safe Drinking Water at Your School?



Action schools can take to provide healthy drinking water for students and staff

Among their many duties, schools are responsible for providing safe drinking water to students and staff. New England schools receive their drinking water from nearby public water supply systems or their own on-site well water system. Drinking water provided by schools is regulated under the federal Safe Drinking Water Act and state laws and regulations. If your school receives drinking water from another provider, then you can be assured that your water is regularly tested to ensure it meets federal and state drinking water standards. If your school has its own on-site well water system, the U.S. Environmental



Protection Agency (EPA) and the state drinking water program regulate it as a public water system, and school officials are responsible for making sure the water is safe. This includes protecting the source from contamination, regularly testing and reporting monitoring results, and maintaining the distribution system.

Is your school in a drinking water protection area?

Across New England, state drinking water agencies have identified the land areas that provide water to public supply wells and surface water supplies. In these areas, precipitation falling on the land can eventually make its way to a water supply well, reservoir or river used to provide drinking water. As precipitation moves across the land or through the soil, it may pick up pollutants and carry them to nearby drinking water sources. Because activities on these lands can lead to drinking water contamination, these lands have been designated as drinking water protection areas.

Depending on which state you're in, this may be called a:

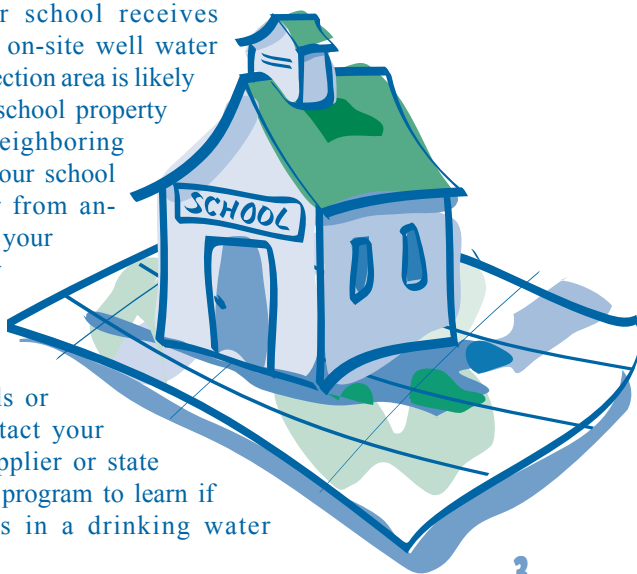
- wellhead protection area
- aquifer protection area
- drinking watershed area, or
- source water protection area.

It is important to keep pollutants off these lands, whenever possible.



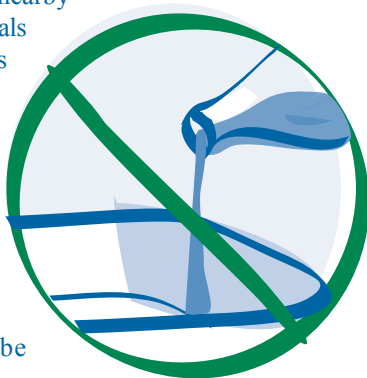
Learn if your school is in a drinking water protection area.


If your school receives water from an on-site well water system, its protection area is likely to include the school property and perhaps neighboring properties. If your school receives water from another supplier, your school property may be in the protection area to the supplier's wells or reservoir. Contact your local water supplier or state drinking water program to learn if your school is in a drinking water protection area.



 **Take care with toxic or hazardous materials to keep them from getting into the drinking water.**

Release of toxic or hazardous materials onto soil, into septic systems, or to the ground through spills into floor drains could cause contamination of a nearby drinking water supply. School officials must be sure that their staff knows how to properly handle hazardous materials and chemicals. Some areas to check are sinks and floor drains in: facility maintenance areas, cleaning supply areas, science laboratories, vocational shops, and art classrooms. It is a good idea to post signs over sinks indicating chemicals cannot be disposed of down the drain.



