



# healthy schools

lessons for a clean educational environment

## Introduction



More than 53 million children and 6 million adults in the United States spend their days in our elementary and secondary schools. Reducing environmental risks inside these buildings is critical to maintaining the public health. Almost all of New England's children will spend a large portion of their childhood in school. To help our children stay healthy, we must reduce their exposure to environmental hazards in school environments. When students and their teachers are healthy and comfortable, children learn and produce more in the classroom, which in turn improves performance and achievement later in life.

This brochure can help school employees and parents recognize potential environmental health issues at schools, both indoors and outdoors. It includes basic information about a broad range of topics, and links to web sites that offer more information and guidance on how to have a healthier school environment and comply with relevant laws. EPA's Healthy School Environments web site provides access to programs that help prevent and resolve environmental issues in schools.

[www.epa.gov/ne/schools](http://www.epa.gov/ne/schools)

[www.epa.gov/schools](http://www.epa.gov/schools)

## Table of Contents

<b>I. Staying Healthy Indoors</b> .....	<b>2</b>
• <b>Indoor Air Quality</b> .....	2
Mold & Moisture .....	2
Radon .....	2
Volatile Organic Compounds (VOCs).....	3
Ventilation.....	3
• <b>Toxics</b> .....	4
Asbestos .....	4
Lead.....	4
Mercury.....	4
Chemicals.....	5
Pesticides.....	5
Polychlorinated Biphenyls (PCBs).....	6
• <b>Drinking Water</b> .....	6
<b>II. Staying Healthy Outdoors</b> .....	<b>7</b>
• <b>Outdoor Air Quality</b> .....	7
Ultraviolet Radiation .....	7
Diesel School Buses .....	8
• <b>Oil Storage</b> .....	<b>8</b>
<b>III. Go Green at School</b> .....	<b>10</b>
Design, Construction and Renovation.....	10
Energy Efficiency .....	10
Reuse, Recycling, E-cycling.....	10
Safety and Preparedness .....	10
Assessing Your School .....	11
Healthy School Environments .....	11
<b>IV. 12 Ways to Make your School Healthier</b> .....	<b>12</b>



# healthy schools

table of  
contents

## Tools for Schools



The rate of asthma in children is increasing at a pace that underscores the need for schools to address indoor air problems. EPA's Indoor Air Quality Tools for Schools Program helps schools maintain a healthy environment and reduce exposures to indoor environmental contaminants. In Connecticut, where 70 percent of schools reported indoor air quality problems the success of this program has been dramatic. One elementary school in Waterford, Conn. cut out three quarters of the related health complaints, seeing complaints drop from 152 to 40 complaints in the year after the program began. A Hamden, Conn. elementary school cut absenteeism in half from 484 days to 203 days in the year after the Tools for Schools program was put in place.

➔ [www.epa.gov/iaq/schools/](http://www.epa.gov/iaq/schools/)

## Staying Healthy Indoors

### ● Indoor Air Quality

*The environment inside a school is affected by the quality of its air, the way staff and administration manage chemicals and a range of other factors. Schools in New England have more problems linked to indoor air quality than average for the nation, with more than 50 percent reporting concerns. The age and design of many schools buildings in New England contribute to a higher incidence of indoor air quality concerns. Children, who spend dozens of hours a week at school, are especially susceptible to pollutants because their bodies are smaller and growing. Because of indoor air quality problems, students and staff face a risk higher than the general public of short-term health problems, such as fatigue and nausea, and long-term problems like asthma and other respiratory diseases.*

### Mold & Moisture

Mold is associated with moisture and may become a health problem in schools. Mold growth in buildings often leads to health complaints, particularly from students or staff with allergies or respiratory problems. Health effects and symptoms can include allergic reactions, asthma, and other respiratory problems. Preventing moisture is the key to controlling mold problems in school buildings. Mold spores, found almost every-



where in our environment, need moisture to germinate, and take only a day or two to grow. Moisture problems in schools can be caused by flooding, poor drainage, misdirected sprinklers or leaky roofs, pipes, windows, foundations and other structural openings. Moisture problems in schools also can result from poor ventilation during certain regular maintenance, including painting or carpet cleaning, or from conditions during school breaks including high humidity during summer, and reduced use of air-conditioning or heating.

