Towards Healthy Schools 2015

Progress on America's Environmental Health Crisis for Children

Coalition *for* Healthier Schools

…providing the national platform and
the forum for environmental health at school, since 2001…

Coordinated by Health Schools Network

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"In The News"

One third of parents concerned about losing jobs, pay when they stay home with sick kids who can't attend child care. (The Sacramento Bee)

Bacterial Protein In House Dust Spurs Asthma. (ENews Park Forest)

BPA Levels Tied to Obesity in Youths. (The New York Times)

Iowa Lacks Guidelines to Track Radon in Schools (KCRG)

Exposure to Common PCB Toxins May Up Asthma Symptoms. (Business Standard)

An Immune Disorder at the Root of Autism. (The New York Times)

Toxic Chemicals Found in Children's School Supplies. (NBC New York)

Los Angeles To Ban All Styrofoam Food Trays At All School Campuses. (Daily News: Los Angeles)

Rashes at Florida School Result in Lockdown. (CNN)

For Some Children, Every Day is Asthma Day. (The Huffington Post)

Air Pollution, Asthma Burden Unevenly Shared Among U.S. Children. (The Huffington Post)

Electrical Pollution: Are We Being Poisoned? (KRIV FOX 26)

Mysterious tics, spasms affect 12 teens at New York High School. (NBC)

Two More Students with Tic-Like Symptoms in LeRoy. (NBC Buffalo)

Contaminated Fields Still Years Away From Ready. (Pleasantville-BriarcliffManorPatch)

Possible Cancer Cluster in Briarcliff. (Briarcliff DailyVoice)

Class Action Lawsuit Filed Against PCB Makers. (equities.com)

PCB Clean-up at Middle Schools Will Cost Millions Beyond Expectations. (SouthingtonPatch)

City to Ramp Up PCB Removal From Schools Under Accelerated Spending Plan. (dnainfo.com)

Hurricane Sandy Aftermath: Some NJ Schools Reopen With No Heat, No Lunch. (nj.com)

Hurricane Sandy: Back to School, Bundled Up, But With Lingering Questions. (The New York Times)

Pediatricians join call for health study on gas drilling. (Albany Times Union)

Towards Healthy Schools 2015:
Progress on America's Environmental Health Crisis for Children

We do not do enough to protect our children: unhealthy schools impose a grave injustice. States compel children to attend school; in fact, 98% of all school-age children attend schools—irrespective of conditions. Yet the environmental conditions of decayed facilities or facilities close to hazards can damage children's health and ability to learn. At the same time, it is well documented that healthy school facilities can help children learn, grow, and stay healthy.

Today, justice for children can be achieved, but that demands swifter, surer progress on federal, state, and local fronts to ensure that all children have environmentally healthy schools that are clean and in good repair— and when children do not, that they have timely on-site public health interventions to help reduce exposures and have necessary support services. This is a profound pediatric health and environmental justice issue that must not be set aside.

Towards Healthy Schools 2015: Progress on America's Environmental Health Crisis for Children is the third triennial state-by-state data and policy report on this topic since 2006. *Sick Schools* (2009) and before it *Lessons Learned* (2006) researched and assessed state-by-state data and policies on environmental conditions at schools and risks to children's health, compiling them into a single, unique resource that painted a deeply disturbing picture, in which vulnerable children endure unhealthy schools.[1,2]

A co-released report, *Who's In Charge*, issued in 2006 and later published in the occupational health journal *New Solutions* (J. Paulson, 2010), outlined that while school employees have some recourse when environmental conditions affect their health, children, who are biologically more vulnerable and more exposed to hazards than adults, and who outnumber adults in schools, have none. And, worse, federal and state agencies fail to provide oversight or services to children at risk.[3,4]

Towards Healthy Schools 2015 cites, as did the two previous reports, basic federal data for public schools, such as total number of buildings; total enrollment; total number of personnel; percentage of children with asthma; percentage of children without health insurance; total number of children receiving special education; total number of children of minority status; and more.

New in this edition are three data sets used to illustrate additional risk factors not covered in the first two reports:

- total number of children eligible for free or reduced price meals (a proxy for poverty status);
- states requiring schools to keep asthma/allergy incident reports; and
- states requiring inspection of school drinking water outlets for lead.

National data summary and trends.

Compared to 2006, the national data summary shows marked changes. There are more public school buildings today than in 2006 (up 5% over 2006 to 101,435), more children enrolled (up 2% to 49.5m), and a significant number of minority children enrolled (up 18% to 23.5m, from 19.8m in 2006). This indicates a decrease in white children in public schools. A total of 23.5 million school children today are eligible for free or reduced price meal programs at school, an indicator of the poverty status of children and an overall indicator of local economic realities. There are also more employees in schools (up 15% to 6.2m), a reflection of the US Department of Education's recent increases in public education investments.

On the health side, there are more children with asthma nationally, more children with attention deficit hyperactivity disorder (ADHD), and fewer children receiving special education services in school (down 4% from 2006 to 6.4m, but up from 2009). Given the skyrocketing number of children with autism and autism spectrum disorders[5] in schools, coupled with an increase in ADHD, the overall decrease in children receiving special education is troubling. It suggests that school districts may not be identifying children with disabilities who are eligible for help. A possible reason is the lack of full federal support for special education. Children with these unmet needs are at increased risk for additional learning problems and poorer health outcomes.

On the school facility side, there are also marked changes. New information has emerged, showing that agencies in 46 states report having facility staff, compared to the 39 previously reported and a 2010 study found eleven states not funding capital construction. The duties of state staffing for facility offices are not detailed. Also in need of an intensive review is how the 28 states reported to have statewide school facility assessments are currently assessing facilities. For example, what consistent measures, if any, are being used across the states? Classroom carbon dioxide levels? Intact roofing systems? A set of common measures linked in the literature to children's health, or behavior, or ability to learn would be invaluable.

As a measure of school facility improvements, there are two very good news stories that emerge. First, the number of states with high performance and/or green school design protocols in place (either voluntary or required) has increased to 24 states from 21 in 2009. And second, the number of states that promote or require schools to use green cleaning products has jumped to 11 from 8 in 2009. Both policies help reduce exposures in schools, although conventional green-designed facilities are more focused on water, energy, and site conservation than on indoor environmental quality (IEQ) and occupant health. Yet, addressing IEQ elements—such as dampness, CO and CO_2 and particulates —are essential to children's health and learning, and to personnel health and productivity.[6,7]

There has been no change in the states requiring safer pest control indoors (IPM, or integrated pest management), but both Connecticut and New York have enacted bans on the aesthetic uses of herbicides on school property, a very positive step. Indoor air quality (IAQ) laws have not changed significantly; however, this report provides a detailed IAQ footnote, indicating states with specific features, such as protecting occupants in school buildings under renovation.

And finally, one major change in data reported: *Towards Healthy Schools 2015* eliminates the calculation of the estimate of children at risk of additional health and learning problems due solely to environmental factors in schools used in both the 2006 and 2009 reports (estimated 60% at risk). This decision was made, first, because the data on conditions of school buildings are quite old and need to be updated with new federal surveys; second, because emerging issues such as the lack of carbon monoxide detectors[8] in schools or the presence of PCBs in school building materials[9] affect tens of millions of school children and there is no reliable information regarding the extent of PCB contamination; third, because research published by the Institute of Medicine and other respected entities shows new risks to children's health; and fourth, because the fiscal crisis hits the hardest at locally funded schools, so that the poorest communities and/or the highest-risk learners are even more likely to have the schools in the worst condition. Children with existing disabilities may be even more vulnerable to these exposures than their peers.[10]

Because children do not vote, their needs tend to be dismissed or ignored in the high-profile political battles. Thus, the loudest voices on the federal budget are not speaking about environments where children live, learn, or play. Working together today to address the health and learning barriers documented in this report will help bend the health cost curve and improve our children's academic achievement and associated future earnings and prevent their own fiscal cliff tomorrow.

***Towards Healthy Schools 2015* estimates that *ALL* public and private school children should be considered at elevated risk of health and learning difficulties due solely to the unexamined and or unaddressed environmental health risks in their schools and the lack of public health services for children at risk or with suspected exposures.**

What the science says.

The science is clear: physical environmental stressors in schools measurably and significantly affect children's achievement. A breakthrough came in 2006, when the National Academy of Science's National Research Council released *Green Schools: Attributes for Health and Learning.*[11] After examining data, this influential report concluded that there was no evidence to document that conventional green schools provide health benefits, but plenty of evidence for the links between indoor environmental health factors and child (and personnel) health.

Since then, the evidence has continued to mount. For instance, in 2011, the National Academies' Institute of Medicine released *Climate Change, the Indoor Environment, and Health*, finding that "[p]oor indoor environmental quality is creating health problems today and impairs the ability of occupants to work and learn."[12] Echoing longstanding recommendations from Healthy Schools Network and the Coalition for Healthier Schools, the report recommended "preventing exposures," which it found can be 100-1,000 times more intense indoors than out, and collecting more data on exposures. Indoor exposures include poor ventilation and high ambient CO_2 levels in schools (an indicator of indoor air pollution), which can cause short-term and long-term health problems for children and adults,[13] as well as environmental hazards leading to an increase in chronic, non-communicable diseases.[14]

In addition, the IOM observed well-documented but not widely understood problems with conventional "green" buildings and products that do not take health into account. For example, it reported that the highest-rated green building (LEED Platinum) need not earn a single credit in indoor environmental quality.[15]

Science also documents the flip side: the measurable benefits—to children's health, behavior, and achievement—of healthy school facilities. What's more, contrary to popular belief, healthy schools also deliver cost benefits because they reduce health and education costs sharply. In fact, savings derived from school occupant health and performance far outweigh the total savings from water and energy efficiency combined.[16]

For instance, according to *Greening America's Schools: Costs and Benefits*, healthy schools can reduce asthma almost 40% and upper respiratory infections nearly 70% by adopting proven best practices to improve IAQ—and reduce absenteeism and improve productivity in the process. The report estimates that a new, average-sized healthy school can reduce asthma incidence 25%, which translates to 20 fewer children a year with asthma and a savings of $33,000.[17]

In 2011, a study by New York State's Department of Health illuminated the connection between school IAQ and asthma, finding that pediatric asthma hospitalizations can rise by up to 300% in September, stay high, and spike on each return to school after vacations.[18]

Financial Benefits of Green Schools ($/ft²)	
Energy	$9
Emissions	$1
Water and Wastewater	$1
Increased Earnings	$49
Asthma Reduction	$3
Cold and Flu Reduction	$5
Teacher Retention	$4
Employment Impact	$2
Total	**$74**
Cost of Greening	**($3)**
Net Financial Benefits	**$71**

Kats, 2006, p2.

But what about children?

As pediatrician Jerome Paulson, MD, and others have pointed out[19], children are biologically more vulnerable to environmental hazards than adults and may not be able to identify hazards or remove themselves from harm's way. Paulson documented the potential exposures in schools, outlined the public health services available to school personnel with suspected workplace illnesses, injuries, and exposures, and outlined the lack of services for children in the same schools. He added, "The publically supported environmental public health programs to serve children and their families are woefully inadequate."

His recommendations include: data collection system for school environmental heath problems; tracking system for sentinel schools nationwide; coordinated federal strategy to rapidly improve school facilities and remediate hazards; convening various federal agencies; additional funding for the federally designated Pediatric Environmental Health Specialty Units; and convening federal agencies, legal experts, and child health advocates to discuss research, data collection, and overcoming barriers to public health research in schools and child care centers.

Prevention pays.

Preventing harm to school children is the one option that has not gained sufficient attention, in the states or at the federal agencies. But prevention is also now the choice of many advocates for saving federal and state health care dollars. The savings would be considerable. According to a 2008 estimate of the cost of environmentally associated diseases in children (Trasande, et al), "diseases of environmental origin in children cost $76.6 billion annually."[20] This includes costs for asthma, intellectual disabilities, and other health conditions that can be exacerbated by exposures in the school environment.

A more recent study found, after comparing the costs of various health care strategies, that prevention pays off in the long run. In fact, health protection in the form of healthier behaviors and healthier environments is more cost effective over the long term than health care coverage and medical care access. [21]

What is preventive public health for children in schools? There is as yet no evidence that conventional green schools provide health and learning benefits,[22] but there is robust evidence that healthy indoor environments in schools lead to better health and learning outcomes. There is also evidence that even in a state like New York, with well understood laws on school environments, pediatric asthma hospitalizations can rise up to 300% on returns to school during the academic year [23] and that schools are filled with asthma triggers inconsistent with state laws.[24]

Very simply, given the costs of asthma—to children, families, education, and the health care system for preventable illnesses and hospitalizations—the federal and state agencies should define, implement and evaluate an new array of preventive health services for children in schools and child care centers at risk of or with suspected exposures.

One 30-year-old published article clarifies the message. Assessments of the National Institutes of Occupational Safety (NIOSH) Health Hazard Evaluation (HHE) reports by researchers typically analyze the types of job hazards and effects on health. But a 1984 study of HHEs surveyed not only the 376 employees in the schools but also the parents of 2,744 students.[25] In the "complaint schools" and in the control schools evaluated, parents reported that more children had acute health symptoms (headaches, coughs, itchy eyes, sore throats, runny noses) than the adults occupying the same buildings. This is not surprising: children are more vulnerable to hazards than adults—for example, children breathe more air per pound of body weight. This simple finding argues powerfully for prevention efforts focused on school children.

Good news: progress at EPA and Education and in the states.

Despite the grim facts and grim fiscal outlook, there is some progress, although it is threatened by the federal budget negotiations and the economic downturn, which has cut both federal and state health and environment programs and led to massive cuts to local K-12 school budgets. Environmental health at school has at last drawn attention at the federal level.

Much of it comes from US Environmental Protection Agency (EPA),[26] the agency with the longest history and deepest expertise on indoor environments and specifically school facilities. Although US EPA recently zeroed out the budget of its Indoor Air Quality Tools for Schools program that had helped states, districts, and nonprofits to address indoor environments in schools, it also fostered new work. In 2011, the agency released first-ever federal guidelines on school siting. These voluntary guidelines are designed to help local school districts and community members evaluate environmental factors to make the best possible school siting decisions.

Then, in 2012, EPA released first-ever guidelines for state agencies to address environmental health at school, and announced voluntary grants to agencies in five states: Connecticut, Minnesota, New York, Ohio, and Wisconsin. These are a welcome start that should expand throughout the decade and provide new opportunities for collaborations among federal and among state agencies, and with NGO's focused on child health, environment, health, and education.

At this writing, it is unclear how each state will tackle the issues and how EPA will deploy its in-house expertise given budget cuts and continuing threats. Illustratively, the Energy Independence and Security Act (EISA) of 2007 required EPA to develop guidance that would help states improve schools, including how to address onsite investigations of schools by collaborating with federally designated Pediatric Environmental Health Specialty Units (PEHSUs).[27] We look forward to these new efforts to rapidly demonstrate the effectiveness of EPA's guidelines and programs.

Meanwhile, the US Department of Education (ED) has become more active on school environments, beginning with "green schools". It established a voluntary award for schools targeting three areas of concern: (a) energy and environmental footprint; (b) healthy facilities and healthy children; and, (c) environmental education and service learning. This is progress, as ED has historically not engaged on federal children's environmental health initiatives or on issues of school facilities. The resulting Green Ribbon Schools Award[28] (modeled on ED's Blue Ribbon Schools Award), now in its second year, has stimulated a great deal of interest among state education agencies, which also, until now, had not shown this kind of high-level attention to school facilities.

While ED included "healthy facilities and healthy children" as one of the three areas, it is the currently only area in which there is robust peer-reviewed evidence on the benefits to children's health and learning. Placing equal or greater emphasis on the other two areas dilutes the urgent message to improve school indoor environments and to reduce risks to children. We look forward to ED, EPA, and CDC working more closely together in the future to align and coordinate their respective programs and goals as well as collaborating with similarly interested NGOs.

More good news: states are making strides on school environmental health.

EPA's guidelines on school environmental health included case studies on several states EPA identified as having programs to improve environmental health in schools.

Connecticut, for instance, established a highly successful program based on EPA's Indoor Air Quality Tools for Schools to improve indoor air quality at schools. Created by the state's Department of Public Health, and partially funded by US EPA, the program has implemented EPA's IAQ Tools for Schools program in most of Connecticut's public schools. The department established a consortium of 24 state agencies and organizations, which offers outreach and training. The department does not provide oversight of local schools. Connecticut's program focuses on building teams at schools and using existing resources. Although there is very limited monitoring data available, a small study of six school districts (about 50 schools) showed marked improvements: a drop in asthma-related office visits was the most frequently reported health outcome.[29,30] See the Connecticut program at http://www.ct.gov/dph/LIB/dph/Environmental_Health/EOHA/pdf/schoolteam.pdf

In Wisconsin, several school environmental health and safety programs were integrated into a single program. The state's Department of Natural Resources and Department of Public Instruction joined forces to create the Wisconsin Green and Healthy Schools Program, in which participating schools pursue a three-step, web-based certification process covering a wide range of environmental health and safety topics. The program helps schools get started by conducting workshops and keeps the lines of communication open through its website and newsletter. Resource-strapped schools appreciate the streamlined approach; they have also responded to the program's emphasis on cost and energy savings. In addition, the involvement of the Department of Public Instruction has given the program added credibility with schools. About 140 of the state's more than 2,200 public schools are participating. See more information at: http://dnr.wi.gov/Education/educatorresources/ghs/

Recommendations: Healthy Schools for All Children.