 **Contact your state drinking water program to receive an assessment of threats to your school's drinking water supply.**

Assessments have been done across New England to determine the susceptibility of public drinking water sources to contamination and are a starting point for identifying activities that threaten the safety of your school's drinking water.

State drinking water programs are required to complete a drinking water source assessment for all public drinking water systems. Each assessment includes information about the location of each drinking water system's protection area, and about activities that could potentially contaminate the drinking water source. Many assessments also include recommendations for preventing drinking water contamination.

Does the drinking water at your school have elevated lead levels?

Many schools don't realize that their own plumbing can affect drinking water quality. Years ago, schools in New England were built with pipes and fixtures that contain lead. When water is in contact with lead-lined plumbing, lead may leach into water. This can cause elevated lead concentrations in a school's drinking water, even though the water entering the school meets drinking water standards. Exposure to lead is a concern for all people, but can most affect young children, infants and pregnant women. Even at low exposures to lead, children may experience lower IQ levels, impaired hearing, reduced attention span and poor classroom performance. Higher lead levels may cause brain damage in children. Recent studies also link blood-lead levels with increases in blood pressure among adults. The only way to be sure that lead is not a problem is to test your school's drinking water samples from taps and water fountains.



Test drinking water in your school to check for lead.

Sample taps used most for drinking and preparing food. Be sure the tests are completed by trained personnel and analyzed by a state or EPA certified laboratory. If your school has its own well, coordinate the tests with your certified operator. Your state drinking water program can send you a list of certified laboratories.



Notify parents and staff if lead action levels are exceeded.

Each state and EPA set lead levels that require follow-up notification and action. Your notification should include the test results, health effects of lead, and actions being taken to correct the problem.



Correct problems leading to high lead levels.

Lead pipes or fixtures in the school can cause elevated lead levels. Regularly flushing the school plumbing system or replacing lead components may lower lead levels. Contact your State Drinking Water Program to learn how to lower lead levels at your school.

Is your school protecting against cross-contamination of drinking water?

Cross contamination can happen when there is contact between the drinking water system and another liquid or substance. Backflow of harmful substances may happen due to reduced pressure in the drinking water system or because of increased pressure in the contaminating source. Because a contaminant may not have a strong taste, odor or color, cross contamination may not be immediately apparent. Cross connections can happen at schools when a tube or hose from a faucet is submerged in a solution in a beaker or in a custodian's sink; a pipe is connected from a drinking water source to chemical lab equipment, a storage tank or cafeteria equipment; or a hose is dropped into a waste/floor drain in an automotive shop, boiler room or cafeteria. Other sources of potential cross connections include heating system boilers, water coolers, lawn sprinkler systems, fire sprinkler systems and soft drink machines.

 **Contact your local water supplier to learn if they have a cross connection program.**

Or, if your school has its own on-site well water system, contact your state drinking water program to learn how to protect against cross contamination of the school's drinking water system.

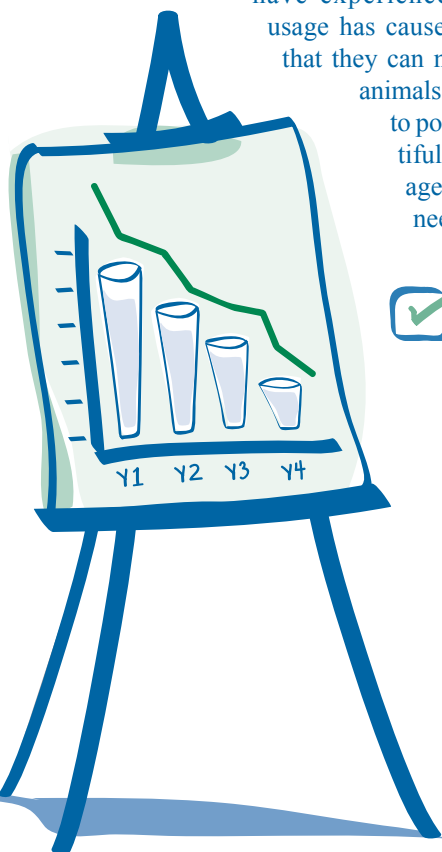
 **Investigate potential cross connections at the school.**

Eliminate any direct cross connections or install appropriate backflow preventative device(s).