➔ [www.epa.gov/mold/moldresources.html](http://www.epa.gov/mold/moldresources.html)

➔ [www.epa.gov/mold/mold\\_remediation.html](http://www.epa.gov/mold/mold_remediation.html)

### Radon

Nearly one in five schools nationwide has at least one schoolroom with an unacceptably high short-term level of radon. Radon, a naturally occurring radioactive gas that can cause lung cancer, comes from the decay of uranium, found in nearly all soils. EPA estimates that more than 70,000 schoolrooms nationwide have high short-term radon levels. In New England, the challenge is great since much of New England is built on granite, which can contain the uranium necessary for radon emissions. Radon can seep

into school buildings through cracks or holes in the basement walls and floor. It is colorless, odorless and tasteless, and the only way to detect radon is to test for it. Since EPA ranks indoor radon among the most serious causes of environmental health problems facing us, all school buildings should be tested for radon. After smoking, it is the second leading cause of lung cancer in the country causing an estimated 14,000 lung cancer deaths a year.

➔ [www.epa.gov/radon](http://www.epa.gov/radon)

## Organic Vapors or Volatile Organic Compounds (VOCs)

Schools use many products that contain organic vapors or volatile organic compounds. Paints, paint strippers, wood preservatives, aerosol sprays, cleansers, moth repellents, air fresheners, stored fuels

and craft supplies all may contain VOCs. Different VOCs pose different levels of threat to children and adult health. Exposure to VOCs can irritate eyes, nose and throat; damage the liver, kidneys and central nervous system; and lead to cancer. Use of safer alternatives and environmentally friendly products in schools can help reduce the risks associated with VOCs. Schools should also reduce risks by ventilating work areas and properly storing and safely disposing of products containing VOCs.

➔ [www.epa.gov/iaq/voc.html](http://www.epa.gov/iaq/voc.html)

## Ventilation

School heating, ventilation, and air-conditioning (HVAC) systems are designed to provide air at comfortable temperature and humidity levels, free of harmful concentrations of air pollutants. HVAC systems typically function by bringing in

## Asthma



About 330,000 children in New England have asthma. Compared to non-asthmatic children, children with asthma are more likely to be in poor general health and to miss school. Environmental asthma triggers commonly found in schools are mold and cockroaches or other pests. Secondhand smoke and dust mites in schools also may trigger asthma. A child's asthma should be addressed medically and by avoiding environmental triggers.

➔ [www.epa.gov/asthma/triggers.html](http://www.epa.gov/asthma/triggers.html)

healthy schools

staying healthy  
indoors

outdoor air, conditioning and mixing the outdoor air with some portion of indoor air, distributing this mixed air throughout the school building, and exhausting some portion of the indoor air outside. The quality of indoor air may deteriorate when any part of this process doesn't work properly. HVAC systems are among the largest energy consumers in schools. Good HVAC systems not only protect student and staff health, but can also reduce water consumption and improve acoustics. In addition, HVAC systems need proper maintenance such as cleaning filters and emptying condensate reservoirs.

➔ [www.epa.gov/iaq/schooldesign/hvac.html](http://www.epa.gov/iaq/schooldesign/hvac.html)

## ● Toxics

### Asbestos

Asbestos can be found in materials used in schools for acoustic and thermal insulation, fireproofing, roofing and in other building materials. Asbestos is a toxic substance and known carcinogen, and it can cause serious diseases in humans. Although school leaders may choose to remove asbestos from school buildings, many schools manage the asbestos-containing building material by leaving it in place. These materials left intact generally do not pose a health risk. They may pose a greater risk if they are damaged, disturbed in some manner, or dete-

riorate over time and thus release asbestos fibers into the air. EPA's asbestos program for schools, which is governed by The Asbestos Hazard Emergency Response Act, provides guidance for "in-place" management of asbestos-containing materials.