- Adequately fund EPA's Green and Healthy Schools Initiative.
- Restore full staffing and resources for US EPA's IAQ Tools for Schools and other schools-related programs.
- Fund and staff federal agencies to develop a coordinated federal strategy on children's environmental health and school environments (EPA, CDC, ED, Energy, Homeland, Labor). A permanent federal interagency council with an appointed federal advisory committee is needed to address children's environmental health and the environmental conditions and practices of PK-12 schools.
- Federal and state initiatives should fund and implement environmental public health clinical and other services for children's environmental health in schools, and authorize state health agencies to intervene to prevent harm to children.
- Federal agencies should develop a research, tracking, and surveillance agenda for environmental health in schools.
- Reauthorize and expand the Healthy, High Performance Schools (Subtitle E) of the Energy Independence and Security Act of 2007.
- Fund school construction/renovation and urgent repairs.
- Strengthen EPA's authorization to regulate chemicals in commerce
- Encourage federal, state, and local government agencies that are working to improve children's environmental health in schools to work with Coalition for Health Schools' members nationally, and within their own jurisdictions.

Report production, questions, and comments.

Healthy Schools Network coordinated the development and production of the overall report. The Network drafted the report Introduction, assisted by board members Lloyd Kolbe, PhD, and John Shaw, then circulated the draft to all report contributors for comment.

State policy comments are the sole responsibility of the individual, local, and state contributors listed in the Credits and credited on the state pages. The Network also selected a limited number of state policies from the National Association of State Boards of Education online resources and pictures of school interiors from a large number of contributed sources.

The state data tables were researched by Network staff and interns, and draw upon federal and national sources, as footnoted in the Appendices. If a web link does not open, readers should cut and paste the link into their web browsers.

Readers' comments or requests for additional information should be sent to the Network at info@healthyschools.org, with "HS 2015" in the subject line.

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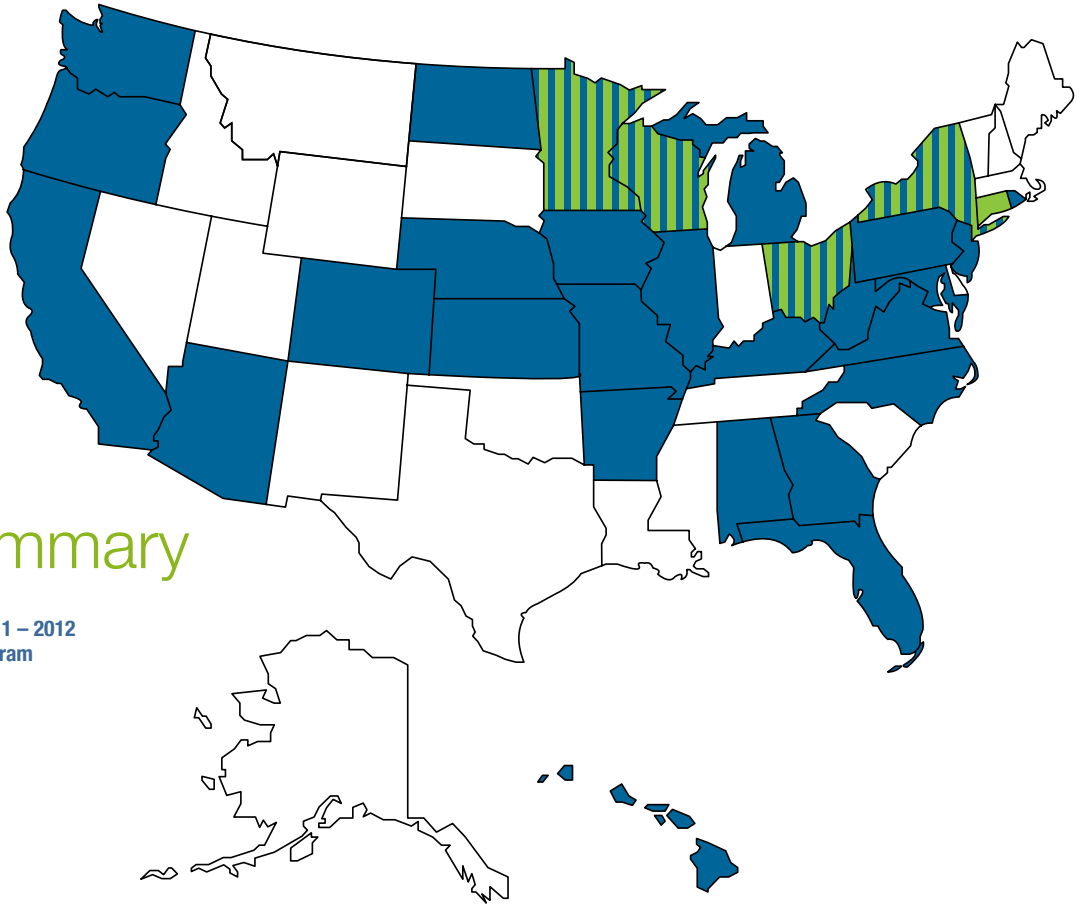


National Summary

States that participated in the 2011 – 2012 US ED Green Ribbon Schools Program

States awarded US EPA grants to state health departments

States involved in both programs

NATIONAL TOTALS

	2012	2009	2006
Number of Public Schools	101,435	98,793	96,143
Number of Public School Students	49,474,181	49,292,507	48,590,635
Number of Minority Students	23,516,967	21,904,510	19,778,912
Number of Students Free & Reduced-Price Lunch Eligible	23,573,963	DNR	DNR
Number of Employees in School System	6,195,144	6,215,635	5,447,541

NATIONAL AVERAGES

	2012	2009	2006
% Children under Age 19 without Health Insurance	8.1	12.5	DNR
% of Children with Asthma Aged 17 and Younger	8.9	8.9	8.7
% of Children Diagnosed with ADHD	9.9	7.7	n/a

NATIONAL TOTALS

	2012	2009	2006
Number of Students in Special Education Program	6,404,588	6,247,443	6,597,187

NATIONAL AVERAGES

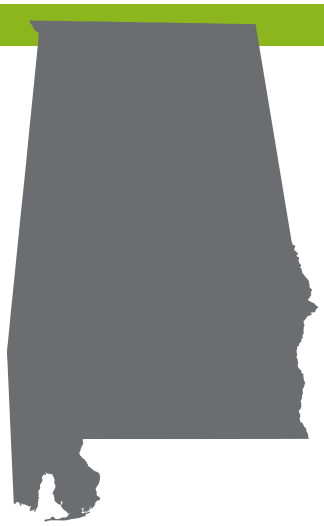
	2012	2009	2006
% Schools with at Least One Inadequate Building Feature	57%	57%	57%
% Schools with at Least One Unsatisfactory Environmental Factor	67%	67%	68%

NATIONAL TOTALS

	2012	2009	2006
State Education School Facilities Office	46	39	DNR
States with Adopted OSHA Plan	24	24	DNR
State Grants for Construction	40	36	36
States with School Building Assessments	28	28	28
State Requires that Schools Keep Asthma/Allergy Incident Reports	23	DNR	DNR
State School Green Cleaning Laws	11	8	DNR
High Performance Green School Design	24	2	DNR
Indoor Air Quality Policies	31 states with Policies, see footnote for details	see footnote	DNR
States Require Periodic Inspection of Drinking Water Outlets for Lead	27	DNR	DNR
States with Integrated Pest Management Plans	25	15	DNR

DNR = DATA NOT INCLUDED IN REPORT

As of December 1, 2012, additional states indicated their intention to participate in the FY 2012-2013 Green Ribbon Schools Award. These states are: Alaska, Connecticut, Delaware, Indiana, Louisiana, Massachusetts, Mississippi, New Hampshire, Tennessee, Utah, and Vermont.



Alabama

Asthma Awareness Education: "The Alabama Course of Study: Health Education (2003) sets a minimum content standard for teaching on topics of both infectious and noninfectious diseases in the second grade, on the negative effects of substance abuse in the fourth grade, and on understanding the management of chronic illnesses at the high school level."

Requirements for School Nurses: "Student-to-Nurse Ratio: The School Nurse Act (2009) sets the goal of having one state-funded nurse for every 500 pupils as funding becomes available in the State's Education Trust Fund and is appropriated by the Legislature."

See National Association of School Boards of Education (NASBE), "State School Policy Database" at http://nasbe.org/healthy_schools/hs/map.php

Number of Public Schools	1,615
Number of Public School Students	755,552
Number of Minority Students	315,033
Number of Students Free & Reduced-Price Lunch Eligible	402,386
Number of Employees in School System	95,144
% Children under Age 19 without Health Insurance	6.2
% of Children with Asthma Aged 17 and Younger	11.5
% of Children Diagnosed with ADHD	14.3
Number of Students in Special Education Program	81,216
% Schools with at Least One Inadequate Building Feature	59%
% Schools with at Least One Unsatisfactory Environmental Factor	63%
State Education School Facilities Office	Y
States with Adopted OSHA Plan	N
State Grants for Construction	Y
States with School Building Assessments	Y
State Requires that Schools Keep Asthma/Allergy Incident Reports	N
State School Green Cleaning Laws	N
High Performance Green School Design	N
Indoor Air Quality Policies	see footnote
States Require Periodic Inspection of Drinking Water Outlets for Lead	N
States with Integrated Pest Management Plans	N

State data taken from federal and national sources: see footnotes in Appendices.

Alaska

Number of Public Schools	518
Number of Public School Students	132,104
Number of Minority Students	63,137
Number of Students Free & Reduced-Price Lunch Eligible	50,701
Number of Employees in School System	18,102
% Children under Age 19 without Health Insurance	14.6
% of Children with Asthma Aged 17 and Younger	N/A
% of Children Diagnosed with ADHD	9.2
Number of Students in Special Education Program	18,048
% Schools with at Least One Inadequate Building Feature	69%
% Schools with at Least One Unsatisfactory Environmental Factor	80%
State Education School Facilities Office	Y
States with Adopted OSHA Plan	Y
State Grants for Construction	Y
States with School Building Assessments	Y
State Requires that Schools Keep Asthma/Allergy Incident Reports	N
State School Green Cleaning Laws	N
High Performance Green School Design	N
Indoor Air Quality Policies	see footnote
States Require Periodic Inspection of Drinking Water Outlets for Lead	Y
States with Integrated Pest Management Plans	Y

Credit: *Alaska Community Action on Toxics*

State data taken from federal and national sources: see footnotes in Appendices.

Alaska lacks key policies that are necessary to protect the health of children and workers in school environments, such as indoor air or green cleaning laws. Although the state implemented pesticide right-to-know regulations for schools in 2001, prompted by Alaska Community Action on Toxics (ACAT), the Alaska Department of Environmental Conservation fell short of adopting a statewide requirement for integrated or least-toxic pest management. ACAT worked with students, parents, and teachers to prompt the Anchorage School District, the largest in the state, to adopt a precedent-setting least toxic pest management policy in 2000 that has proven effective in reducing exposures to harmful pesticides.

The harsh climate in Alaska and remoteness of many rural communities afford unique challenges for Alaska's schools. Insulating against the colder outdoor temperatures makes it even more important to ensure a healthy indoor environment in schools through the use of safe building materials and furnishings, cleaning supplies, and least-toxic pest management strategies. Some rural Alaska schools have had to contend with structural damage as the underlying permafrost melts; others have been sited on contaminated sites, such as a school that was constructed on a former military waste site.

In preparation for the 2013-2014 legislative session, Alaska Community Action on Toxics is again working to build public support for enactment of The Healthy Schools Act which would reduce the exposure of Alaskan children to toxic chemicals in school buildings and on school grounds. In addition, the US EPA is coordinating the Alaska Healthy Schools Working Group. For more information contact EPA's Region 10 office in Seattle.

Arizona

Air Quality Policy: "Administrative Code R7-6-215 (2001) requires each general, science, and art classroom to have a heating, ventilation, and air conditioning system that is 'capable of maintaining a CO2 (carbon dioxide level) of not more than 800 PPM above the ambient CO2 level (outside air).' ARS 15-2002 (no date available) requires the state school facilities board to provide information on improving and maintaining indoor environmental quality to school districts every two years."

See National Association of School Boards of Education (NASBE) "State School Healthy Policy Database" at http://nasbe.org/healthy_schools/hs/map.php

Number of Public Schools	2,380
Number of Public School Students	1,071,751
Number of Minority Students	612,403
Number of Students Free & Reduced-Price Lunch Eligible	482,044
Number of Employees in School System	96,622
% Children under Age 19 without Health Insurance	12.7
% of Children with Asthma Aged 17 and Younger	9.4
% of Children Diagnosed with ADHD	13.1
Number of Students in Special Education Program	125,806
% Schools with at Least One Inadequate Building Feature	64%
% Schools with at Least One Unsatisfactory Environmental Factor	69%
State Education School Facilities Office	Y
States with Adopted OSHA Plan	Y
State Grants for Construction	Y
States with School Building Assessments	N
State Requires that Schools Keep Asthma/Allergy Incident Reports	N
State School Green Cleaning Laws	N
High Performance Green School Design	Y
Indoor Air Quality Policies	see footnote
States Require Periodic Inspection of Drinking Water Outlets for Lead	N
States with Integrated Pest Management Plans	Y

State data taken from federal and national sources: see footnotes in Appendices.

Arkansas

Number of Public Schools	1,128
Number of Public School Students	482,114
Number of Minority Students	169,742
Number of Students Free & Reduced-Price Lunch Eligible	291,608
Number of Employees in School System	72,184
% Children under Age 19 without Health Insurance	7.0
% of Children with Asthma Aged 17 and Younger	N/A
% of Children Diagnosed with ADHD	7.6
Number of Students in Special Education Program	64,883
% Schools with at Least One Inadequate Building Feature	42%
% Schools with at Least One Unsatisfactory Environmental Factor	62%
State Education School Facilities Office	Y
States with Adopted OSHA Plan	N
State Grants for Construction	Y
States with School Building Assessments	Y
State Requires that Schools Keep Asthma/Allergy Incident Reports	N
State School Green Cleaning Laws	N
High Performance Green School Design	N
Indoor Air Quality Policies	see footnote
States Require Periodic Inspection of Drinking Water Outlets for Lead	Y
States with Integrated Pest Management Plans	N

Credit: *Association of School Business Officials*

State data taken from federal and national sources: see footnotes in Appendices.

Fayetteville Public Schools, AR (8,400 students)

- District IEQ Team was formed and met with the ASBO Advisory Group initially to launch their district program and now meets monthly
- IEQ problems were identified during building walkthroughs and an elementary school was identified to serve as a TfS pilot building to launch their IEQ program in the 2010-2011 school year
- IEQ Pilot program goals have been established, grants have been submitted for necessary funding, and resources needed to implement the pilot have been identified
- High School Green Team students are engaged in the IEQ program by participating in the TfS pilot program, collecting data, writing grants, and mentoring elementary students
- A television program with ASBO and FPS staff highlighting the benefits of IEQ and the district implementation efforts has been produced for public viewing

California

According to the California Department of Public Health (CDPH), 16.2% of school-aged children in California have been diagnosed with asthma (see: http://www.californiabreathing.org/grants-awards/air-health-awards). Asthma-related absences cost schools $31 million annually in lost revenue (Ibid). Since 2009, California has made some progress to ensure that schools have healthy learning environments despite major cutbacks in school maintenance budgets. More schools and districts are switching voluntarily to green cleaning and seeing positive results on student health. Through the AIR Health Awards, CDPH has granted $83,000 to 33 schools and 10 districts that have instituted air quality improvement plans that address cleaning supplies, pesticide use, classroom pets, bus idling, and school smoking bans. The agency plans to release a guidance document on asthma-safer cleaning for schools based on several successful pilot projects. However, despite several attempts to adopt such legislation, California still does not have a law requiring schools to use certified green cleaning products.

In 2011, four California schools – out of 52 schools that applied in California – received a Green Ribbon Schools Award from the U.S. Department of Education as part of the program's inaugural year, highlighting their exemplary environmental and health practices. All winning schools use Green Seal or EcoLogo cleaning products, have an IAQ Plan consistent with Tools for Schools, and follow Integrated Pest Management practices.

Number of Public Schools	10,340
Number of Public School Students	6,289,578
Number of Minority Students	4,634,039
Number of Students Free & Reduced-Price Lunch Eligible	3,335,885
Number of Employees in School System	530,337
% Children under Age 19 without Health Insurance	10.0
% of Children with Asthma Aged 17 and Younger	5.9
% of Children Diagnosed with ADHD	6.2
Number of Students in Special Education Program	662,508
% Schools with at Least One Inadequate Building Feature	71%
% Schools with at Least One Unsatisfactory Environmental Factor	87%
State Education School Facilities Office	Y
States with Adopted OSHA Plan	Y
State Grants for Construction	Y
States with School Building Assessments	Y
State Requires that Schools Keep Asthma/Allergy Incident Reports	N
State School Green Cleaning Laws	N
High Performance Green School Design	Y
Indoor Air Quality Policies	see footnote
States Require Periodic Inspection of Drinking Water Outlets for Lead	Y
States with Integrated Pest Management Plans	Y

Credit: *Green Schools Initiative*

State data taken from federal and national sources: see footnotes in Appendices.

Colorado

Number of Public Schools	1,835
Number of Public School Students	843,316
Number of Minority Students	363,989
Number of Students Free & Reduced-Price Lunch Eligible	336,425
Number of Employees in School System	101,426
% Children under Age 19 without Health Insurance	10.6
% of Children with Asthma Aged 17 and Younger	N/A
% of Children Diagnosed with ADHD	7.6
Number of Students in Special Education Program	84,710
% Schools with at Least One Inadequate Building Feature	58%
% Schools with at Least One Unsatisfactory Environmental Factor	63%
State Education School Facilities Office	Y
States with Adopted OSHA Plan	N
State Grants for Construction	Y
States with School Building Assessments	Y
State Requires that Schools Keep Asthma/Allergy Incident Reports	N
State School Green Cleaning Laws	N
High Performance Green School Design	Y
Indoor Air Quality Policies	see footnote
States Require Periodic Inspection of Drinking Water Outlets for Lead	Y
States with Integrated Pest Management Plans	N

State data taken from federal and national sources: see footnotes in Appendices.