 **Test backflow prevention devices used at the school annually.**

Does your school conserve water?

Schools use a large amount of water. Every day schools require water for their heating and cooling systems, restrooms, drinking water faucets, locker rooms, cafeteria, laboratories, art rooms, outdoor playing fields and lawns. As land development continues in New England, many communities are finding it hard to provide enough drinking water and have experienced water shortages. Increased water usage has caused some streams to lose so much water that they can no longer support native plants, fish and animals. They have also become more susceptible to pollution. Even areas that usually have plentiful drinking water supplies have faced shortages due to drought. Water conservation is needed to reduce water demand.



Make water conservation an everyday practice at your school.

Saving water will lower water and sewer costs, and reduce energy, chemical and mechanical expenses.

Use guides and tips to help identify ways that your school can conserve water.

The WAVE (Water Alliances for Voluntary Efficiency) program is a voluntary EPA program that provides free water management software and technical support to help schools evaluate potential cost savings from conserving water. Many states also offer information on water conservation.

Is your drinking water supply secured against vandalism or other harm?

The terrorist attacks on our country and recent incidents of school violence made us more aware and appreciative of the basic services that Americans rely on every day, including safe schools and drinking water. Even before these recent events, schools have traditionally had to protect against vandalism and end of the year pranks by students.



Be sure your school is secure and ready to handle potential emergencies.

Assess the vulnerability of the school's drinking water system to harm and prepare an emergency response plan. Work with your local emergency planning committee, and be sure everyone working at your school is involved in this effort and understands their responsibilities. Carry out a mock drill of your emergency response plan, and know who to contact if there is a drinking water emergency.



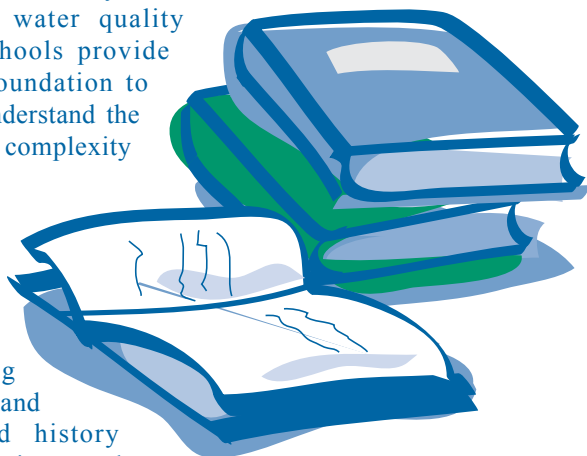
Get the latest information and guidance about security.

Laws have been passed recently requiring security vulnerability assessments and emergency response plans for many water systems. Contact the EPA and your state's drinking water program to learn about national and state security requirements and guidance.



Will your school help to educate our future leaders about drinking water issues?

Today's students become tomorrow's leaders. Knowledge of drinking water issues is becoming increasingly important in New England. Many residents in New England operate their own private well and do not understand how their own practices can directly affect their drinking water quality and health. Schools provide an important foundation to help students understand the importance and complexity of these issues. Early science classes demonstrating the water cycle, mathematics classes demonstrating supply and demand principles, and history lessons discussing early settlement patterns near water sources and our nation's system of government, laws and regulations provide important knowledge for water resource decision-making.



Demonstrate drinking water concepts through classroom activities.

Classroom resources that demonstrate water concepts through a variety of subjects are available from many organizations. One place to start is EPA New England's website for teachers (www.epa.gov/region01/schools/).