➔ [www.epa.gov/asbestos/pubs/asbestos\\_in\\_schools.html#2](http://www.epa.gov/asbestos/pubs/asbestos_in_schools.html#2)

### Lead

About one million children in this country have elevated blood lead levels. Lead is highly toxic and exposure to it can be dangerous, especially for children six or younger. The most common sources of lead are lead-based paint, lead dust, contaminated soil, older plumbing fixtures, vinyl mini-blinds, and painted toys and furniture made before 1978 that were painted with lead-based paint. New England has many buildings built before 1978, when the use of lead was phased out of paint. Exposure to low levels of lead can permanently affect children by causing nervous system and kidney damage, learning disabilities, attention deficit disorder, and decreased intelligence. Higher levels of lead can have devastating effects on children, including seizures, unconsciousness and, in some cases, death. Children should be tested for lead by their doctor or health care provider.

**Consumer Information**  
1-800-424-LEAD

**Center for Disease Control  
Lead Poisoning Prevention:**  
1-404-488-7330.

At schools built before 1978, both the building and the soil in surrounding schoolyards should be tested for lead paint hazards and their source.

➔ [www.epa.gov/region1/eco/ne\\_lead/index.html](http://www.epa.gov/region1/eco/ne_lead/index.html)

### Mercury



Mercury is present in many items found in schools, including thermometers, barometers, switches, thermostats, lamps and laboratory equipment. Mercury spills at schools are often caused by improper storage and mishandling of these items. Because mercury is shiny and "cool" it is more likely than other lab chemicals to be misused, spilled and spread through schools. Mercury exposure is harmful to children's health and may cause damage to the senses and brain, irritability, impulsiveness, drowsiness, impaired memory and sleep disturbances. At high doses, mercury exposure can cause tremors, inability to walk, convulsions and even death. Effects may occur at lower levels of exposure in children than adults. Cleaning up mercury spills in schools can also be costly, and cause widespread environmental

contamination since it can easily be tracked throughout a building. Mercury compounds and equipment and products containing mercury should be replaced in schools with alternatives such as digital thermometers. Several New England states already prohibit schools from purchasing mercury.

- [www.epa.gov/epaoswer/hazwaste/mercury/school.htm](http://www.epa.gov/epaoswer/hazwaste/mercury/school.htm)
- [www.newmoa.org/prevention/mercury/](http://www.newmoa.org/prevention/mercury/)
- [www.epa.gov/region1/eco/mercury/index.html](http://www.epa.gov/region1/eco/mercury/index.html)

## Chemicals



From elementary school maintenance closets to high school chemistry labs, schools use a variety of chemicals. Chemicals are found in science classrooms and labs, art classrooms and vocational shops. When chemicals are mismanaged, students and school personnel may be at risk from spills, fires, and other accidental exposures. Chemical accidents disrupt school schedules and can cost thousands of



*Young children are exposed more to pesticides because they crawl, explore and engage in other hand-to-mouth activities.*

dollars to clean up. Schools that use and manage chemicals properly can reduce chemical exposure and costly accidents. EPA's Schools Chemical Cleanout Campaign (SC3) helps schools learn about purchasing less hazardous chemicals, including mercury.

- [www.epa.gov/sc3](http://www.epa.gov/sc3).
- [www.epa.gov/ne/assistance/schools/sites.html](http://www.epa.gov/ne/assistance/schools/sites.html)
- [www.epa.gov/epaoswer/osw/conserv/clusters/schools/pdfs/state.pdf](http://www.epa.gov/epaoswer/osw/conserv/clusters/schools/pdfs/state.pdf)

## Pesticides

Pesticides, which may be used indoors and outdoors to protect students and employees from insects, rodents, fungi, bacteria and to eliminate weeds, can also cause health hazards and contribute to environmental pollution. Children are more sensitive than adults to pesticides. Young children are exposed more to pesticides because they crawl, explore and engage in other hand-to-mouth activities. Because of concerns about unnecessary exposure to pesticides most states have developed special restrictions on how pesticides may

healthy schools

staying healthy  
indoors



## Drinking Water

Clean drinking water is necessary for good health. High concentrations of bacteria, synthetic chemicals and natural contaminants in drinking water in schools pose a threat to student and adult health. Schools in New England receive drinking water either from public water supplies or from their own on-site well. Water from public water supply systems is regularly tested to ensure it meets federal and state drinking water standards. On-site well water systems at schools are regulated as public water systems by the EPA and the state drinking water program, and administrators at those schools 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.