Food Allergies: "Statute 22-2-135 (2009) requires the State Board of Education to promulgate rules for the management of food allergies and anaphylaxis among students enrolled in public schools. The rules must include the following: (1) Reasonable accommodations for communication between schools and emergency medical services, (2) Reasonable accommodations to reduce the risk of students' exposure to anaphylaxis-causing agents, (3) The provision of emergency anaphylaxis treatment training for appropriate staff, including self-injectable epinephrine, and (4) Procedures to ensure the availability of a student's self-injectable epinephrine to faculty and administrative staff in the event of an emergency. Statute 22-2-139 (2009) requires each school district board of education to adopt and implement a policy for the management of food allergies and anaphylaxis, in accordance with the rules established by the State Board of Education in Statute 22-2-135 (2009)."

See National Association of School Boards of Education (NASBE) "State School Healthy Policy Database" at http://nasbe.org/healthy_schools/hs/map.php

Connecticut

Since 1999, the Connecticut General Assembly has passed landmark legislation that addresses school indoor air quality (IAQ), pesticide use, bus emissions, high performance standards for school construction and renovation, and, most recently, green cleaning. (For an updated summary of Connecticut's school environmental health laws, visit www.pollutionfreeschools.org).

The health of school occupants remains at risk because no state agency has been given the necessary authority and resources to effectively track and ensure local school districts are complying with these laws.

Some positive strides have been made in the implementation of IAQ programs that are required by An Act Concerning Indoor Air Quality in Schools enacted in 2003. The Connecticut Public Health Department on its own initiative established and continues to facilitate a statewide consortium known as the Connecticut School Indoor Environment Resource Team (CSIERT). This consortium has provided free school IAQ outreach and training for the majority of Connecticut's public school districts.

The failure of the 2003 law to define minimum standards for an acceptable IAQ program remains a significant roadblock to protecting the health of school children and employees. Requirements for the federal Green Ribbon Schools and Connecticut's Green LEAF Schools programs have begun to explicitly define the essential components for an effective IAQ program. These requirements have the potential to improve compliance with Connecticut's environmental health laws while promoting healthy school models.

Number of Public Schools	1,184
Number of Public School Students	560,546
Number of Minority Students	212,807
Number of Students Free & Reduced-Price Lunch Eligible	190,554
Number of Employees in School System	93,087
% Children under Age 19 without Health Insurance	4.0
% of Children with Asthma Aged 17 and Younger	11.3
% of Children Diagnosed with ADHD	7.8
Number of Students in Special Education Program	68,130
% Schools with at Least One Inadequate Building Feature	58%
% Schools with at Least One Unsatisfactory Environmental Factor	68%
State Education School Facilities Office	Y
States with Adopted OSHA Plan	Y
State Grants for Construction	Y
States with School Building Assessments	Y
State Requires that Schools Keep Asthma/Allergy Incident Reports	N
State School Green Cleaning Laws	Y
High Performance Green School Design	Y
Indoor Air Quality Policies	see footnote
States Require Periodic Inspection of Drinking Water Outlets for Lead	Y
States with Integrated Pest Management Plans	Y

Credit: *Connecticut Foundation for Environmentally Safe Schools*

State data taken from federal and national sources: see footnotes in Appendices.

Delaware

Number of Public Schools	218
Number of Public School Students	129,403
Number of Minority Students	64,619
Number of Students Free & Reduced-Price Lunch Eligible	61,564
Number of Employees in School System	16,477
% Children under Age 19 without Health Insurance	5.6
% of Children with Asthma Aged 17 and Younger	N/A
% of Children Diagnosed with ADHD	14.1
Number of Students in Special Education Program	18,608
% Schools with at Least One Inadequate Building Feature	70%
% Schools with at Least One Unsatisfactory Environmental Factor	65%
State Education School Facilities Office	Y
States with Adopted OSHA Plan	N
State Grants for Construction	Y
States with School Building Assessments	Y
State Requires that Schools Keep Asthma/Allergy Incident Reports	Y
State School Green Cleaning Laws	N
High Performance Green School Design	N
Indoor Air Quality Policies	see footnote
States Require Periodic Inspection of Drinking Water Outlets for Lead	Y
States with Integrated Pest Management Plans	N

State data taken from federal and national sources: see footnotes in Appendices.

Self-Administration of Asthma Medication: "Administrative Code 14:612 (2003), Section 3.11 states that each school district that has a policy must permit the use and possession of an asthmatic quick relief inhaler with an individual prescription label by a student with the following provisions: the student uses the inhaler as directed by a state licensed health practitioner, written authorization for the student to possess and use the inhaler is provided, and a statement releasing the school district and its employees from any liability resulting from the student's use and possession of the inhaler is given."

See National Association of School Boards of Education (NASBE) "State School Healthy Policy Database" at http://nasbe.org/healthy_schools/hs/map.php

District of Columbia

Sidwell Friends School, NW, The first K-12 LEED Platinum school in the world:

This school earned a US Department of Education Green Ribbon School Award in part due to its reduction in energy and water consumption, its participation in a community agriculture cooperative, environmental education and participation in environmental conservancy projects. To see the school's application and learn more, visit http://www2.ed.gov/programs/green-ribbon-schools/2012-schools/dc-sidwell-friends-middle-school.pdf

Number of Public Schools	235
Number of Public School Students	71,284
Number of Minority Students	66,191
Number of Students Free & Reduced-Price Lunch Eligible	51,183
Number of Employees in School System	11,381
% Children under Age 19 without Health Insurance	3.4
% of Children with Asthma Aged 17 and Younger	18.0
% of Children Diagnosed with ADHD	7.7
Number of Students in Special Education Program	11,947
% Schools with at Least One Inadequate Building Feature	91%
% Schools with at Least One Unsatisfactory Environmental Factor	73%
State Education School Facilities Office	N
States with Adopted OSHA Plan	N
State Grants for Construction	Y
States with School Building Assessments	not reported here
State Requires that Schools Keep Asthma/Allergy Incident Reports	Y
State School Green Cleaning Laws	Y
High Performance Green School Design	Y
Indoor Air Quality Policies	see footnote
States Require Periodic Inspection of Drinking Water Outlets for Lead	Y
States with Integrated Pest Management Plans	N

State data taken from federal and national sources: see footnotes in Appendices.

Florida

Number of Public Schools	4,289
Number of Public School Students	2,643,347
Number of Minority Students	1,505,487
Number of Students Free & Reduced-Price Lunch Eligible	1,479,519
Number of Employees in School System	333,183
% Children under Age 19 without Health Insurance	15.3
% of Children with Asthma Aged 17 and Younger	N/A
% of Children Diagnosed with ADHD	11.6
Number of Students in Special Education Program	366,824
% Schools with at Least One Inadequate Building Feature	57%
% Schools with at Least One Unsatisfactory Environmental Factor	80%
State Education School Facilities Office	Y
States with Adopted OSHA Plan	N
State Grants for Construction	Y
States with School Building Assessments	N
State Requires that Schools Keep Asthma/Allergy Incident Reports	Y
State School Green Cleaning Laws	N
High Performance Green School Design	Y
Indoor Air Quality Policies	see footnote
States Require Periodic Inspection of Drinking Water Outlets for Lead	Y
States with Integrated Pest Management Plans	Y

State data taken from federal and national sources: see footnotes in Appendices.

The University of Florida's IPM in Schools program, supported by the US EPA, is part of the statewide IPM program for Florida. The program offers treatment strategies, sample materials such as notification forms and letters and external resources. See National School IPM Information Source at http://schoolipm.ifas.ufl.edu/INDEX.html.

Integrated Pest Management: "The State Requirements for Educational Facilities (2008) requires each board to establish policies for pest management in accordance with the Environmental Protection Agency's Integrated Pest Management in Schools guidelines."

See National Association of School Boards of Education (NASBE) "State School Healthy Policy Database" at http://nasbe.org/healthy_schools/hs/map.php

Georgia

Integrated Pest Management: "Code 20-2-587 (2003) requires each local school system to develop and implement an integrated pest management program for school buildings and school grounds approved by the Department of Agriculture, according to code 20-2-589 (2003). Code 20-2-587 (2003) requires schools to maintain a school pesticide notification list. All individuals on the list must be notified at least 24 hours prior to an application. Code 20-20-588 (2003) prohibits applications of pesticides within a school building or on school grounds while students are present for normal academic instruction or extracurricular activities, or within seven hours prior to normal academic instruction or extracurricular activities."

See National Association of School Boards of Education (NASBE) "State School Healthy Policy Database" at http://nasbe.org/healthy_schools/hs/map.php

Number of Public Schools	2,541
Number of Public School Students	1,667,067
Number of Minority Students	931,922
Number of Students Free & Reduced-Price Lunch Eligible	961,954
Number of Employees in School System	227,187
% Children under Age 19 without Health Insurance	11.6
% of Children with Asthma Aged 17 and Younger	9.0
% of Children Diagnosed with ADHD	9.2
Number of Students in Special Education Program	177,536
% Schools with at Least One Inadequate Building Feature	37%
% Schools with at Least One Unsatisfactory Environmental Factor	48%
State Education School Facilities Office	Y
States with Adopted OSHA Plan	N
State Grants for Construction	Y
States with School Building Assessments	Y
State Requires that Schools Keep Asthma/Allergy Incident Reports	N
State School Green Cleaning Laws	N
High Performance Green School Design	N
Indoor Air Quality Policies	see footnote
States Require Periodic Inspection of Drinking Water Outlets for Lead	N
States with Integrated Pest Management Plans	N

State data taken from federal and national sources: see footnotes in Appendices.

Hawaii

Number of Public Schools	290
Number of Public School Students	179,601
Number of Minority Students	153,639
Number of Students Free & Reduced-Price Lunch Eligible	84,106
Number of Employees in School System	21,652
% Children under Age 19 without Health Insurance	2.9
% of Children with Asthma Aged 17 and Younger	11.1
% of Children Diagnosed with ADHD	6.3
Number of Students in Special Education Program	19,716
% Schools with at Least One Inadequate Building Feature	N/A
% Schools with at Least One Unsatisfactory Environmental Factor	N/A
State Education School Facilities Office	Y
States with Adopted OSHA Plan	Y
State Grants for Construction	Y
States with School Building Assessments	Y
State Requires that Schools Keep Asthma/Allergy Incident Reports	Y
State School Green Cleaning Laws	Y
High Performance Green School Design	Y
Indoor Air Quality Policies	see footnote
States Require Periodic Inspection of Drinking Water Outlets for Lead	Y
States with Integrated Pest Management Plans	N

State data taken from federal and national sources: see footnotes in Appendices.

Green Cleaning: "Statute 302A-1509 (2010) requires the department of education to require that all public school facilities give first preference, when feasible, to the purchase and use of environmentally-sensitive cleaning and maintenance products that have been approved by the Green Seal program pursuant to section 321-26.5, for use in public school facilities. The categories of cleaning are outlined in the statute. Statute 321-26.5 (2010) requires the Department of Health to maintain a list of products that have been approved by the EPA's Design for the Environment program or the Green Seal program for public school facilities for use as a first preference guideline when purchasing and using environmentally-sensitive cleaning and maintenance products."

See National Association of School Boards of Education (NASBE) "State School Healthy Policy Database" at http://nasbe.org/healthy_schools/hs/map.php

Idaho

Self-Administration of Asthma and Anaphylaxis Medication: "Statute 33-520 (2008) requires each school district to adopt a policy permitting the self-administration of medication by way of metered-dose inhaler by a pupil for asthma or other potentially life-threatening respiratory illness or an epinephrine auto-injector for severe allergic reaction. The student shall be permitted to possess and use the prescribed the [inhaler and/or] epinephrine auto-injector at all times. Schools may require pupils to maintain duplicate prescription medications with the school nurse or in the absence of a school nurse, school administrator."

See National Association of School Boards of Education (NASBE) "State School Healthy Policy Database" at http://nasbe.org/healthy_schools/hs/map.php

Number of Public Schools	755
Number of Public School Students	275,859
Number of Minority Students	59,176
Number of Students Free & Reduced-Price Lunch Eligible	124,104
Number of Employees in School System	27,783
% Children under Age 19 without Health Insurance	11.8
% of Children with Asthma Aged 17 and Younger	N/A
% of Children Diagnosed with ADHD	8.3
Number of Students in Special Education Program	27,365
% Schools with at Least One Inadequate Building Feature	56%
% Schools with at Least One Unsatisfactory Environmental Factor	64%
State Education School Facilities Office	N
States with Adopted OSHA Plan	N
State Grants for Construction	Y
States with School Building Assessments	Y
State Requires that Schools Keep Asthma/Allergy Incident Reports	N
State School Green Cleaning Laws	N
High Performance Green School Design	N
Indoor Air Quality Policies	see footnote
States Require Periodic Inspection of Drinking Water Outlets for Lead	Y
States with Integrated Pest Management Plans	N

State data taken from federal and national sources: see footnotes in Appendices.

Illinois

Number of Public Schools	4,439
Number of Public School Students	2,091,654
Number of Minority Students	1,019,037
Number of Students Free & Reduced-Price Lunch Eligible	921,471
Number of Employees in School System	215,764
% Children under Age 19 without Health Insurance	4.9
% of Children with Asthma Aged 17 and Younger	9.8
% of Children Diagnosed with ADHD	6.2
Number of Students in Special Education Program	303,092
% Schools with at Least One Inadequate Building Feature	62%
% Schools with at Least One Unsatisfactory Environmental Factor	70%
State Education School Facilities Office	Y
States with Adopted OSHA Plan	Y
State Grants for Construction	Y
States with School Building Assessments	Y
State Requires that Schools Keep Asthma/Allergy Incident Reports	Y
State School Green Cleaning Laws	Y
High Performance Green School Design	Y
Indoor Air Quality Policies	see footnote
States Require Periodic Inspection of Drinking Water Outlets for Lead	N
States with Integrated Pest Management Plans	Y

Credit: *Safer Pest Control Project*

State data taken from federal and national sources: see footnotes in Appendices.

Illinois, home to the third largest school district in the U.S., contains over 7,700 public schools and licensed child-care facilities responsible for educating over two million students. Safer Pest Control Project (SPCP) led the process for Illinois to pass one of the nation's first state laws that required public schools and licensed child-cares to use Integrated Pest Management (IPM) and reduce unhealthy exposure to both pests and toxic pesticides. In addition, a new amendment in 2009 added notification provisions for outdoor use of pesticides on turf and strong recommendations for natural lawn care. SPCP's comprehensive training program for child-care facilities to support these laws won an EPA Environmental Justice Award in 2009. SPCP, in collaboration with the Illinois Department of Public Health, provided free IPM training and technical assistance to hundreds of teachers and child-care staff across Illinois and helped create a strong statewide program.

The groundwork has been laid for Illinois to become one of the premier examples of how IPM can work to better control pests, lower costs, and create better indoor air quality for the health and safety of students and staff. The greatest barrier Illinois faces is its grave financial difficulties which undermine much of the advancements made. State-sponsored training and technical assistance is at a standstill, the State IPM coordinator position is open with no plans to fill it, and thus there is little or no enforcement. Our work remains as critical as before, and we will continue to fundraise and strategize on how to make up for a substantial lack of state resources to provide the safe and healthy learning environments our children deserve.

Indiana

In October of 2010, the Indiana Pesticide Review Board added Rule 16, titled Pesticide Use at Schools, to already existing Title 357 - Use of Pesticides in Indiana (357 IAC 1-16). The purpose of this rule is to minimize the potential for pesticide exposure to students at schools by ensuring that

- Pesticides are used only by a certified applicator; or an individual operating under the direct supervision of the certified applicator.
- Pesticides are not used when students are in the pesticide application area.
- Pesticides are stored in locked storage areas.
- Except for immediate health threat situations, school corporations provide advance notice of pesticide applications to school parents, guardians, and staff on a notification registry.
- School corporations keep records of pesticide applications.
- Pesticides with lowest hazards to children are used whenever practical and effective.

Improving Kids' Environment is currently working with schools in Indiana and Ohio on an EPA-funded Integrated Pest Management program, to assist schools in developing best practice policies and procedures in order to make chemical pesticide use a last resort for pest management.

Indiana was recently chosen for the 2012 AAFA Honor Roll™ by the Asthma and Allergy Foundation of America (AAFA), which assesses state-level school policies regarding asthma and allergies. (See the entire report -*State Honor Roll™ of Asthma and Allergy Policies for Schools*, www.StateHonorRoll.org). The report, released in October 2012, recognizes progress where it is happening and provides a blueprint for advocates and policy makers to improve policies nationwide. Overall, Indiana meets fifteen of eighteen core policy standards and ten of fifteen extra credit indicators.

Number of Public Schools	1,992
Number of Public School Students	1,047,232
Number of Minority Students	281,759
Number of Students Free & Reduced-Price Lunch Eligible	485,728
Number of Employees in School System	138,802
% Children under Age 19 without Health Insurance	9.1
% of Children with Asthma Aged 17 and Younger	8.8
% of Children Diagnosed with ADHD	13.2
Number of Students in Special Education Program	165,802
% Schools with at Least One Inadequate Building Feature	56%
% Schools with at Least One Unsatisfactory Environmental Factor	67%
State Education School Facilities Office	Y
States with Adopted OSHA Plan	Y
State Grants for Construction	N
States with School Building Assessments	N
State Requires that Schools Keep Asthma/Allergy Incident Reports	N
State School Green Cleaning Laws	N
High Performance Green School Design	N
Indoor Air Quality Policies	see footnote
States Require Periodic Inspection of Drinking Water Outlets for Lead	Y
States with Integrated Pest Management Plans	Y

Credit: *Improving Kids' Environment*

State data taken from federal and national sources: see footnotes in Appendices.