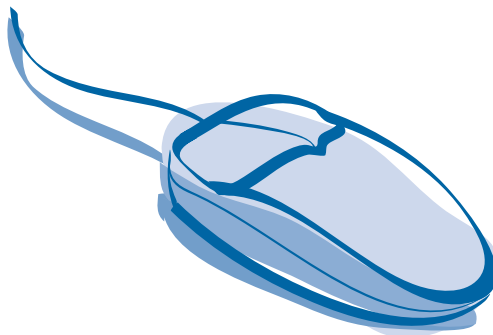
Drinking Water Contacts and Information for New England Schools

Contacts for further assistance:

Contact your state drinking water program or the United States Environmental Protection Agency (EPA) New England Office if you have questions about providing safe drinking water at your school. State drinking water programs can describe state-specific requirements and provide additional guidance materials for schools. State Rural Water Associations (see below) are also available to provide technical assistance to schools that operate their own drinking water supply.

- ▶ **EPA New England**
 Drinking Water Program
Phone: (888)372-7341
Website: <http://www.epa.gov/ne/topics/water/dwd.html>
- ▶ **CT Department of Public Health**
 Drinking Water Division
Phone: (860) 509-7333
Website: www.dph.state.ct.us/BRS/water/dwd.htm
- ▶ **ME Department of Human Services**
 Drinking Water Program
Phone: (207) 287-2070
Website: <http://www.medwp.com>
- ▶ **MA Department of Environmental Protection**
 Division of Water Supply
Phone: (617) 292-5770
Website: <http://www.state.ma.us/dep/brp/dws/>





- ▶ **NH Department of Environmental Services**
 Water Supply Engineering Bureau **Phone:** (603) 271-4071
Website: <http://www.des.state.nh.us/wseb/>

- ▶ **Rhode Island Department of Health**
 Office of Drinking Water Quality
Phone: (401) 222-6867
Website: <http://www.healthri.org/environment/dwq/Home.htm>

- ▶ **VT Department of Environmental Conservation**
 Water Supply Division
Phone: (802) 241-3400
Website: <http://www.vermontdrinkingwater.org>

- ▶ **Atlantic States Rural Water Association (CT/RI)**
 c/o Maine Rural Water Association
Phone: (860)889-6373
Website: <http://www.asrwwa.org/>

- ▶ **Maine Rural Water Association**
Phone: 207-729-6569
Website: <http://www.mainerwa.org>

- ▶ **Northeast Rural Water Association (MA/NH/VT)**
Phone: (800) 556-3792
Website: <http://www.neruralwater.org>

Informational Resources for New England Schools

The EPA offers many resources for the protection and conservation of drinking water at schools. State drinking water and related environmental programs also have guidance and should be contacted for further information. The following list of resources is intended as a starting point for schools and does not attempt to include all resources available.

- ▶ **Safe Drinking Water Hotline (EPA)**
Provides answers to questions and guidance on drinking water issues.
Phone: (800) 426-4791
- ▶ **Source Water Protection Best Management Practices Bulletins (EPA)**
Tips for protecting drinking water sources from contamination from many common land activities. Bulletins address several topics including: storm water runoff, septic systems, underground and above ground storage tanks, fertilizer and pesticide use, vehicle washing, small quantity chemical use, and roadway deicing.
Contact: MaryJo Feuerbach at (617)918-1578 or feuerbach.maryjo@epa.gov
Also at: <http://www.epa.gov/safewater/protect/swpbmp.html>
- ▶ **Ground Water Discharge (Underground Injection Control) Program (EPA)**
Regulates discharges to the ground via floor drains, septic systems, disposal wells and other means. In New England, State Underground Injection Control Programs take the lead in regulating these activities.
Contact: David Delaney at (617)918-1614 or delaney.david@epa.gov for state contacts.
Also at: <http://www.epa.gov/ne/eco/drinkwater/>
[go to Preventing Contamination...ground water discharges (underground injection control program) for a list of state contacts].
- ▶ **Healthy School Environments Web Portal (EPA)**
<http://www.epa.gov/schools>
The Healthy School Environments Web Pages are intended to serve as a gateway to on-line resources to help school staff and administration and others address environmental health issues in schools.