School administrators should 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 should ensure that staff members know how to properly handle hazardous materials and chemicals.



### ● Lead in Drinking Water

The vast majority of public drinking water systems are safe and dependable, but drinking water pipes, taps, solder and other plumbing components may contain lead. Lead in the plumbing may leach into water and pose a health risk when consumed. Most lead gets into drinking water through contact with plumbing materials containing lead. These include lead pipes, lead solder (commonly used until 1986), as well as faucets, valves and other components made of brass. The extent of corrosion partially determines the amount of lead that may be released into the drinking water. Even though a supplier may deliver water that meets health standards for lead, the plumbing in the school may elevate the lead level above acceptable standards. The potential for lead to leach into water can increase the longer the water remains in contact with lead in plumbing. Schools with intermittent water use patterns may have elevated lead concentrations. This increases the importance of testing for lead in drinking fountains, water faucets, taps and other drinking water outlets.

➔ [www.epa.gov/safewater/schools/](http://www.epa.gov/safewater/schools/)

➔ [www.epa.gov/region1/ecodrinkwater/pdfs/DrinkingWater-Booklet.pdf](http://www.epa.gov/region1/ecodrinkwater/pdfs/DrinkingWater-Booklet.pdf)

➔ [www.epa.gov/safewater/schools/guidance.html#3ts](http://www.epa.gov/safewater/schools/guidance.html#3ts)

be used in schools. State pesticide regulatory agencies have details of pesticide use recommendations and restrictions in a particular state or town. When pests are carefully managed, schools can reduce or even eliminate the need to use pesticides. Integrated Pest Management (IPM), an approach to managing pests that minimizes the need for pesticides, can make schools much safer for children.

➔ [www.epa.gov/pesticides/ipm](http://www.epa.gov/pesticides/ipm)

### PCBs

Many schools have fluorescent lights with components containing Polychlorinated Biphenyls, synthetic chemical compounds made up of chlorine, carbon and hydrogen. As these components—called light ballasts—age, they degrade, increasing the risk of leaks or even fires, posing a health and environmental hazard to students and staff. PCBs have been linked to such health concerns as decreased gestational age, lower birth weight, depressed immune responses, impaired mental development and growth retardation. Before 1979, PCBs were widely used in electrical equipment, such as florescent light ballasts, transformers and capacitors. Although PCBs are no longer used, there are still millions of pieces of equipment in operation that contain PCBs. When not handled and disposed of properly, PCBs can harm children and adults.

➔ [www.epa.gov/opptintr/pcb/](http://www.epa.gov/opptintr/pcb/)

➔ [www.cdc.gov/niosh/docs/2007-150/](http://www.cdc.gov/niosh/docs/2007-150/)

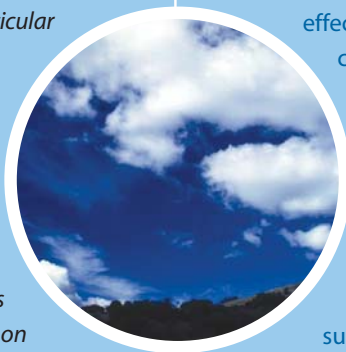


## ● Outdoor Air Quality

Air pollution, especially smog, has been linked to many respiratory problems and may trigger asthma attacks in children. Air pollution is not just a problem in urban areas. On hot days in summer, even rural areas may face unhealthy levels of air pollution. On days when air quality is poor, outdoor activities for children should be restricted. EPA's website ([www.epa.gov/airnow](http://www.epa.gov/airnow)) provides daily air quality forecasts and health alerts.