Iowa

Number of Public Schools	1,487
Number of Public School Students	495,775
Number of Minority Students	91,615
Number of Students Free & Reduced-Price Lunch Eligible	188,486
Number of Employees in School System	69,614
% Children under Age 19 without Health Insurance	4.9
% of Children with Asthma Aged 17 and Younger	6.2
% of Children Diagnosed with ADHD	9.7
Number of Students in Special Education Program	68,498
% Schools with at Least One Inadequate Building Feature	50%
% Schools with at Least One Unsatisfactory Environmental Factor	67%
State Education School Facilities Office	Y
States with Adopted OSHA Plan	Y
State Grants for Construction	Y
States with School Building Assessments	N
State Requires that Schools Keep Asthma/Allergy Incident Reports	Y
State School Green Cleaning Laws	Y
High Performance Green School Design	N
Indoor Air Quality Policies	see footnote
States Require Periodic Inspection of Drinking Water Outlets for Lead	N
States with Integrated Pest Management Plans	N

State data taken from federal and national sources: see footnotes in Appendices.

Green Cleaning: "Code 8A.318 (2010) encourages all school districts to conform to an environmentally preferable cleaning policy designed to facilitate the purchase and use of environmentally preferable cleaning and maintenance products. The law also directs all public school districts (as well as other state institutions) to conduct an evaluation and assessment regarding implementation of an environmentally preferable cleaning policy. Following the assessment, by July 2012, school districts are required to purchase only cleaning and maintenance products identified by the state Department of Administrative Services or products that meet nationally recognized standards."

Pesticide Application: "Administrative Code 21-45.50 requires pesticide applicators to post a notification within 24 hours of applying pesticides in urban areas in municipalities. This includes on school property."

See National Association of School Boards of Education (NASBE) "State School Healthy Policy Database" at http://nasbe.org/healthy_schools/hs/map.php

Kansas

Center School District #51, KS
(2,500 students)

- Visit was made by the ASBO Indoor Environmental Quality (IEQ) Advisory Group (AG) - made up of the Environmental Management Specialist (EMS) and the Environmental Program Facilitator (EPF) - in April 2009
- District formed IEQ committee
- School nurse aggressively pursued resolving IAQ issues to manage high asthma incidence
- Asthma Friendly Schools Program was adopted
- Health staff are now required to view the asthma friendly schools video
- Asthma triggers such as plants, air fresheners, and pets have been removed from the classrooms
- Children's Mercy Hospital (CMH) conducted staff training on asthma/IAQ
- Asthma visits to the nurse/office now being tracked, which includes the documentation of reasons for the visits including symptoms
- Each building has an IAQ team that meets regularly while the district team meets quarterly. Students and teachers implement creative activities to participate in Healthy Schools Day.
- Center teamed up with CMH to conduct a vacuum cleaner study to measure effectiveness of removing particulates."

Number of Public Schools	1,470
Number of Public School Students	483,701
Number of Minority Students	154,665
Number of Students Free & Reduced-Price Lunch Eligible	228,852
Number of Employees in School System	67,750
% Children under Age 19 without Health Insurance	8.7
% of Children with Asthma Aged 17 and Younger	7.5
% of Children Diagnosed with ADHD	10.0
Number of Students in Special Education Program	66,851
% Schools with at Least One Inadequate Building Feature	55%
% Schools with at Least One Unsatisfactory Environmental Factor	74%
State Education School Facilities Office	Y
States with Adopted OSHA Plan	N
State Grants for Construction	Y
States with School Building Assessments	N
State Requires that Schools Keep Asthma/Allergy Incident Reports	N
State School Green Cleaning Laws	N
High Performance Green School Design	N
Indoor Air Quality Policies	see footnote
States Require Periodic Inspection of Drinking Water Outlets for Lead	N
States with Integrated Pest Management Plans	N

Credit: *Association of School Business Officials*

State data taken from federal and national sources: see footnotes in Appendices.

Kentucky

Number of Public Schools	1,577
Number of Public School Students	673,128
Number of Minority Students	121,667
Number of Students Free & Reduced-Price Lunch Eligible	380,773
Number of Employees in School System	99,225
% Children under Age 19 without Health Insurance	6.9
% of Children with Asthma Aged 17 and Younger	10.7
% of Children Diagnosed with ADHD	12.4
Number of Students in Special Education Program	102,370
% Schools with at Least One Inadequate Building Feature	59%
% Schools with at Least One Unsatisfactory Environmental Factor	63%
State Education School Facilities Office	Y
States with Adopted OSHA Plan	Y
State Grants for Construction	Y
States with School Building Assessments	Y
State Requires that Schools Keep Asthma/Allergy Incident Reports	N
State School Green Cleaning Laws	N
High Performance Green School Design	Y
Indoor Air Quality Policies	see footnote
States Require Periodic Inspection of Drinking Water Outlets for Lead	N/A
States with Integrated Pest Management Plans	Y

State data taken from federal and national sources: see footnotes in Appendices.

Kentucky Green & Healthy Schools (KGHS) is a project-based and student-centered program that empowers students and staff to move their school toward becoming safer, healthier, and more environmentally sustainable. This inquiry-based program uses the entire school building and grounds as a learning laboratory for students. All grade levels of all existing schools (and even schools in the process of being built) are invited to join KGHS! Through this program, a team of students, teachers and school administrators (a Green & Healthy Team) works together to improve the school facilities in 9 different categories.

These categories are

- Energy
- Green Spaces
- Hazardous Chemicals
- Health & Safety
- Indoor Air Quality
- Instructional Leadership
- Solid Waste
- Transportation
- Water

By improving their school, students can help the school save energy costs, decrease absenteeism, increase student test scores, and create a more sustainable learning environment. Schools are recognized for their efforts through awards and attendance at the annual KGHS Summit. See Kentucky Green & Healthy Schools at http://greenschools.ky.gov/

Louisiana

Integrated Pest Management: "RS 3:3384 (1993) restricts the use of pesticides to a school building or on school grounds to hours only in which students will not be present for academics or extracurricular activities for at least 8 hours after the application. RS 3:3386 (1995) permits only individuals certified as a commercial applicator and trained in integrated pest management to apply or supervise the application of pesticides. An annual integrated pest management plan must be prepared by the governing authority of each school that applies integrated pest management strategies of pest prevention methods, according to RS 3:3388 (1995), and recommends the least toxic method in, on, or around school buildings and grounds per RS 3:3385 (1993)."

National Association of School Boards of Education (NASBE) "State School Healthy Policy Database" at http://nasbe.org/healthy_schools/hs/map.php

Number of Public Schools	1,509
Number of Public School Students	696,558
Number of Minority Students	358,432
Number of Students Free & Reduced-Price Lunch Eligible	460,546
Number of Employees in School System	100,880
% Children under Age 19 without Health Insurance	7.2
% of Children with Asthma Aged 17 and Younger	8.3
% of Children Diagnosed with ADHD	14.2
Number of Students in Special Education Program	82,934
% Schools with at Least One Inadequate Building Feature	50%
% Schools with at Least One Unsatisfactory Environmental Factor	66%
State Education School Facilities Office	N
States with Adopted OSHA Plan	N
State Grants for Construction	N
States with School Building Assessments	N
State Requires that Schools Keep Asthma/Allergy Incident Reports	Y
State School Green Cleaning Laws	N
High Performance Green School Design	N
Indoor Air Quality Policies	see footnote
States Require Periodic Inspection of Drinking Water Outlets for Lead	Y
States with Integrated Pest Management Plans	Y

State data taken from federal and national sources: see footnotes in Appendices.

Maine

Number of Public Schools	657
Number of Public School Students	189,077
Number of Minority Students	14,249
Number of Students Free & Reduced-Price Lunch Eligible	78,915
Number of Employees in School System	32,548
% Children under Age 19 without Health Insurance	5.8
% of Children with Asthma Aged 17 and Younger	8.5
% of Children Diagnosed with ADHD	9.6
Number of Students in Special Education Program	29,502
% Schools with at Least One Inadequate Building Feature	60%
% Schools with at Least One Unsatisfactory Environmental Factor	71%
State Education School Facilities Office	Y
States with Adopted OSHA Plan	N
State Grants for Construction	Y
States with School Building Assessments	Y
State Requires that Schools Keep Asthma/Allergy Incident Reports	Y
State School Green Cleaning Laws	Y
High Performance Green School Design	Y
Indoor Air Quality Policies	see footnote
States Require Periodic Inspection of Drinking Water Outlets for Lead	Y
States with Integrated Pest Management Plans	Y

Credit: *Maine PTA*

State data taken from federal and national sources: see footnotes in Appendices.

Green cleaning in schools is still a voluntary program in Maine. Unfortunately, due to staff and budget cuts, the original plan calling for the Maine Education Department to generate and maintain on its website a list of school administrative units that implement at least some green cleaning procedures or use one or more green cleaning chemicals has not been fulfilled as required by the Legislative Resolves passed in 2006.

The department continues to encourage schools to use "green" cleaning chemicals by listing preferable, third-party certified cleaning chemicals: http://www.maine.gov/education/const/chem/overview_green.htm The list gives a great deal of information, including which organization certified the product and whether or not the product contains fragrance. Another page provides Best Green Cleaning Management Practices: maine.gov/education/const/chem/green_cleaning_mgmt.doc

Also on the Department website is best practice information for carpet cleaning and maintenance: http://www.maine.gov/education/const/chem/carpet_maintenance.ppt The department's Chemicals in Schools home page can be found at http://www.maine.gov/education/const/chem/home.htm Although the department has taken steps in the right direction, local vigilance by citizen groups remains vital to ensuring oversight.

Maine Parent Teacher Association (ME PTA) and the Learning Disabilities Association of Maine collaborated on a statewide presentation to Parent Teacher Association members about the impact of chemicals found at home and in schools on children's health and development and steps parents can take to reduce exposure.

ME PTA was contacted recently by a PTA with concerns about town athletic fields used by schools. In spite of the requirement that any facilities used by schools meet Maine's integrated pest management requirements, the fields in that town smelled strongly of pesticides when the students arrived for a scheduled activity.

Maryland

Maryland still has no laws offering basic protections to students and staff during school construction, renovation, maintenance and custodial activities. Maryland has recently adopted three laws that are both opportunities and challenges.

Effective 2013, schools must adopt policies relating to the procurement of green cleaning supplies. Advocates were successful in including the "consideration of adverse health effects" under environmental attributes and the designation that products will be identified as "green" by a "nationally recognized independent third–party certifier entity that certifies environmentally preferable products." Unfortunately, these policies are subject to exceptions and allow boards to opt out if doing so is not practicable or economically feasible.

Maryland has become one of the only states to require Environmental Literacy (EL) Graduation Requirements. Maryland must now develop comprehensive, multi-disciplinary Environmental Education programs infused within the curricula and aligned with EL requirements.

In 2008, Maryland amended Maryland Education Code 5-301 requiring regulations governing IEQ in new relocatable classrooms. Additionally, Maryland recently enacted section 5-312, requiring new state-funded school construction to meet or exceed the LEED Silver rating (or state approved equivalent). However, there is no requirement to select any of the Indoor Environmental Quality credits under the LEED rating system.

Number of Public Schools	1,475
Number of Public School Students	852,211
Number of Minority Students	486,207
Number of Students Free & Reduced-Price Lunch Eligible	341,557
Number of Employees in School System	115,367
% Children under Age 19 without Health Insurance	5.1
% of Children with Asthma Aged 17 and Younger	11.9
% of Children Diagnosed with ADHD	11.9
Number of Students in Special Education Program	102,818
% Schools with at Least One Inadequate Building Feature	67%
% Schools with at Least One Unsatisfactory Environmental Factor	65%
State Education School Facilities Office	Y
States with Adopted OSHA Plan	Y
State Grants for Construction	Y
States with School Building Assessments	Y
State Requires that Schools Keep Asthma/Allergy Incident Reports	Y
State School Green Cleaning Laws	Y
High Performance Green School Design	Y
Indoor Air Quality Policies	see footnote
States Require Periodic Inspection of Drinking Water Outlets for Lead	N
States with Integrated Pest Management Plans	Y

Credit: *Maryland Children's Environmental Health Coalition*

State data taken from federal and national sources: see footnotes in Appendices.

Massachusetts

Number of Public Schools	1,849
Number of Public School Students	955,563
Number of Minority Students	305,397
Number of Students Free & Reduced-Price Lunch Eligible	326,849
Number of Employees in School System	122,057
% Children under Age 19 without Health Insurance	1.5
% of Children with Asthma Aged 17 and Younger	9.5
% of Children Diagnosed with ADHD	9.8
Number of Students in Special Education Program	167,754
% Schools with at Least One Inadequate Building Feature	75%
% Schools with at Least One Unsatisfactory Environmental Factor	80%
State Education School Facilities Office	Y
States with Adopted OSHA Plan	N
State Grants for Construction	Y
States with School Building Assessments	Y
State Requires that Schools Keep Asthma/Allergy Incident Reports	Y
State School Green Cleaning Laws	N
High Performance Green School Design	Y
Indoor Air Quality Policies	see footnote
States Require Periodic Inspection of Drinking Water Outlets for Lead	Y
States with Integrated Pest Management Plans	Y

Credit: *Massachusetts Coalition for Occupational Safety and Health (Mass COSH)*

State data taken from federal and national sources: see footnotes in Appendices.

Schools in Massachusetts can benefit from federal, state and local policies and programs aimed at improving health and environmental building conditions, but advocates continue to see huge gaps in needed resources and the political will to implement them.

Healthy school advocates believe that our state already has many of the "tools" necessary to create "green and healthy" schools, but they will continue to be utilized in a piecemeal fashion without a state mandate. This is a partial list of some of those "tools" and resources.

The MA School Building Authority (www.massschoolbuildings.org) provides financial incentives for school construction and renovation projects using High Performance Green School Design. Since 2010 the MSBA has initiated a "green repair" and "accelerated repair" program primarily for the repair and/or replacement of roofs, windows, and/or boilers with energy-efficient and cost-saving upgrades.

Schools can voluntarily take advantage of the Commonwealth's Environmentally Preferable Products Program (www.mass.gov/epp) which offers state approved vendors for green cleaning and 3rd party certified cleaning products, and approved vendors for integrated pest management.

The Statewide MA Asthma Action Partnership's (MAAP) five-year action plan (http://www.mass.gov/eohhs/docs/dph/com-health/asthma/state-plan.pdf) brings together parents, school staff, health professionals and state agencies who are working on actionable goals to reduce asthma severity and disparities in schools and housing.

Michigan

Air Quality: "In 2003, the State Board of Education adopted the Policy on Coordinated School Health Programs to Support Academic Achievement and Healthy Schools that recommends each school district to promote a positive school climate and safe school facility by monitoring air quality in schools for molds, dust, and property humidity as part of a Coordinated School Health Program. In 2005, the State Board of Education adopted the Policy on the Management of Asthma in Schools that recommends schools to implement best practice policies that prevent indoor and outdoor air quality problems which could include preventative maintenance on heating/cooling systems, construction and remodeling projects, bus idling, dust mites, and molds. Act 306 of 1937 (2002) calls for the regulation of construction, reconstruction, and remodeling of school buildings in order to promote the safety, welfare, and educational interests of the people of the state."

See National Association of School Boards of Education (NASBE) "State School Healthy Policy Database" at http://nasbe.org/healthy_schools/hs/map.php

Number of Public Schools	4,115
Number of Public School Students	1,587,067
Number of Minority Students	479,869
Number of Students Free & Reduced-Price Lunch Eligible	719,800
Number of Employees in School System	193,486
% Children under Age 19 without Health Insurance	5.1
% of Children with Asthma Aged 17 and Younger	11.1
% of Children Diagnosed with ADHD	9.9
Number of Students in Special Education Program	217,213
% Schools with at Least One Inadequate Building Feature	52%
% Schools with at Least One Unsatisfactory Environmental Factor	61%
State Education School Facilities Office	Y
States with Adopted OSHA Plan	Y
State Grants for Construction	N
States with School Building Assessments	N
State Requires that Schools Keep Asthma/Allergy Incident Reports	Y
State School Green Cleaning Laws	N
High Performance Green School Design	N
Indoor Air Quality Policies	see footnote
States Require Periodic Inspection of Drinking Water Outlets for Lead	N
States with Integrated Pest Management Plans	Y

State data taken from federal and national sources: see footnotes in Appendices.

Minnesota

Number of Public Schools	2,461
Number of Public School Students	838,037
Number of Minority Students	219,218
Number of Students Free & Reduced-Price Lunch Eligible	306,136
Number of Employees in School System	108,993
% Children under Age 19 without Health Insurance	6.7
% of Children with Asthma Aged 17 and Younger	N/A
% of Children Diagnosed with ADHD	7.8
Number of Students in Special Education Program	122,850
% Schools with at Least One Inadequate Building Feature	57%
% Schools with at Least One Unsatisfactory Environmental Factor	66%
State Education School Facilities Office	Y
States with Adopted OSHA Plan	Y
State Grants for Construction	Y
States with School Building Assessments	N
State Requires that Schools Keep Asthma/Allergy Incident Reports	N
State School Green Cleaning Laws	N
High Performance Green School Design	N
Indoor Air Quality Policies	see footnote
States Require Periodic Inspection of Drinking Water Outlets for Lead	N
States with Integrated Pest Management Plans	N

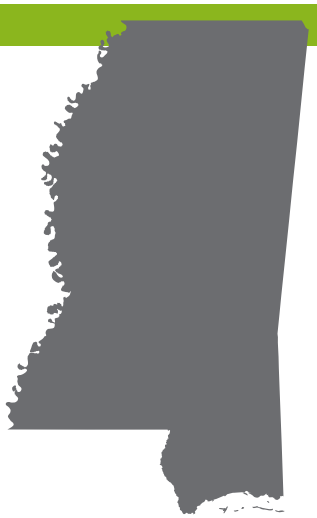
Credit: *ClearCorps, USA*

State data taken from federal and national sources: see footnotes in Appendices.