- ▶ **Environmental Management in Schools (EPA)**
Assistance to schools in addressing the range of environmental issues that schools face.
Contact: Joan Jouzaitis at (617)918-1846 or jouzaitis.joan@epa.gov or
Lee Fiske at (617)918-1847 or fiske.lee@epa.gov
Also at: <http://www.epa.gov/region01/schools>

- ▶ **Chemical Management in Schools (EPA)**
Provides training in chemical purchasing, use, storage, and management.
Contact: Lee Fiske at (617)918-1847 or fiske.lee@epa.gov
Also at: <http://www.epa.gov/ne/assistance/necat/index.html>

- ▶ **Integrated Pest Management at Schools (EPA)**
Resources, factsheets, and toolkits are available to reduce pesticide use at schools.
Contact: Robert Koethe at (617)918-1535 or koethe.robert@epa.gov
Also at: <http://www.epa.gov/pesticides/ipm/>

- ▶ **Lead in Drinking Water in Schools and Non-Residential Buildings (EPA)**
Document describes how drinking water in schools and non-residential buildings can be tested for lead and how contamination problems can be corrected if found.
Contact: Mary Dever at (617)918-1717 or dever.mary@epa.gov
Also at: <http://www.epa.gov/safewater/consumer/leadinschools.html>

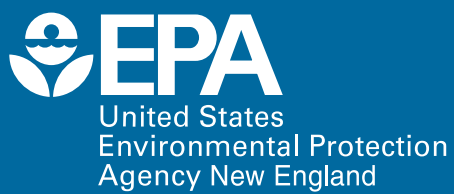
- ▶ **USEPA's Office of Ground Water and Drinking Water Website (EPA)**
Includes an overview of drinking water issues and regulation of drinking water supplies. Includes information about local drinking water quality, source protection, drinking water standards, public water systems, and underground injection control. Numerous

documents related to drinking water protection, lead in drinking water, conservation, security and classroom education are available.

Go to: <http://www.epa.gov/safewater/>

- ▶ **WAVE Program (EPA)**
Provides software and assistance for conserving water at schools.
Contact: Barbara McGonagle at (617)918-1608 or mcgonagle.barbara@epa.gov
Also at: <http://www.epa.gov/owm/water-efficiency/>
- ▶ **Top 10 List for Drinking Water Security and Emergency Preparedness (EPA)**
Provides tips to enhance security of small ground water systems.
Contact: MaryJo Feuerbach at (617)918-1578 or feuerbach.maryjo@epa.gov
Also at: <http://www.epa.gov/ne/eco/drinkwater/> (go to Drinking Water Security page)
- ▶ **Security Vulnerability Self Assessment Guide for Small Drinking Water Systems** (Association of State Drinking Water Administrators in coordination with National Rural Water Association)
Guidance is available for small systems, such as schools, to complete a security vulnerability assessment of their drinking water system.
Contact: Association of State Drinking Water Administrators at: <http://www.asdwa.org>
- ▶ **That Magnificent Ground Water Connection** (New England Interstate Water Pollution Control Commission in coordination with EPA)
Classroom activities for students demonstrating the many characteristics, uses and threats to ground water resources in New England. Available for grades K-6 and 7-12.
Contact: Denise Springborg at (978)323-7929
Selected activities also at: <http://www.epa.gov/ne/students/teacher/gndwater.html>
- ▶ **General Teacher Resources for New England from EPA**
Includes many available resources for school teachers including a pen pal program for students, curricula, grants, classroom speaker's bureau and more.
Contact: Kristen Conroy at (617)918-1069 or conroy.kristen@epa.gov
Also at: <http://www.epa.gov/ne/education/index.html>

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