The air quality around schools can be affected by pollution from many different sources: stationary sources such as factories and power plants; mobile sources such as cars, planes and trains; and naturally occurring sources such as dust. At schools, diesel school buses present a particular challenge.

Ground-level ozone, one of the main ingredients in smog, is created when pollution from cars, buses and industrial sources reacts with sunlight on hot summer days. Ozone near ground level can aggravate asthma, emphysema and bronchitis and can in-



---

*Overexposure to UV radiation can lead to serious health effects, such as skin cancer, cataracts and immune suppression.*

---

flame and damage cells that line the lungs. On days when there are forecasts for high ozone or smog, it is important to limit and slow down outdoor activities, especially for children.

## Ultraviolet Radiation



The global levels of ultraviolet (UV) radiation are rising. Overexposure to UV radiation can lead to serious health effects, such as skin cancer, cataracts and immune suppression. Some exposure to sunlight can be enjoyable, but too much can be dangerous. For children playing outside on school playgrounds, overexposure to the sun's ultraviolet radiation can cause sunburns in the short term and problems such as skin cancer and cataracts in the long term. The ozone layer, a thin shield in the upper atmosphere, protects Earth from the sun's ultraviolet rays.

Children and their caregivers need to protect themselves from overexposure to the sun. Schoolchildren need to learn "sunsafe behaviors" like limiting time in the midday sun, staying in the shade,

using sunscreen and wearing a hat and sunglasses.

## Diesel School Buses



More than 1.7 million children in New England ride a bus to and from school every day, spending, on average, an hour and a half each week-day in a school bus. School buses are the safest way for children to get to school. Pollution from diesel vehicles, however, has health implications. Diesel exhaust from idling school buses can accumulate on and around the bus and pose a health risk outside and inside school buses and buildings. Diesel exhaust has been identified as a likely cause of cancer, and the soot and gases emitted by diesel buses are associated with acute eye, throat, and bronchial irritation; exacerbation of asthma and allergic responses; and potential interference with proper lung growth and development in children.

➔ [www.epa.gov/ne/eco/diesel/school\\_buses.html](http://www.epa.gov/ne/eco/diesel/school_buses.html)



*A national partnership, Clean Schoolbus USA's goal is to reduce both children's exposure to diesel exhaust and the amount of air pollution created by diesel school buses.*



Clean School Bus USA is a national partnership to reduce children's exposure to diesel exhaust by eliminating unnecessary school bus idling, installing effective emission control systems on newer buses and replacing the oldest buses in the fleet with newer ones. Its goal is to reduce both children's exposure to diesel exhaust and the amount of air pollution created by diesel school buses.

➔ [www.epa.gov/cleanschoolbus/](http://www.epa.gov/cleanschoolbus/)

## Air Quality Forecast

EPA works with local weather forecasters to provide a color-coded chart that reports air quality levels in communities across New England. This the Air Quality Index, often seen on local weather forecasts, helps the

public understand whether local air quality and air pollution levels are good, moderate, unhealthy—or worse.

➔ [www.epa.gov/ne/aqi](http://www.epa.gov/ne/aqi)

## Oil Storage

Schools store fuel for heating buildings and fueling school vehicles. Improper handling and storage can threaten groundwater, which is often a source of drinking water, and other natural resources, and create public safety hazards. Fuel must be handled in ways that minimize the chance of a leak or spill, and schools must be prepared to respond if a leak or spill does occur. EPA rules require facilities that store more than 1,320 gallons of oil above ground to have plans, called *Spill Prevention and Control Countermeasure plans*, to reduce the chance of a spill and spill out response strategies. "Oil" is defined to include gasoline, kerosene, diesel, lubricants, waste oil, hydraulic oil and heating oil. Facilities with oil stored below ground may have to draft these plans as well, or may fall under the scope of the federal Underground Storage Tank regulations.