St. Paul Public Schools (SPPS) is making great strides to reduce children's exposure to toxins in classrooms and playgrounds. The Green and Healthy Schools (GHS) parent group has been advocating for toxic-free healthy learning environments with SPPS staff for five years. Our efforts are flourishing with receptive and responsive SPPS staff in Facilities, Custodial Services, Safety, Nutrition, Operations, and Energy & Sustainability Management. SPPS has 39,000 students; 75.8% are children of color and 72% qualify for Free and Reduced Lunch. Examples of the terrific changes SPPS has made ensuring healthier learning environments for children and stronger academic achievement include

- ALL SPPS schools are using Eco-Lab Green Seal certified cleaners.
- Bleach is no longer being used except as a required disinfectant.
- Vacuums are all HEPA vacs.
- SPPS is investigating green hand soaps.
- Three chemical-free ionizing floor scrubbers are being used in the district.
- No herbicides or fertilizers are being used on any SPPS turf.
- SPPS is engaged in a study with the University of Minnesota to identify a resilient turf breed for athletic fields.
- SPPS is working to obtain equipment to enhance pesticide-free turf maintenance.
- Indoor Pest Control: >500 door-sweeps have been replaced; glue boards are being used for mice control; teacher requests for mice control are in database; custodial staff conduct monthly checks; and pesticides are used as a last resort as part of the district's IPM plan.
- SPPS is developing its Sustainability Master Plan.
- SPPS has had an IAQ plan in place for 10-12 years. Mechanical systems are assessed yearly.
- SPPS is hiring an Environmental Services Manager.

GHS, a CLEARCorps USA program, is continuing to work with SPPS to secure sustainable toxic-free schools.



Mississippi

Air Quality: "Code 41-79-31 (2010) requires local school health councils to conduct a school health needs assessment that addresses and supports the eight components of the coordinated school health model. The results of the assessment must be used in the development of long-range maintenance plans that include specific indoor air quality components for each school building. The long-range maintenance plans must be included in the local school wellness policy. 41-79-31 (2010) requires the State Department of Education to require that local school health councils adopt and support the implementation of a local school wellness policy that includes minimizing children's exposure to dust, gases, fumes and other pollutants that can aggravate asthma in the school setting. The policy must require the air quality and ventilation systems of schools to be assessed annually, which assessment may be accomplished with the EPA's Tools for Schools Indoor Air Quality Checklist. The policy also must prohibit the use of hazardous substances such as, but not limited to, chemical cleaning products and pesticides in and around school buildings during the hours that children are present at school. The policy must require all school construction projects to implement containment procedures not later than July 1, 2012, for dusts, gases, fumes and other pollutants that trigger asthma."

See National Association of School Boards of Education (NASBE) "State School Healthy Policy Database" at http://nasbe.org/healthy_schools/hs/map.php

Number of Public Schools	1,115
Number of Public School Students	490,526
Number of Minority Students	264,829
Number of Students Free & Reduced-Price Lunch Eligible	345,734
Number of Employees in School System	67,866
% Children under Age 19 without Health Insurance	10.9
% of Children with Asthma Aged 17 and Younger	8.6
% of Children Diagnosed with ADHD	9.9
Number of Students in Special Education Program	63,786
% Schools with at Least One Inadequate Building Feature	50%
% Schools with at Least One Unsatisfactory Environmental Factor	54%
State Education School Facilities Office	Y
States with Adopted OSHA Plan	N
State Grants for Construction	Y
States with School Building Assessments	N
State Requires that Schools Keep Asthma/Allergy Incident Reports	Y
State School Green Cleaning Laws	N
High Performance Green School Design	N
Indoor Air Quality Policies	see footnote
States Require Periodic Inspection of Drinking Water Outlets for Lead	Y
States with Integrated Pest Management Plans	N

State data taken from federal and national sources: see footnotes in Appendices.

Missouri

Number of Public Schools	2,451
Number of Public School Students	918,710
Number of Minority Students	232,563
Number of Students Free & Reduced-Price Lunch Eligible	406,358
Number of Employees in School System	128,289
% Children under Age 19 without Health Insurance	7.3
% of Children with Asthma Aged 17 and Younger	10.9
% of Children Diagnosed with ADHD	10.8
Number of Students in Special Education Program	127,148
% Schools with at Least One Inadequate Building Feature	54%
% Schools with at Least One Unsatisfactory Environmental Factor	58%
State Education School Facilities Office	Y
States with Adopted OSHA Plan	N
State Grants for Construction	N
States with School Building Assessments	N
State Requires that Schools Keep Asthma/Allergy Incident Reports	N
State School Green Cleaning Laws	Y
High Performance Green School Design	N
Indoor Air Quality Policies	see footnote
States Require Periodic Inspection of Drinking Water Outlets for Lead	N
States with Integrated Pest Management Plans	N

State data taken from federal and national sources: see footnotes in Appendices.

Green Cleaning: "Statute 161.365 (2008) requires the Department of Education, along with other stakeholders, to establish and amend on an annual basis guidelines and specifications for green cleaning programs, including environmentally sensitive cleaning and maintenance products, paper product purchases, and equipment purchases for cleaning programs. The Department must disseminate the resulting Green Cleaning Guidelines and Specifications for Schools (2009) to each district, which in turn must disseminate to each school."

See National Association of School Boards of Education (NASBE) "State School Healthy Policy Database" at http://nasbe.org/healthy_schools/hs/map.php

Selected Endorsements for Healthy School Environments

"The American Association on Intellectual and Developmental Disabilities (AAIDD) supports a healthy and safe environment for children and staff …throughout the nation."

— **Margaret A. Nygren, EdD, Executive Director and CEO**
American Association on Intellectual and Developmental Disabilities

"The health of our schools directly affects the health of our kids. Poor indoor air quality, unsafe spaces and other hazards lead to illness, injury and poor attendance and compromise academic achievement . . . . We urge our leaders to become involved and work to assure that the places where our children live, learn, grow, and play are safe and healthy."

— **Georges C. Benjamin, MD, FACP, FACEP (E), Executive Director**
American Public Health Association

"Children need better protection from toxic chemical exposure while at school. The body of evidence in scientific literature shows that pesticide exposure can adversely affect a child's neurological, respiratory, immune, and endocrine system, even at low levels. Fortunately, effective and safer pest management strategies that do not rely on harmful pesticides exist."

— **Jay Feldman, Executive Director**
Beyond Pesticides

"The Council of Educational Facility Planners International (CEFPI) is a proud advocate for healthy schools, as we believe that healthy schools should be a given, not a choice. Students and staff spend a significant amount of time in our school buildings, and it is imperative that these be healthy schools. Research shows that healthy schools have a positive impact on student success, as they lead to improved attendance, academic achievement, and better overall wellbeing. In addition, healthy schools also reduce energy consumption and maintenance costs, and provide green, sustainable and safe environments for students to learn."

— **Irene Nigaglioni, AIA, CEFP, Chair**
Council of Educational Facility Planners International (CEFPI)

"Our future as a society is dependent on the generations of young people attending schools across our country today. For their sake and ours, ensuring that the buildings, materials, and surroundings where they go to school are safe should be our first priority as a nation."

— **Vernice Miller-Travis, Vice Chair**
Maryland State Commission on Environmental Justice and Sustainable Communities

"The Mid-Atlantic Center for Children's Health & the Environment wants every child to attend a school that is free of environmental hazards that interfere with learning or compromise health."

— **Jerome A. Paulson, MD FAAP, Director**
Mid-Atlantic Center for Children's Health & the Environment Children's National Medical Center

"NEA-HIN's teachers and education support professionals understand the connection between a healthy school and academic achievement. By working together, we can make the changes needed to make every school a safe and healthy place for both students and staff."

— **Jerald Newberry, Executive Director**
National Education Association Health Information Network

"NEHA and the thousands of practitioners we represent in the environmental health profession recognize children's environmental health issues as being one of our core priority areas. Our work in the area of school food safety, indoor air quality in schools, asthma trigger risk reduction, and smoking cessation are all reflective of that concern."

— **Larry Marcum, Managing Director, Government Affairs and Research and Development National Environment Health Association (NEHA)**

Alaska Community Action on Toxics staff with children from the Auntie May Nicoli Elementary School, Aniak, AK, after holding a workshop on green cleaning and environmental health.

Fracking Goe

Natural Gas Wells on School Grounds in New York:

What impact will fracked wells have on children's health, and who's in charge of inspections and maintenance?

Fracking underway near Colorado elementary school.

Silica sand-filled rail cars parked 60 feet from Pennsylvania day care c

New York State is considering the rules by which natural gas wells will be permitted to use high-volume hydraulic fracturing in horizontal gas exploration. Unfortunately, we believe that studies to date lack an in-depth look at how children will be affected. The words "children," "asthma," and "learning disabilities" do not appear even once in the state's 1537-page draft environmental impact statement (DEIS). We are concerned that the generic environmental impact statement (GEIS) being developed by the state Department of Environmental Conservation (DEC) will not provide a sufficient buffer area for such wells drilled on or near public and private school grounds and public and private child-care centers. We are also concerned with already existing natural gas wells on or near schools in Upstate New York. Our research indicates that schools with permitted wells that self-supply are not regulated by any state agency or subjected to ongoing inspections. Healthy Schools Network has recommended the DEC, in concert with the Department of Health and the Education Department, conduct a robust human health impact assessment of the proposed hydrofracking in the Marcellus Shale region that includes:

- Assessing risks and detailing mitigations of potential threats to children where they live, learn, and play in the hydrofracking zone, including from noise, air and water pollution, traffic hazards, chemical mismanagement and spills, and hazardous waste disposal.
- Developing and publicizing a map of all public and private P-12 schools and all public and private child-care centers and Head Starts in the potential fracking zone that currently rely on private well water.
- Based on an accurate health assessment, establish meaningful buffer zones that protect children's health.

Map indicates active and inactive gas wells on school grounds in Upstate New Yor
visit: http://www.healthyschools.org

es to School

enter.

k. For more details

The Story of Le Roy Junior/Senior High School

In the fall of 2011, at least 12 students at Le Roy Junior/Senior High School near Batavia, NY, developed neurological tic symptoms that impacted their ability to function and attend school. More students developed similar symptoms in the new year, precipitating parental and community concern and pressure to find a cause. The school district worked with consultants and state agencies who labeled the outbreak "conversion disorder" before ever considering environmental triggers

Subsequent research determined that there are at least six natural gas wells on the school property, of which four were drilled using the low-volume hydrofracking technique. In addition, state environmental officials have cited the school for at least two brine spills.

New York State needs to clarify who is responsible for ongoing inspections of existing natural gas wells on school grounds. In addition, the potential health effects of air emissions, brine spills, diesel trucks, and other fracking-related activities need to be thoroughly evaluated in any health impact assessment.

Le Roy students (A) congregate near site of brine spill (B) from gas well number 6.

Parents and Community Members Concerned for Children's Environmental Health

(excerpts from Healthy Schools Network files)

Suburban New York City Parent.
After more than ten years of parent actions, a district has forwarded a playing field remediation plan to the state environment agency and had it approved.

- 1998: District allows a company to dump construction debris on school grounds in exchange for building playing fields that cover the dumping site.
- 2001: State Department of Environmental Conservation cites school for accepting improper fill; school contractor determined there were no public health threats.
- 2003: District agrees to state consent order for additional water and soil testing, then defunded it the following year.
- 2004: Parent and child testify at legislative hearing about school-based exposures and the unwillingness to accommodate.
- 2007-2011: Parents complain about the fields after children report finding nails and other materials; fields closed, and later parents learn about old dumping. On testing, fields show high levels of PAHs (polycyclic aromatic hydrocarbons).
- 2012: District responds to claims of a possible cancer cluster for *the first time publicly*, and approves a remediation plan. Finally, in fall 2012, state issues determination that proposed field remediation plans are comprehensive and appropriate to protect health and environment.

Rural SC Parent.
My older child was forced to drop out of school due to severe allergies and sensitivities. He is trying to earn a GED on his own as the school ignored our physician letters and declined to classify him as disabled. He has received no educational services from the school. Now my second child, also severely allergic, is about to drop out. I am a taxpayer. I have children who need an education and need help. Which agency can help us?

Rural OH Parent.
Ten years ago my children's school was dirty and moldy, due to dampness and poor maintenance. After a great deal of fact finding and advocacy we have a new school–and guess what–due to poor construction management and maybe poor design and maintenance, the new building leaks and is now growing molds indoors. My children are out of the system, but what can we do about the children now caught up in another moldy building. Couldn't this have been avoided?

IL Parent.
My daughter is a very allergic child. Exposures to certain chemicals can make her quite ill. In school she is constantly sick: vomiting, bloody stools. She carries an EpiPen. Her teachers are aware of her problems and have instructions to avoid these chemicals, but are ignoring them. The principal is aware but has not intervened with the teachers. Can you help prepare me to speak at the next board meeting?

KA Parent.
There are illnesses going around school. Kids have watery eyes one day, headaches the next, and fevers. Parents are not notified. I know there are water leaks in the library and molds. The kids are being asked to help clean up the moldy library. I called the health department but I was told it did not handle mold complaints.

San Francisco IAQ Program:
Technology and Student Involvement

(excerpts from American Association of School Administrators)

In 1998, San Francisco Unified School District (SFUSD) began working with EPA Region 9 to address community concerns over students suffering from asthma in schools. In 2005, a resolution passed requiring all district schools to implement programs to improve indoor air quality (IAQ). In 2007, an IAQ coordinator joined SFUSD to develop a plan for institutionalizing Tools for Schools (TfS) in all schools by 2010. The TfS concepts have been incorporated into the classroom via an IAQ lab course for elementary and middle school students on how to conduct field investigations, interview occupants, and create solutions. The next steps for SFUSD are to examine student illness data, specifically to track asthma, and target IAQ interventions. An extended component of the district's IAQ program is the district's green cleaning program, expected to reach 51 schools in 2013. SFUSD is working with the SF Asthma Task Force and the SF Department of Public Health to develop and disseminate new educational materials to explain the benefits of green cleaners and to discourage teachers from bringing in their own often hazardous products. Read more about the project at: http://iaqinpractice.org/district-themes/san-francisco-unified-school-district/

New York City PCB Campaign

(excerpts from New York Lawyers for the Public Interest)

Among the most toxic man-made chemicals on the planet, Poly-chlorinated biphenyls (PCBs) are increasingly linked to the most serious of human health issues including: cancer, childhood leukemia, liver disease, heart disease, permanently depressed IQ, autism, diabetes, asthma, hormonal disturbance. With the passage of the Toxic Substances Control Act in 1977, Congress banned the manufacturing of PCBs and in 1979 banned their use, except in a totally enclosed manner. Developed by Monsanto in 1929 as an electrical insulator and elasticizer, prior to the ban, PCBs were used indiscriminately in building materials and electrical equipment and are commonly found in buildings constructed and remodeled between 1950 through 1978. PCB contamination of our waterways is common knowledge, but more recently communities are grappling PCB contamination within their older school buildings.

Since 2009 parents and advocacy groups in New York City, the largest public school system in the United States, with more than one million students, have campaigned to rid their schools of PCB contaminated caulking materials and, more recently, PCB contaminated lighting fixtures that are actively leaking PCBs into classrooms. As more school communities confront PCB contamination in their schools, NYC's PCB campaign offers many lessons on how to tackle this significant public health issue threatening students and school staff across the country.

The NYC PCB free schools campaign started with a concerned Bronx parent teaming up with New York Lawyers for the Public Interest to sue the New York City Department of Education (DOE) over PCB contaminated caulk at her daughter's school. In October 2009, the DOE settled the case by entering into an agreement with the Environmental Protection Agency (EPA) to launch a five school pilot program to study caulk remediation options and devise a plan to address PCB contaminated caulk throughout the City's school system. The pilot study started in the summer of 2010 with the DOE testing three of the five pilot schools for PCB contamination. To everyone's surprise, the air tests showed PCB contamination well beyond what was expected for contamination associated with caulking. Further investigation showed that there was another PCB contaminator in the classroom responsible for the high levels of PCBs in the air – T12 fluorescent lights with lighting ballasts containing PCBs.