➔ [www.epa.gov/oust/pubs/index.htm](http://www.epa.gov/oust/pubs/index.htm)

Even schools that do not fall within the scope of federal regulations need to take steps to prevent a spill and to have a plan in case a spill occurs. Any oil spill that reaches, or threatens to reach a surface water must be reported to the National Response Center at (800) 424-8802.

➔ [www.epa.gov/oilspill/spcc.htm](http://www.epa.gov/oilspill/spcc.htm)

Air Quality Index (AQI) Values	Levels of Health Concern	Cautionary Statements for Ozone	Cautionary Statements for Particle Pollution
0-50	Good	None	None
51-100	Moderate	Unusually sensitive people should consider reducing prolonged or heavy exertion outdoors.	Unusually sensitive people should consider reducing prolonged or heavy exertion.
101-150	Unhealthy for Sensitive Groups	Active children and adults, and people with lung disease, such as asthma, should reduce prolonged or heavy exertion outdoors.	People with heart or lung disease, older adults, and children should reduce prolonged or heavy exertion.
151-200	Unhealthy	Active children and adults, and people with lung disease, such as asthma, should avoid prolonged or heavy exertion outdoors. Everyone else, especially children, should reduce prolonged or heavy exertion outdoors.	People with heart or lung disease, older adults, and children should avoid prolonged or heavy exertion. Everyone else should reduce prolonged or heavy exertion.
201-300	Very Unhealthy	Active children and adults, and people with lung disease, such as asthma, should avoid all outdoor exertion. Everyone else, especially children, should avoid prolonged or heavy exertion outdoors.	People with heart or lung disease, older adults, and children should avoid all physical activity outdoors. Everyone else should avoid prolonged or heavy exertion.
301-500	Hazardous	Everyone should avoid all physical activity outdoors.	People with heart or lung disease, older adults, and children should remain indoors and keep activity levels low. Everyone else should avoid all physical activity outdoors.

**The Air Quality Index (AQI)** is a standardized method of reporting air pollution. It measures pollutant concentrations in a community's air to a number on a scale of 0 to 500. It lets the public determine whether air pollution levels are good, moderate, unhealthy—or worse. It is often seen on weather broadcasts on television.

AQI air quality index

## Go Green at School

*Effective and motivated staff, administration and students can overcome inadequate facilities and perform at a high level almost anywhere, but a well-designed facility can enhance performance and make learning more fun. Creating a healthy and sustainable school facility is not difficult, but it requires a “whole building” approach to the design process.*

### Design, Construction and Renovation

School districts will spend billions of dollars in the next few years building and renovating schools to keep up with a surging population and new class-size limits. The designs of these schools will help determine the quality of the buildings, decades of operational expenses and, most importantly, the health and productivity of generations of students and staff. The most sustainable and energy-efficient designs will take advantage of climate conditions, enhance the indoor environment, conserve energy and use renewable resources. They will also protect and conserve water, use materials that come from sustainable resources, minimize construction waste; and optimize maintenance and operations.

- ➔ [www.epa.gov/ne/greenbuildings](http://www.epa.gov/ne/greenbuildings)
- ➔ [www.epa.gov/greenbuilding](http://www.epa.gov/greenbuilding)

### Energy Efficiency

America’s primary and secondary schools spend a staggering \$6 billion a year for energy — more than is spent on textbooks and computers combined. Schools can save as much as 30 percent on energy costs by using energy-efficient technologies and mak-

ing sensible changes in operations and maintenance. Wasted energy dollars - \$1.5 billion nation-wide - can be redirected to the schools’ primary mission: education.

### ENERGY STAR® for K-12 School Districts

The ENERGY STAR For Schools program links energy and financial performance and protects the environment. Through the ENERGY STAR program, EPA gives school districts technical support and guidance on financing. The agency also recognizes schools trying to use energy more efficiently. EPA helps school administrators make decisions that are good for their budgets and the environment.



In New England, our K-12 schools spend more than \$500 million on energy. EPA’s Community Energy Challenge helps local communities measure their energy use and take steps to reduce energy use in schools or other municipal buildings. Every community can save 10 percent, and those who achieve this 10 percent will be recognized by EPA’s ENERGY STAR program.