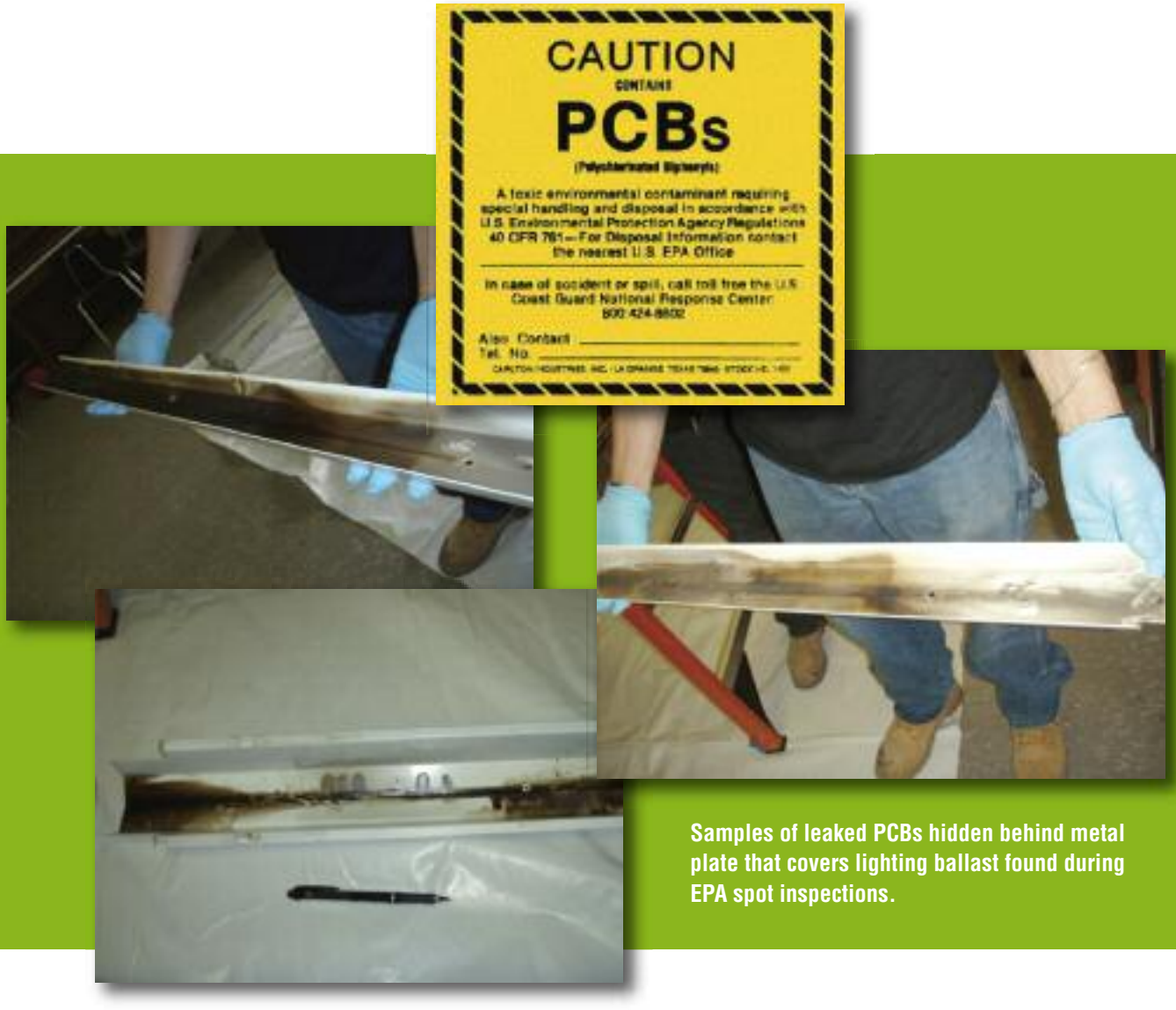
The PCB light ballasts at issue were all decades beyond their 10 to 15 year life expectancy and, as such, were failing and leaking pure PCBs onto the surfaces below the lights and contaminating the air. The PCB ballast leakage rate at these schools was extremely high and in one pilot school, 96% of the PCB ballasts were leaking.

Alarmed by the revelation, EPA Region 2 performed "spot inspections" at 7 non-pilot study school buildings and found leaking PCB lights at 100% of the schools. In response, the EPA urged the DOE to develop and implement a plan to replace the PCB containing light fixtures still utilized at over 700 school buildings throughout the city. Unfortunately, the DOE responding by lumping replacing the PCB lights into the City's Greener Schools plan mandated local legislation requiring energy upgrades to its building in excess of 50,000 square feet within 10 years.

Finding 10 years an unacceptably long remediation timeline, in July 2011 New York Communities for Change (NYCC) partnered with New York Lawyers for the Public Interest and sued the DOE and the School Construction Authority (SCA), seeking a court order to force the City to replace PCB containing T12 light fixtures within a much shorter timeline. Since the summer of 2010, NYCC and NYLPI have led a coalition of parents, students, schools staff, unions, and elected officials in a campaign to pressure the DOE to shorten its 10-year time frame for replacing the PCB lighting.

The campaign has won some impressive federal and local victories. On the federal level, the campaign was instrumental in ushering in EPA guidance to school administrators on the importance of removing PCB containing light fixtures. On a local level, grassroots advocacy secured the passage two laws that provide valuable information to parents regarding potential and actual PCB contamination at their child's school.

Responding to our campaign, the DOE instituted a visual inspection protocol whereby custodial engineers examine the exterior of T-12 light fixtures for signs of PCB leaking. Although the visual protocol fails to find the vast majority of the leaks because the ballasts are hidden behind a metal plate that catches the leaked substance, visual inspections have identified nearly 300 schools with visibly leaking PCB light fixtures and placed them on a fast-tracked replacement timeline. Yet, when these light fixtures are physically examined, we are finding nearly all of the ballasts are leaking. In one recent example in Staten Island, PCBs spilled from a light onto a fifth grade student as she sat at her desk. Responding to community outrage over this incident, the DOE replaced all the PCB lights at the school; 96% of the T-12 light fixtures were actively leaking PCBs. Accordingly, the campaign continues to pressure the DOE to physically examine the lights in order to identify leaks and to replace all the T-12 lights school system wide on a timeline that places students' and staff's health first.



Samples of leaked PCBs hidden behind metal plate that covers lighting ballast found during EPA spot inspections.

Montana

Integrated Pest Management: "MCA 80-8-404 (1993) requires the department of agriculture to develop a model school integrated pest management safety program that includes information on pests, environmental concerns, and recommendations for protecting school children from exposure to pesticides and the potential acute and chronic health effects. Further, MCA 80-8-107 (1997) requires school building operators to post notices of pesticide application at each access to the room."

See National Association of School Boards of Education (NASBE) "State School Healthy Policy Database" at http://nasbe.org/healthy_schools/hs/map.php

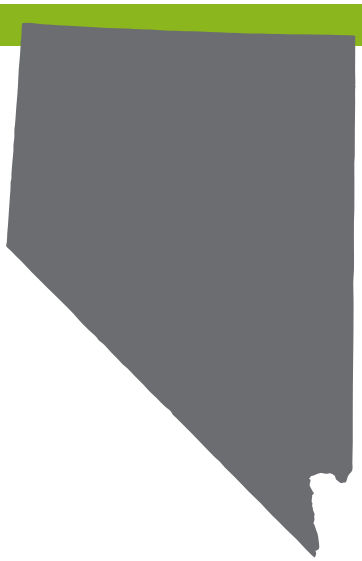
Number of Public Schools	829
Number of Public School Students	141,693
Number of Minority Students	25,866
Number of Students Free & Reduced-Price Lunch Eligible	57,836
Number of Employees in School System	19,249
% Children under Age 19 without Health Insurance	13.1
% of Children with Asthma Aged 17 and Younger	6.9
% of Children Diagnosed with ADHD	8.5
Number of Students in Special Education Program	16,760
% Schools with at Least One Inadequate Building Feature	45%
% Schools with at Least One Unsatisfactory Environmental Factor	69%
State Education School Facilities Office	Y
States with Adopted OSHA Plan	N
State Grants for Construction	Y
States with School Building Assessments	Y
State Requires that Schools Keep Asthma/Allergy Incident Reports	N
State School Green Cleaning Laws	N
High Performance Green School Design	N
Indoor Air Quality Policies	see footnote
States Require Periodic Inspection of Drinking Water Outlets for Lead	Y
States with Integrated Pest Management Plans	Y

State data taken from federal and national sources: see footnotes in Appendices.

Nebraska

Number of Public Schools	1,127
Number of Public School Students	298,500
Number of Minority Students	87,295
Number of Students Free & Reduced-Price Lunch Eligible	127,114
Number of Employees in School System	45,509
% Children under Age 19 without Health Insurance	6.6
% of Children with Asthma Aged 17 and Younger	6.1
% of Children Diagnosed with ADHD	9
Number of Students in Special Education Program	44,299
% Schools with at Least One Inadequate Building Feature	44%
% Schools with at Least One Unsatisfactory Environmental Factor	61%
State Education School Facilities Office	N
States with Adopted OSHA Plan	N
State Grants for Construction	N
States with School Building Assessments	N
State Requires that Schools Keep Asthma/Allergy Incident Reports	Y
State School Green Cleaning Laws	N
High Performance Green School Design	N
Indoor Air Quality Policies	see footnote
States Require Periodic Inspection of Drinking Water Outlets for Lead	N
States with Integrated Pest Management Plans	N

State data taken from federal and national sources: see footnotes in Appendices.



Nevada

Green Cleaning: "NRS 368.4195 (2009) requires the Department of Education, in consultation with other agencies and groups, to adopt regulations setting for the standards for environmentally sensitive cleaning and maintenance products for use in the cleaning of all floor surfaces in public schools. Each school district must ensure that the public schools within the district use only environmentally sensitive cleaning and maintenance products in the cleaning of all floor surfaces in the public schools. Districts may apply for a 1-year waiver if the costs associated with the purchase of such products would place an undue burden on the school district or a particular school in the district."

See National Association of School Boards of Education (NASBE) "State School Healthy Policy Database" at http://nasbe.org/healthy_schools/hs/map.php

Number of Public Schools	677
Number of Public School Students	437,149
Number of Minority Students	257,929
Number of Students Free & Reduced-Price Lunch Eligible	219,903
Number of Employees in School System	33,400
% Children under Age 19 without Health Insurance	18.4
% of Children with Asthma Aged 17 and Younger	8.6
% of Children Diagnosed with ADHD	5.6
Number of Students in Special Education Program	48,048
% Schools with at Least One Inadequate Building Feature	42%
% Schools with at Least One Unsatisfactory Environmental Factor	57%
State Education School Facilities Office	N
States with Adopted OSHA Plan	Y
State Grants for Construction	N
States with School Building Assessments	N
State Requires that Schools Keep Asthma/Allergy Incident Reports	Y
State School Green Cleaning Laws	Y
High Performance Green School Design	N
Indoor Air Quality Policies	see footnote
States Require Periodic Inspection of Drinking Water Outlets for Lead	N
States with Integrated Pest Management Plans	Y

State data taken from federal and national sources: see footnotes in Appendices.

New Hampshire

Number of Public Schools	483
Number of Public School Students	194,711
Number of Minority Students	19,933
Number of Students Free & Reduced-Price Lunch Eligible	48,904
Number of Employees in School System	32,955
% Children under Age 19 without Health Insurance	4.9
% of Children with Asthma Aged 17 and Younger	N/A
% of Children Diagnosed with ADHD	8.5
Number of Students in Special Education Program	29,778
% Schools with at Least One Inadequate Building Feature	59%
% Schools with at Least One Unsatisfactory Environmental Factor	78%
State Education School Facilities Office	Y
States with Adopted OSHA Plan	N
State Grants for Construction	Y
States with School Building Assessments	N
State Requires that Schools Keep Asthma/Allergy Incident Reports	Y
State School Green Cleaning Laws	N
High Performance Green School Design	Y
Indoor Air Quality Policies	see the footnote
States Require Periodic Inspection of Drinking Water Outlets for Lead	Y
States with Integrated Pest Management Plans	N

Credit: *New Hampshire Coalition for Occupational Safety and Health*

State data taken from federal and national sources: see footnotes in Appendices.

In 2010, two significant bills were passed into law by New Hampshire legislators. The first, 200:48 Air Quality in Schools, requires schools to set policies to address the minimizing or eliminating of emissions from all motorized vehicles on school property taking into account the state's anti-idling and clean air zone policies already established by the NH Department of Environmental Services. The second law is 200:11-a Investigation of Air Quality, giving the NH Department of Education authorization to establish an indoor air quality investigative checklist which is to be filled out annually for every school building in NH by the principal or his/her designee. A copy of the checklist is to be sent to the municipal health officer and to the NH Department of Education.

The NH Partners for Healthy Schools, a partnership of 28 or so nonprofit, for profit organizations, municipal, federal and state government agencies, has been working with the NH Department of Education to develop the checklist which they now have on Survey Monkey and hope to have it on the website by the end of 2013. Every school is required to have a copy of the US EPA's Tools for Schools Action Kit as required by law.

New Hampshire state agencies report that in the 2010-2011 school year there were 190,805 students with 20,837 minority students. The percentage of children under 19 in 2010 stood at 5.2%. Asthma rates for children under the age of 18 from the years 2006-2008 stands at 8.4% or about 25,000.

See NH Partners for Healthy Schools (NHPHS) at: http://www.nhhealthyschoolenvironments.org/

New Jersey

On average, New Jersey's 2,500 school buildings are 50 years old and are four times more densely populated than office buildings. Age and overcrowding put intense strain on ventilation and heating systems, plumbing, electrical systems, and physical structures. Students and staff in many schools are exposed to mold and other indoor air pollutants. In 2011, the poorest school districts identified 716 "emergent" conditions defined as "so potentially hazardous that it causes an imminent peril to the health and safety of students or staff."

The New Jersey Supreme Court Abbott vs. Burke ruling found the education provided to school children in poor communities was inadequate and unconstitutional. The court ruling mandated the state "to ameliorate the severely deficient condition and quality of school buildings in low-wealth neighborhoods" (see http://www.edlawcenter.org/cases/abbott-v-burke/abbott-history.html). In 2008, the NJ legislature approved $3.9 billion in bond financing for the state's program to fund school construction and repair projects.

When Governor Chris Christie took office in 2010, he ordered a halt to the program that funded new construction and emergent repairs in low-wealth neighborhoods. Occasional news releases have announced that a very small number of projects will move forward but even those are not actually being done. Years of delayed maintenance and stalled new construction projects have led to unhealthy schools.

The New Jersey Work Environment Council is coordinating the Healthy Schools Now campaign, a statewide effort to ensure healthy schools for all of New Jersey's students, teachers and school staff. The campaign platform promotes 1) safe and modernized school buildings, 2) danger-free learning environments, 3) healthy air, and 4) safe temperatures.

Number of Public Schools	2,634
Number of Public School Students	1,402,548
Number of Minority Students	679,906
Number of Students Free & Reduced-Price Lunch Eligible	444,736
Number of Employees in School System	202,634
% Children under Age 19 without Health Insurance	6.7
% of Children with Asthma Aged 17 and Younger	9.0
% of Children Diagnosed with ADHD	9.0
Number of Students in Special Education Program	225,241
% Schools with at Least One Inadequate Building Feature	53%
% Schools with at Least One Unsatisfactory Environmental Factor	69%
State Education School Facilities Office	Y
States with Adopted OSHA Plan	Y
State Grants for Construction	Y
States with School Building Assessments	Y
State Requires that Schools Keep Asthma/Allergy Incident Reports	Y
State School Green Cleaning Laws	N
High Performance Green School Design	Y
Indoor Air Quality Policies	see footnote
States Require Periodic Inspection of Drinking Water Outlets for Lead	Y
States with Integrated Pest Management Plans	Y

Credit: *New Jersey Work Environment Council*

State data taken from federal and national sources: see footnotes in Appendices.

New Mexico

Number of Public Schools	873
Number of Public School Students	338,122
Number of Minority Students	250,113
Number of Students Free & Reduced-Price Lunch Eligible	227,077
Number of Employees in School System	46,519
% Children under Age 19 without Health Insurance	12.3
% of Children with Asthma Aged 17 and Younger	8.0
% of Children Diagnosed with ADHD	7.1
Number of Students in Special Education Program	46,612
% Schools with at Least One Inadequate Building Feature	69%
% Schools with at Least One Unsatisfactory Environmental Factor	75%
State Education School Facilities Office	Y
States with Adopted OSHA Plan	Y
State Grants for Construction	Y
States with School Building Assessments	Y
State Requires that Schools Keep Asthma/Allergy Incident Reports	N
State School Green Cleaning Laws	N
High Performance Green School Design	Y
Indoor Air Quality Policies	see footnote
States Require Periodic Inspection of Drinking Water Outlets for Lead	Y
States with Integrated Pest Management Plans	N

State data taken from federal and national sources: see footnotes in Appendices.

Integrated Pest Management: "6.30.2.10 E(4) NMAC requires to districts to develop procedures for pest management for school facilities and grounds. The code specifies that pesticide application may not be done while students, staff or visitors are present or will be present within 6 hours and notification must be given either oral or written of anticipated pesticide application."

Student-to-Nurse Ratio: "There is no mandated ratio in New Mexico. Health services are required to be provided; however, the number of school nurses in a district is determined at the local level and is based on the size of the school/district and the assessed needs of the students."

See National Association of School Boards of Education (NASBE) "State School Healthy Policy Database" at http://nasbe.org/healthy_schools/hs/map.php

New York

In 1995, after too many media headlines about sick schools, the New York State Board of Regents adopted its landmark Advisory Committee Report on School Environmental Quality. It is a replicable model of how states can promote comprehensive policies. More than 15 years later, recommendations such as those to eliminate mercury, improve indoor air using EPA's IAQ Tools for Schools protocol, reduce and provide notice of pesticide uses, adopt nontoxic cleaning, and improve facility design and funding, are in place. But some elements are unfulfilled.

Seizing on federal opportunities, New York has taken two new steps. In 2011, the education department elected to participate in the federal Education Department's Green Ribbon Schools Award. In 2012, the health department won a US EPA Office of Children's Health Protection grant to address the gaps in environmental health in schools. The department has published studies on school environments showing, for example, that schools are filled with asthma triggers "inconsistent" with state laws, and that pediatric asthma hospitalizations can triple on returning to school throughout the academic year. These are powerful findings.

The need for timely invention services for children – both to protect their health and to save on health care costs — could not be clearer.

See www.healthyschools.org/ny_program.html

Number of Public Schools	4,791
Number of Public School Students	2,734,955
Number of Minority Students	1,338,457
Number of Students Free & Reduced-Price Lunch Eligible	1,315,564
Number of Employees in School System	413,971
% Children under Age 19 without Health Insurance	4.9
% of Children with Asthma Aged 17 and Younger	7.4
% of Children Diagnosed with ADHD	9.2
Number of Students in Special Education Program	452,551
% Schools with at Least One Inadequate Building Feature	67%
% Schools with at Least One Unsatisfactory Environmental Factor	76%
State Education School Facilities Office	Y
States with Adopted OSHA Plan	Y
State Grants for Construction	Y
States with School Building Assessments	Y
State Requires that Schools Keep Asthma/Allergy Incident Reports	N
State School Green Cleaning Laws	Y
High Performance Green School Design	Y
Indoor Air Quality Policies	see footnote
States Require Periodic Inspection of Drinking Water Outlets for Lead	Y
States with Integrated Pest Management Plans	Y

Credit: *Healthy Schools Network, Inc.*

State data taken from federal and national sources: see footnotes in Appendices.