- ➔ [www.epa.gov/region1/eco/energy/energy-challenge.html](http://www.epa.gov/region1/eco/energy/energy-challenge.html)
- ➔ [www.energystar.gov](http://www.energystar.gov)

### Reuse, Recycling and E-cycling

Reuse and recycling are a series of approaches aimed at reducing the amount of solid waste and other resources we dispose of. Reuse includes donating or finding a second life for



materials that may be considered waste. Recycling includes collecting recyclable materials that would otherwise be considered waste, sorting and processing recyclables into raw materials such as fibers, and manufacturing raw materials into new products. School districts can reduce the amount of waste they generate, and start a waste reduction program or expand an existing one. Safer alternatives may be chosen for hazardous chemicals used in facility maintenance or classrooms and shops. Schools also can reduce the environmental impact of electronics at the end of their useful life through reuse and donation, recycling, and buying greener electronic products. Water can also be recycled for watering plants and food waste can be used for creating compost.

- ➔ [www.epa.gov/epaoswer/education/toolkit-res.htm](http://www.epa.gov/epaoswer/education/toolkit-res.htm)
- ➔ [www.epa.gov/ne/assistance/reuse/index.html](http://www.epa.gov/ne/assistance/reuse/index.html)
- ➔ [www.epeat.net](http://www.epeat.net)

### Safety and Preparedness

Like other public buildings, any school at any time may face an emergency that could threaten the health and safety of students and staff. Schools need

to be ready for emergencies by preparing school buildings to withstand natural disasters and terrorism and planning for facilities to shelter residents during emergencies. Schools should have "safe school" plans in place, and ways to evaluate these plans.

## Managing the Many Environmental Responsibilities of Schools



In New England, a handful of school districts have used Environmental Management Systems as a way to identify, prioritize and manage environmental responsibilities.

➔ [www.epa.gov/ne/ems/projects.html](http://www.epa.gov/ne/ems/projects.html)

## Assessing Your School

EPA has also developed a software tool to help school districts assess the environmental conditions at their own facilities. The Healthy School Environments Assessment Tool (HealthySEAT) contains an environmental health and safety checklist and is designed to be easily customized to reflect state and local requirements and policies.



**HealthySEAT**   
Healthy School Environments Assessment Tool

➔ [www.epa.gov/schools/healthyseat/index.html](http://www.epa.gov/schools/healthyseat/index.html)

## Building Healthy Schools in New Hampshire

In New Hampshire, the Department of Environmental Services and EPA New England joined forces in 2005 to custom fit the HealthySEAT program for the state's needs. Once the software was customized, NHDES contacted NH school district facilities managers to promote it as a valuable, free tool that would help them manage environmental, health & safety concerns and requirements. The state then trained interested facilities managers to use the program. NH school facilities managers trained to use the program say their jobs are easier, they save time, and the school environment is better as a result. A fact sheet describing this project and NH software are posted on the NHDES Healthy School Environments web site.

➔ [www.des.nh.gov/ard/ehp/hse/healthyseat.htm](http://www.des.nh.gov/ard/ehp/hse/healthyseat.htm)



healthy schools

go green  
at school



## Twelve Ways to Make Your School Healthier

### 1. Clear the air inside.

EPA's Indoor Air Quality Tools for Schools program provides information to help schools prevent and solve indoor air quality problems.

### 2. Clear the air outside.

Schools can reduce children's exposure to diesel exhaust by eliminating unnecessary school bus idling, installing effective emission control systems on newer buses and replacing the oldest buses with new ones.

### 3. Rid school buildings of radon.

Schools should test the level of radon gas in their buildings with a radon test kit. If the test results are above healthy levels, steps should be taken to reduce radon.

### 4. Use toxics with caution.

Schools should look for alternatives to toxic pesticides and cleaning chemicals. Products should only be used as directed, and stored in high locked cabinets and in original containers. Remove the sources of lead, mercury, asbestos and PCBs from the school environment, where possible.

### 5. Buy chemicals carefully.

Possible health, safety and environmental implications should be considered before chemicals are purchased for use in schools. Proper chemical use and management (storage, labeling, disposal) is critical for reducing chemical exposures and costly accidents.

### 6. Test the water.

School districts should know the quality of the drinking water in their schools buildings, and should have it tested regularly.

### 7. Get the lead out.

School buildings built before 1978, should be tested for lead paint. Renovations or repairs should be done in a way that does not create lead dust. Children should be kept away from lead hazards.

### 8. Keep mercury from rising.

School environments should be mercury-free. Schools should use digital thermometers and safer alternatives to mercury in science curriculum, nurses' offices, and within facilities operations/maintenance.

### 9. Cover up.

Schools should practice "sunsafe behavior" and encourage children to cover up, use SPF 15 or higher sun screen, and stay out of midday sun to avoid damaging UV rays.

### 10. Have a "safe school" plan.

School districts should identify hazards, evaluate safety planning and prepare for emergencies.

### 11. Get a team.

You can't do it alone. Ideally, you will have the superintendent, facility manager, business manager, school nurse, principal, teachers and parents working with you.

### 12. Educate yourself.

You need to know what environmental health issues are important so you can evaluate your school and choose your priorities.



healthy schools

12 ways  
to make  
your school  
healthier

## Additional Resources & Links

### **EPA New England**

1 Congress Street, Suite 1100  
Boston, MA 02114-2023  
[www.epa.gov/ne/](http://www.epa.gov/ne/)

### **EPA New England's Customer Call Center:**

1-888-EPA-7341 (1-888-372-7341)

### **EPA New England Children's Health website:**

[www.epa.gov/ne/children/  
index.html](http://www.epa.gov/ne/children/index.html)

### **National Poison Control Hotline:**

1-800-222-1222  
(emergency) 202-362-8563  
(TDD) 202-362-3867

### **National Pesticide Information Center Hotline**

1-800-858-7378 (PEST)

### **National Service Center for Environmental Publications:**

1-800-490-9198  
[www.epa.gov/ncepi](http://www.epa.gov/ncepi)

### **Environmental Justice Hotline:**

1-800-962-6215  
email:  
[environmental-justice-epa@epa.gov](mailto:environmental-justice-epa@epa.gov)

### **The Community Energy Challenge:**

[www.epa.gov/region1/eco/  
energy/energy-challenge.html](http://www.epa.gov/region1/eco/energy/energy-challenge.html)

### **The New England Asthma Regional Council\***

[www.asthmaregionalcouncil.org](http://www.asthmaregionalcouncil.org)

### **The Pediatric Environmental Health Center at Children's Hospital:**

1-888-CHILD14 (1-888-244-5314)

### **Maine School Environmental Guide\***

[www.main.gov/dep/mercury/  
guide.pdf](http://www.main.gov/dep/mercury/guide.pdf)\*

*\*Websites with an asterisk are not part of EPA or the federal government, but rather an external link. The link provides additional information that may be useful or interesting and relevant, but the EPA cannot attest to the accuracy of information provided by this link. Providing links to a non-EPA Web site does not constitute an endorsement by EPA or any of its employees of the sponsors of the site or the information or products presented on the site.*



additional  
resources  
& links





Help conserve paper!  
Access this informative  
publication online.

healthy schools

[www.epa.gov/ne/healthyschools](http://www.epa.gov/ne/healthyschools)



United States  
Environmental Protection  
Agency New England



Help conserve paper!  
Access this informative  
publication online.

healthy schools

[www.epa.gov/ne/healthyschools](http://www.epa.gov/ne/healthyschools)



United States  
Environmental Protection  
Agency New England

[www.epa.gov/ne/healthyschools](http://www.epa.gov/ne/healthyschools)

♻️ printed on 100% recycled paper, with a minimum of 50% post-consumer waste, using vegetable-based inks



EPA 901-K-08-001  
January 2008