North Carolina

Number of Public Schools	2,609
Number of Public School Students	1,490,605
Number of Minority Students	698,114
Number of Students Free & Reduced-Price Lunch Eligible	777,978
Number of Employees in School System	193,039
% Children under Age 19 without Health Insurance	8.7
% of Children with Asthma Aged 17 and Younger	N/A
% of Children Diagnosed with ADHD	15.6
Number of Students in Special Education Program	184,704
% Schools with at Least One Inadequate Building Feature	55%
% Schools with at Least One Unsatisfactory Environmental Factor	68%
State Education School Facilities Office	Y
States with Adopted OSHA Plan	Y
State Grants for Construction	Y
States with School Building Assessments	Y
State Requires that Schools Keep Asthma/Allergy Incident Reports	N
State School Green Cleaning Laws	N
High Performance Green School Design	N
Indoor Air Quality Policies	see footnote
States Require Periodic Inspection of Drinking Water Outlets for Lead	Y
States with Integrated Pest Management Plans	Y

State data taken from federal and national sources: see footnotes in Appendices.

Air Quality: "Statute 115C-48 (2006) requires local boards of education to adopt policies and procedures to reduce students' exposure to diesel emissions. 115C-12(34) (2006) requires the State Board of Education to study methods for mold and mildew prevention and mitigation and incorporate recommendations into the public school facilities guidelines as needed."

Integrated Pest Management: "Statute 115C-45 (2006) requires local boards of education to adopt policies that address the use of pesticides in schools. These policies must include notification of the students' parents or guardians and school staff on the schedule of pesticide use on school property and their right to request notification. Certain pesticide products (outlined in the statute) are exempt from notification. In addition, the policies must require the use of Integrated Pest Management, as defined in the statute."

See National Association of School Boards of Education (NASBE) "State School Healthy Policy Database" at http://nasbe.org/healthy_schools/hs/map.php

North Dakota

Circle of Nations-Wahpeton Indian School, ND, Students help design a state of the art dormitory and preserve their oldest American Indian traditions.

This school earned a US Department of Education Green Ribbon School award in part due to its gardening and service learning at every grade level, a nationally certified schoolyard habitat, energy savings and physical activity and nutrition programs. To see the school's application and learn more, visit http://www2.ed.gov/programs/green-ribbon-schools/2012-schools/nd-circle-of-nations.pdf

Number of Public Schools	521
Number of Public School Students	96,323
Number of Minority Students	15,662
Number of Students Free & Reduced-Price Lunch Eligible	29,929
Number of Employees in School System	16,239
% Children under Age 19 without Health Insurance	5.7
% of Children with Asthma Aged 17 and Younger	6.4
% of Children Diagnosed with ADHD	10.0
Number of Students in Special Education Program	13,097
% Schools with at Least One Inadequate Building Feature	49%
% Schools with at Least One Unsatisfactory Environmental Factor	62%
State Education School Facilities Office	Y
States with Adopted OSHA Plan	N
State Grants for Construction	N
States with School Building Assessments	N
State Requires that Schools Keep Asthma/Allergy Incident Reports	N
State School Green Cleaning Laws	N
High Performance Green School Design	N
Indoor Air Quality Policies	see footnote
States Require Periodic Inspection of Drinking Water Outlets for Lead	Y
States with Integrated Pest Management Plans	N

State data taken from federal and national sources: see footnotes in Appendices.

Ohio

Number of Public Schools	3,852
Number of Public School Students	1,754,191
Number of Minority Students	452,270
Number of Students Free & Reduced-Price Lunch Eligible	745,121
Number of Employees in School System	241,212
% Children under Age 19 without Health Insurance	6.7
% of Children with Asthma Aged 17 and Younger	9.2
% of Children Diagnosed with ADHD	13.3
Number of Students in Special Education Program	259,448
% Schools with at Least One Inadequate Building Feature	76%
% Schools with at Least One Unsatisfactory Environmental Factor	83%
State Education School Facilities Office	Y
States with Adopted OSHA Plan	N
State Grants for Construction	Y
States with School Building Assessments	Y
State Requires that Schools Keep Asthma/Allergy Incident Reports	N
State School Green Cleaning Laws	N
High Performance Green School Design	Y
Indoor Air Quality Policies	see footnote
States Require Periodic Inspection of Drinking Water Outlets for Lead	N/A
States with Integrated Pest Management Plans	N

Credit: *Alliance for Leadership and Interconnection (ALI)*

State data taken from federal and national sources: see footnotes in Appendices.

As reported in the *Sick Schools* report in 2009, more than 10% of Cincinnati Public School (CPS) students have been identified as suffering from asthma, the most common chronic illness reported by the Cincinnati Health Department in 2007. "Greater Cincinnati has a higher asthma rate than the national average." (Cincinnati Enquirer, July 2, 2006). In 2008, Cincinnati Public Schools adopted a No-Idling policy for all of their schools as a result of the Alliance for Leadership and Interconnection (ALI) organizing stakeholders to address the air quality surrounding high risk schools. In 2009, the University of Cincinnati's Environmental Health Department was awarded an NIEHS grant to study the Impact of Traffic Exhaust on Children's Health. ALI received a portion of the grant to produce an anti-idling training video with CET Public Television Station, available at http://www.cetconnect.org/video/cincinnati-anti-idling-campaign-video Student eco-leaders provided language and speaking parts for the video which was distributed to 5,000 member CPS school staff, resulting in over 200 positive responses. After an interactive intervention program, including training bus drivers about the health and environmental impact of vehicle idling, bus idling at the school decreased 60% when dropping off students and 80% during pick up. ALI and partners have been successful with an engagement process for CPS to reduce vehicle idling on school property, but an environmental sustainable practice that is on-going, requires on-going engagement of building occupants, including students and their parents.

Oklahoma

Number of Public Schools	1,803
Number of Public School Students	659,911
Number of Minority Students	299,786
Number of Students Free & Reduced-Price Lunch Eligible	398,917
Number of Employees in School System	82,261
% Children under Age 19 without Health Insurance	11.7
% of Children with Asthma Aged 17 and Younger	10.2
% of Children Diagnosed with ADHD	11.0
Number of Students in Special Education Program	97,247
% Schools with at Least One Inadequate Building Feature	54%
% Schools with at Least One Unsatisfactory Environmental Factor	64%
State Education School Facilities Office	Y
States with Adopted OSHA Plan	N
State Grants for Construction	N
States with School Building Assessments	N
State Requires that Schools Keep Asthma/Allergy Incident Reports	N
State School Green Cleaning Laws	N
High Performance Green School Design	N
Indoor Air Quality Policies	see footnote
States Require Periodic Inspection of Drinking Water Outlets for Lead	N
States with Integrated Pest Management Plans	N

State data taken from federal and national sources: see footnotes in Appendices.

Oregon

Number of Public Schools	1,313
Number of Public School Students	570,720
Number of Minority Students	198,526
Number of Students Free & Reduced-Price Lunch Eligible	280,234
Number of Employees in School System	63,603
% Children under Age 19 without Health Insurance	10.9
% of Children with Asthma Aged 17 and Younger	7.6
% of Children Diagnosed with ADHD	8.8
Number of Students in Special Education Program	80,283
% Schools with at Least One Inadequate Building Feature	63%
% Schools with at Least One Unsatisfactory Environmental Factor	84%
State Education School Facilities Office	Y
States with Adopted OSHA Plan	Y
State Grants for Construction	Y
States with School Building Assessments	N
State Requires that Schools Keep Asthma/Allergy Incident Reports	N
State School Green Cleaning Laws	N
High Performance Green School Design	Y
Indoor Air Quality Policies	see footnote
States Require Periodic Inspection of Drinking Water Outlets for Lead	N
States with Integrated Pest Management Plans	Y

Credit: *Oregon Environmental Council*

State data taken from federal and national sources: see footnotes in Appendices.

In 2009, Oregon passed legislation requiring all schools to adopt a plan for integrated pest management (IPM) and designate a coordinator by July 1, 2012. The law, now in place, will help protect people from pesticide exposure and make toxic chemical pesticides a last resort. Oregon State University and the nonprofit Northwest Center for Alternatives to Pesticides have helped schools develop plans, guidelines, and training. Unfortunately, the law did not provide funding for schools to take on this program. Funding would help ensure that schools can successfully put the plans into practice.

Oregon also passed a bill in 2009 to help schools reduce diesel pollution by replacing old diesel buses or retrofitting them to reduce diesel emissions. The state has 6,400 school buses in service, and has set a goal for retrofitting all appropriate buses in the state by 2013.

In 2011, Oregon adopted a "Cool Schools" initiative to help schools with energy efficiency upgrades, seismic retrofitting and bus upgrades to cleaner fuels. In January 2011, Governor Kitzhaber directed $2 million in stimulus funding to offer energy audits to 500 schools. In June 2011, the Oregon legislature created a way to pool available funds into a streamlined program for schools to undertake these retrofits. In its first year, eight school districts have applied for or secured over $4.7 million for school retrofits. In Fall 2012, school districts were invited to apply for technical services from the Oregon Department of Energy to scope out energy efficiency projects in 2013 and 2014.

Oregon has teamed up with the U.S. Department of Education's new Green Ribbon Schools recognition program to honor schools with exemplary environmental programs, including healthy and safe environments. In the program's first year, four Oregon schools were among the 78 schools in 29 states that won the Green Ribbon awards.

Pennsylvania

Over the past several years, Pennsylvania has seen an increased awareness of general environmental health issues, including those specific to K-12 schools. In particular, the US Department of Education Green Ribbon Schools Award has helped to put school environmental health on the radar of many districts that might have otherwise not considered it, and has yielded an impressive 47 applications from Pennsylvania schools. Additionally, a number of schools have taken up EPA's IAQ Tools for Schools framework, primarily in the southeastern portion of the state.

However, there is still much work to be done. Districts have been devastated by the 12% cuts to the K-12 education budget in 2011, which often leave capital investment and maintenance budgets seriously under funded. The Pennsylvania Departments of Education and Health have yet to proactively address school environmental health issues with meaningful and well-capitalized programs.

Locally, investments in school renovation, replacement and maintenance have increased but are still falling short of need. Survey data show 85% of buildings were constructed before 1980, albeit 60% of buildings have been renovated or had additions built since 1990. Long-range facilities plans also indicate a steady decline in capital expenditures from the late 00s into the 10s (Pennsylvania Department of Education, SY 2007-2008 School Facility Report).

Additionally, a different survey shows that school maintenance expenditures as a percentage of overall budgets have remained flat over the last decade, suggesting that facility conditions continue to be a low priority for school districts. Failure to reverse these trends will result in more schools with conditions that are unsafe for children, and further challenge their ability to learn and grow.

Number of Public Schools	3,269
Number of Public School Students	1,793,284
Number of Minority Students	517,232
Number of Students Free & Reduced-Price Lunch Eligible	686,641
Number of Employees in School System	266,796
% Children under Age 19 without Health Insurance	5.6
% of Children with Asthma Aged 17 and Younger	9.6
% of Children Diagnosed with ADHD	10.2
Number of Students in Special Education Program	295,077
% Schools with at Least One Inadequate Building Feature	42%
% Schools with at Least One Unsatisfactory Environmental Factor	57%
State Education School Facilities Office	Y
States with Adopted OSHA Plan	N
State Grants for Construction	Y
States with School Building Assessments	Y
State Requires that Schools Keep Asthma/Allergy Incident Reports	N
State School Green Cleaning Laws	N
High Performance Green School Design	Y
Indoor Air Quality Policies	see footnote
States Require Periodic Inspection of Drinking Water Outlets for Lead	N
States with Integrated Pest Management Plans	Y

Credit: *inRegion Sustainability Consulting*

State data taken from federal and national sources: see footnotes in Appendices.

Rhode Island

Number of Public Schools	325
Number of Public School Students	143,793
Number of Minority Students	50,110
Number of Students Free & Reduced-Price Lunch Eligible	61,127
Number of Employees in School System	18,632
% Children under Age 19 without Health Insurance	5.7
% of Children with Asthma Aged 17 and Younger	11.8
% of Children Diagnosed with ADHD	11.1
Number of Students in Special Education Program	25,332
% Schools with at Least One Inadequate Building Feature	61%
% Schools with at Least One Unsatisfactory Environmental Factor	75%
State Education School Facilities Office	Y
States with Adopted OSHA Plan	N
State Grants for Construction	Y
States with School Building Assessments	N
State Requires that Schools Keep Asthma/Allergy Incident Reports	Y
State School Green Cleaning Laws	N
High Performance Green School Design	Y
Indoor Air Quality Policies	see footnote
States Require Periodic Inspection of Drinking Water Outlets for Lead	Y
States with Integrated Pest Management Plans	Y

Credit: *Rhode Island Legal Services*

State data taken from federal and national sources: see footnotes in Appendices.

Rhode Island became the first state in the nation to ban the siting of schools on so-called vapor intrusion sites. These include sites where "there exists an ongoing potential for hazardous materials and/or petroleum to migrate as vapors or gases into the [school] building from the subsurface of the parcel of property, including any potential failure of engineered remedies to address said vapors or gases."

The ban extends to school projects involving new construction (including an addition to an existing building) or leasing of a building, but not renovation of an existing building where the building's footprint remains the same. Additionally, Rhode Island's new school siting law requires a public review process for school projects proposed on "a parcel of property formerly used for industrial, manufacturing or landfill purposes that is contaminated by hazardous materials" not covered by the ban. That review process includes the preparation of a report by the school project sponsor that discusses the costs of safely remediating the site for school purposes, the time it will take to remediate the site, a list of alternative sites considered and the rationale for selecting a contaminated site over a clean site.

The report is subject to public comment and a public hearing, and the school project sponsor must respond to all comments and consider those comments in the final selection of a site for the project. A copy of the law is available at http://webserver.rilin.state.ri.us/PublicLaws/law12/law12179.htm

South Carolina

Self-Administration of Asthma and Anaphylaxis Medication: "Code 59-63-80 (2005) requires each school district to adopt a policy, 'requiring that students with special health care needs have individual health care plans.' The plans must provide for the 'authorization of a student to self-monitor and self-administer medication as prescribed by the student's health care provider unless there is sufficient evidence that unsupervised self-monitoring or self-medicating would seriously jeopardize the safety of the student or others.' This policy must include a requirement that the parent or legal guardian to provide the school with written authorization for the student to self-monitor and self-administer medication from themselves and the student's health care practitioner. The statements must be kept on-file in the school nurses' office or that of the school administrator. A requirement for the authorization to possess on his person and administer while in school, on school grounds, at a school-sponsored activity, in transit to or from school or school sponsored activities, or during before-school or after-school activities on school operated property is also required."

See National Association of School Boards of Education (NASBE) "State School Healthy Policy Database" at http://nasbe.org/healthy_schools/hs/map.php

Number of Public Schools	1,228
Number of Public School Students	725,838
Number of Minority Students	338,318
Number of Students Free & Reduced-Price Lunch Eligible	395,033
Number of Employees in School System	65,508
% Children under Age 19 without Health Insurance	10.5
% of Children with Asthma Aged 17 and Younger	N/A
% of Children Diagnosed with ADHD	12.0
Number of Students in Special Education Program	100,262
% Schools with at Least One Inadequate Building Feature	52%
% Schools with at Least One Unsatisfactory Environmental Factor	66%
State Education School Facilities Office	Y
States with Adopted OSHA Plan	Y
State Grants for Construction	Y
States with School Building Assessments	Y
State Requires that Schools Keep Asthma/Allergy Incident Reports	N
State School Green Cleaning Laws	N
High Performance Green School Design	N
Indoor Air Quality Policies	see footnote
States Require Periodic Inspection of Drinking Water Outlets for Lead	Y
States with Integrated Pest Management Plans	Y

State data taken from federal and national sources: see footnotes in Appendices.

South Dakota

Number of Public Schools	718
Number of Public School Students	126,128
Number of Minority Students	25,448
Number of Students Free & Reduced-Price Lunch Eligible	46,717
Number of Employees in School System	19,545
% Children under Age 19 without Health Insurance	7.8
% of Children with Asthma Aged 17 and Younger	N/A
% of Children Diagnosed with ADHD	8.1
Number of Students in Special Education Program	18,026
% Schools with at Least One Inadequate Building Feature	45%
% Schools with at Least One Unsatisfactory Environmental Factor	50%
State Education School Facilities Office	Y
States with Adopted OSHA Plan	N
State Grants for Construction	N
States with School Building Assessments	N
State Requires that Schools Keep Asthma/Allergy Incident Reports	N
State School Green Cleaning Laws	N
High Performance Green School Design	N
Indoor Air Quality Policies	see footnote
States Require Periodic Inspection of Drinking Water Outlets for Lead	N
States with Integrated Pest Management Plans	N

State data taken from federal and national sources: see footnotes in Appendices.

Tennessee

Air Quality: "Code 49-2-121 (2005) encourages each school district to conduct an inspection and evaluation program for its facilities. Such program could be the Environmental Protection Agency's Indoor Air Quality Tools for Schools Program."

See National Association of School Boards of Education (NASBE) "State School Healthy Policy Database" at http://nasbe.org/healthy_schools/hs/map.php

Number of Public Schools	1,803
Number of Public School Students	987,422
Number of Minority Students	322,475
Number of Students Free & Reduced-Price Lunch Eligible	542,953
Number of Employees in School System	128,197
% Children under Age 19 without Health Insurance	6.4
% of Children with Asthma Aged 17 and Younger	6.4
% of Children Diagnosed with ADHD	11.3
Number of Students in Special Education Program	119,004
% Schools with at Least One Inadequate Building Feature	56%
% Schools with at Least One Unsatisfactory Environmental Factor	64%
State Education School Facilities Office	Y
States with Adopted OSHA Plan	Y
State Grants for Construction	Y
States with School Building Assessments	Y
State Requires that Schools Keep Asthma/Allergy Incident Reports	Y
State School Green Cleaning Laws	N
High Performance Green School Design	N
Indoor Air Quality Policies	see footnote
States Require Periodic Inspection of Drinking Water Outlets for Lead	N
States with Integrated Pest Management Plans	N

State data taken from federal and national sources: see footnotes in Appendices.

Texas

Number of Public Schools	9,332
Number of Public School Students	4,935,715
Number of Minority Students	3,396,689
Number of Students Free & Reduced-Price Lunch Eligible	2,471,212
Number of Employees in School System	665,419
% Children under Age 19 without Health Insurance	16.9
% of Children with Asthma Aged 17 and Younger	7.6
% of Children Diagnosed with ADHD	7.7
Number of Students in Special Education Program	441,987
% Schools with at Least One Inadequate Building Feature	46%
% Schools with at Least One Unsatisfactory Environmental Factor	60%
State Education School Facilities Office	Y
States with Adopted OSHA Plan	N
State Grants for Construction	Y
States with School Building Assessments	Y
State Requires that Schools Keep Asthma/Allergy Incident Reports	N
State School Green Cleaning Laws	N
High Performance Green School Design	Y
Indoor Air Quality Policies	see footnote
States Require Periodic Inspection of Drinking Water Outlets for Lead	N/A
States with Integrated Pest Management Plans	Y

Credit: *Children's Environmental Health Institute*

State data taken from federal and national sources: see footnotes in Appendices.

The Children's Environmental Health Institute's (CEHI) program agenda for the 2012 Scientific Symposium included environmental risks in schools. The focus on environmental health risks in schools first emerged at the 2008 Scientific Symposium Blueprint for Children's Health and the Built Environment.

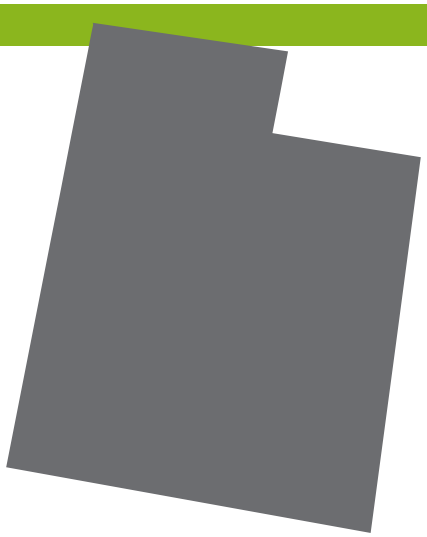
The interest continued over the following two years with CEHI hosting the Roundtable Discussion Environmental Health Risks in Schools at the Texas Medical Association. In addition, CEHI hosted the Texas Hill Country Community Leadership Forum Early Life Exposure: How Environments Affect the Heath and Educational Performance of Students.

These initiatives resulted in the development of the objectives that formed the foundation for the Seventh Biennial Scientific Symposium How School Environments Affect the Health and Academic Performance of Students hosted at the Dell Children's Medical Center of Central Texas on October 25 & 26, 2012.

The objectives included

- Establishing an inclusive participatory process that drives the program agenda for identifying high priority environmental health risks in schools.
- Increasing awareness about the prevention of environmental health risks in schools and environmentally related diseases in children.
- Expanding cross-discipline communication efforts to support best practices and policies to protect the health of children in school environments.

We know that a good school environment does not guarantee that all children will be healthy and that they will all perform well academically. For many children, there are other factors that can adversely impact their health and academic performance. However, we do know that as school environments degrade in quality, the health and academic performance for some children also begins to be adversely affected. The degree to which this occurs and which children will be most impacted must be addressed in Texas.



Utah

Self-Administration of Asthma Medication: "Code 53A-11-602 (2004) requires a public school to permit a student to possess and self-administer inhaled asthma medication in school provided that a signed parental statement authorizing the student to self-administer and acknowledging the student's responsibility is given, and a written statement by the student's health care provider prescribing the medical appropriateness for self-administration and the name of the medication authorized for the student's use is also given."

See National Association of School Boards of Education (NASBE) "State School Healthy Policy Database" at http://nasbe.org/healthy_schools/hs/map.php

Number of Public Schools	1,029
Number of Public School Students	585,552
Number of Minority Students	129,042
Number of Students Free & Reduced-Price Lunch Eligible	223,943
Number of Employees in School System	52,341
% Children under Age 19 without Health Insurance	10.6
% of Children with Asthma Aged 17 and Younger	6.9
% of Children Diagnosed with ADHD	6.7
Number of Students in Special Education Program	70,232
% Schools with at Least One Inadequate Building Feature	62%
% Schools with at Least One Unsatisfactory Environmental Factor	72%
State Education School Facilities Office	Y
States with Adopted OSHA Plan	Y
State Grants for Construction	Y
States with School Building Assessments	N
State Requires that Schools Keep Asthma/Allergy Incident Reports	Y
State School Green Cleaning Laws	N
High Performance Green School Design	N
Indoor Air Quality Policies	see footnote
States Require Periodic Inspection of Drinking Water Outlets for Lead	N/A
States with Integrated Pest Management Plans	N

State data taken from federal and national sources: see footnotes in Appendices.

Vermont

Number of Public Schools	324
Number of Public School Students	96,858
Number of Minority Students	6,959
Number of Students Free & Reduced-Price Lunch Eligible	31,339
Number of Employees in School System	18,485
% Children under Age 19 without Health Insurance	3.5
% of Children with Asthma Aged 17 and Younger	10.0
% of Children Diagnosed with ADHD	9.9
Number of Students in Special Education Program	13,562
% Schools with at Least One Inadequate Building Feature	53%
% Schools with at Least One Unsatisfactory Environmental Factor	58%
State Education School Facilities Office	Y
States with Adopted OSHA Plan	Y
State Grants for Construction	Y
States with School Building Assessments	N
State Requires that Schools Keep Asthma/Allergy Incident Reports	Y
State School Green Cleaning Laws	Y
High Performance Green School Design	Y
Indoor Air Quality Policies	see footnote
States Require Periodic Inspection of Drinking Water Outlets for Lead	Y
States with Integrated Pest Management Plans	Y

Credit: *Vermont Public Interest Research Group*

State data taken from federal and national sources: see footnotes in Appendices.

Last year, the Vermont Public Interest Research Group (VPIRG) and the Alliance for a Clean and Healthy Vermont (Alliance) – a diverse coalition of citizens, public health professionals, children's advocates, environmental groups, and others – worked to help pass green cleaning legislation in Vermont.

This new legislation requires manufacturers and distributors to only sell environmentally preferable cleaning supplies to Vermont schools. Conventional cleaning supplies can contain toxic chemicals that have been linked to asthma, cancer, and other negative health effects. Experts agree that environmentally preferable cleaning products are just as effective and affordable as conventional cleaning supplies.

Though many school districts had begun to voluntarily move in this direction, the new law will ensure that all Vermont students are in healthier, safer school environments. After making the switch, some schools in Vermont have reported fewer instances of asthma, nausea, and headaches, and some have even reported saving money on cleaning supplies.

Moving forward, VPIRG and the Alliance will continue to work to ensure Vermont programs that support safe and healthy learning environments – like green cleaning and the Envision program – are fully funded and successfully implemented.

Virginia

Number of Public Schools	2,211
Number of Public School Students	1,251,440
Number of Minority Students	574,317
Number of Students Free & Reduced-Price Lunch Eligible	458,879
Number of Employees in School System	201,047
% Children under Age 19 without Health Insurance	6.9
% of Children with Asthma Aged 17 and Younger	N/A
% of Children Diagnosed with ADHD	10.2
Number of Students in Special Education Program	162,338
% Schools with at Least One Inadequate Building Feature	60%
% Schools with at Least One Unsatisfactory Environmental Factor	58%
State Education School Facilities Office	Y
States with Adopted OSHA Plan	Y
State Grants for Construction	N
States with School Building Assessments	Y
State Requires that Schools Keep Asthma/Allergy Incident Reports	Y
State School Green Cleaning Laws	N
High Performance Green School Design	Y
Indoor Air Quality Policies	see footnote
States Require Periodic Inspection of Drinking Water Outlets for Lead	Y
States with Integrated Pest Management Plans	N

State data taken from federal and national sources: see footnotes in Appendices.

Washington

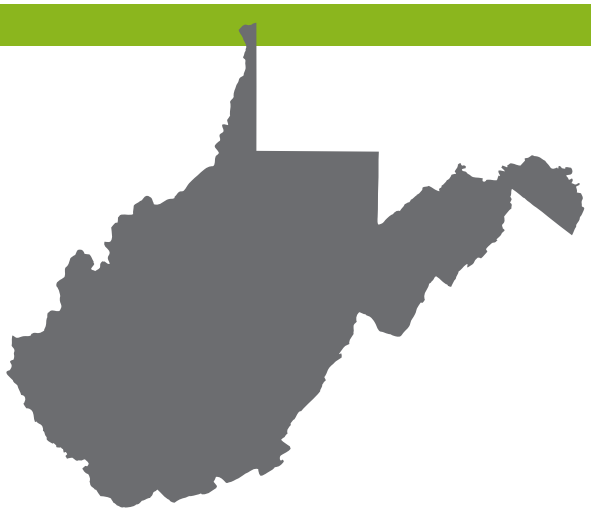
Number of Public Schools	2,354
Number of Public School Students	1,043,788
Number of Minority Students	387,804
Number of Students Free & Reduced-Price Lunch Eligible	418,065
Number of Employees in School System	103,783
% Children under Age 19 without Health Insurance	7.4
% of Children with Asthma Aged 17 and Younger	6.0
% of Children Diagnosed with ADHD	9.5
Number of Students in Special Education Program	127,909
% Schools with at Least One Inadequate Building Feature	60%
% Schools with at Least One Unsatisfactory Environmental Factor	74%
State Education School Facilities Office	Y
States with Adopted OSHA Plan	Y
State Grants for Construction	Y
States with School Building Assessments	Y
State Requires that Schools Keep Asthma/Allergy Incident Reports	Y
State School Green Cleaning Laws	N
High Performance Green School Design	Y
Indoor Air Quality Policies	see footnote
States Require Periodic Inspection of Drinking Water Outlets for Lead	N
States with Integrated Pest Management Plans	N

State data taken from federal and national sources: see footnotes in Appendices.

Air Quality: "WAC 246-366-080 (1991) requires all rooms used by students or staff to be kept reasonably free of all objectionable odor, excessive heat or condensation and all air contaminant producing sources shall be controlled through the maintenance of local ventilation systems. RCW 43.20.050 (1993) further requires the state board of health to adopt rules controlling health-related environmental conditions pertaining to heating, lighting, ventilation, sanitary facilities, cleanliness and space in all public facilities including schools. Lastly, RCW 70.162.050 (1998) allows the superintendent of instruction to implement a model program in a district that evaluates the current indoor air quality in the district and establishes procedures to ensure the maintenance and operation of any ventilation and filtration system."

Pesticide Use: "RCW 17.21.415 (2009) requires public schools to establish a notification system that, as a minimum, notifies interested parents or guardians of students and employees at least 48 hours before a pesticide application to a school facility. Requirements for the notification are outlined in the statute."

See National Association of School Boards of Education (NASBE) "State School Healthy Policy Database" at http://nasbe.org/healthy_schools/hs/map.php



West Virginia

Integrated Pest Management: "Department of Agriculture Legislative Rule 61-12J-4 (1996) requires all schools to develop and maintain an integrated pest management program containing a policy statement, pest management objectives, education of the building occupants, inspection activities, monitoring activities, and an evaluation of the integrated pest management strategies practice."

See National Association of School Boards of Education (NASBE) "State School Healthy Policy Database" at http://nasbe.org/healthy_schools/hs/map.php

Number of Public Schools	765
Number of Public School Students	282,879
Number of Minority Students	22,601
Number of Students Free & Reduced-Price Lunch Eligible	145,605
Number of Employees in School System	39,270
% Children under Age 19 without Health Insurance	6.0
% of Children with Asthma Aged 17 and Younger	6.5
% of Children Diagnosed with ADHD	13.3
Number of Students in Special Education Program	44,924
% Schools with at Least One Inadequate Building Feature	67%
% Schools with at Least One Unsatisfactory Environmental Factor	82%
State Education School Facilities Office	Y
States with Adopted OSHA Plan	N
State Grants for Construction	Y
States with School Building Assessments	Y
State Requires that Schools Keep Asthma/Allergy Incident Reports	Y
State School Green Cleaning Laws	N
High Performance Green School Design	N
Indoor Air Quality Policies	see footnote
States Require Periodic Inspection of Drinking Water Outlets for Lead	Y
States with Integrated Pest Management Plans	Y

State data taken from federal and national sources: see footnotes in Appendices.

Wisconsin

Number of Public Schools	2,275
Number of Public School Students	872,286
Number of Minority Students	223,485
Number of Students Free & Reduced-Price Lunch Eligible	342,660
Number of Employees in School System	103,901
% Children under Age 19 without Health Insurance	5.3
% of Children with Asthma Aged 17 and Younger	8.9
% of Children Diagnosed with ADHD	9.9
Number of Students in Special Education Program	124,721
% Schools with at Least One Inadequate Building Feature	49%
% Schools with at Least One Unsatisfactory Environmental Factor	60%
State Education School Facilities Office	Y
States with Adopted OSHA Plan	N
State Grants for Construction	N
States with School Building Assessments	N
State Requires that Schools Keep Asthma/Allergy Incident Reports	N
State School Green Cleaning Laws	N
High Performance Green School Design	N
Indoor Air Quality Policies	see footnote
States Require Periodic Inspection of Drinking Water Outlets for Lead	N
States with Integrated Pest Management Plans	N

Credit: *Association of School Business Officials*

State data taken from federal and national sources: see footnotes in Appendices.

Greendale School District, WI
(2,600 students)

- An IEQ Coordinator was named and a Team has formed that meets monthly
- Following the school building walk-through assessment training conducted by ASBO, the district has purchased new IEQ monitoring equipment and incorporated new walkthrough procedures
- The IEQ report of building walk-throughs provided to the IEQ Team helped launch team efforts and resulted in corrective actions being implemented to address nearly all environmental management concerns
- The IEQ Team launched a major de-cluttering effort that included: hiring an architect to assess spaces, hiring a professional organizer to meet one-on-one with staff, and creating an end of the year classroom checklist which has had dramatic improvements in their buildings
- Changed culture to maintain healthy indoor environments by: removing hanging material from ceilings, removing paper from bulletin boards and using paint for color, reducing the use of plants and removing air fresheners and stuffed furniture known to trigger asthma symptoms
- Formed a "Greener Dale" team in 2010 with students, staff and community members who meet monthly to address district IEQ/green initiatives and created and implemented a Green Expo for the community that is held annually
- The School Business Official presented information on the Greendale IEQ program at the 2009, 2011 ASBO International Annual Meeting and the 2012 Green Schools National Conference demonstrating real life experiences and benefits to their IEQ management program.

Wyoming

Air Quality: "Rule 3991, Chapter 2, Section 6 (2000) requires the construction of a school bus to be 'reasonably dust-proof'."

Pesticide Use: "Statute 35-7-375 mandates notification of pesticide use on school/district property."

Self-Administration of Asthma and Anaphylaxis Medication: "Statute 21-4-310 (2007) requires district school boards to allow students to posseSs and self-administer medication including asthma inhalers [and/or epinephrine pens] required for potentially life-threatening conditions within any school of the district. The following conditions must be met: (1) A written statement containing parental verification of ability to self-administer and authorization to self-administer as necessary, and (2) Health care provider identification of the medication prescribed or authorized and verification of the appropriateness of possession and self-administration for the student. Potentially life-threatening conditions" includes, but is not limited to, asthma, food allergies and insect bites."

See National Association of School Boards of Education (NASBE) "State School Healthy Policy Database" at http://nasbe.org/healthy_schools/hs/map.php

Number of Public Schools	365
Number of Public School Students	89,009
Number of Minority Students	16,939
Number of Students Free & Reduced-Price Lunch Eligible	32,968
Number of Employees in School System	16,424
% Children under Age 19 without Health Insurance	9.3
% of Children with Asthma Aged 17 and Younger	6.6
% of Children Diagnosed with ADHD	9.1
Number of Students in Special Education Program	15,231
% Schools with at Least One Inadequate Building Feature	49%
% Schools with at Least One Unsatisfactory Environmental Factor	68%
State Education School Facilities Office	Y
States with Adopted OSHA Plan	Y
State Grants for Construction	Y
States with School Building Assessments	N
State Requires that Schools Keep Asthma/Allergy Incident Reports	N
State School Green Cleaning Laws	N
High Performance Green School Design	N
Indoor Air Quality Policies	see footnote
States Require Periodic Inspection of Drinking Water Outlets for Lead	N
States with Integrated Pest Management Plans	N

State data taken from federal and national sources: see footnotes in Appendices.

Appendices

Footnotes

to State Data Tables

Number of Public Schools	FN 1
Number of Public School Students	FN 2
Number of Minority Students	FN 3
Free & Reduced Lunch Eligible	FN 4
Number of Employees in School System	FN 5
% Children under Age 19 without Health Insurance	FN 6
% of Children with Asthma Aged 17 and Younger	FN 7
% of Children Diagnosed with ADHD	FN 8
Number of Students in Special Education Program	FN 9
% Schools with at Least One Inadequate Building Feature	FN 10
% Schools with at Least One Unsatisfactory Environmental Factor	FN 11
State Education School Facilities Office	FN 12
States with Adopted OSHA Plan	FN 13
State Grants for Construction	FN 14
States with School Building Assessments	FN 15
State Requires Schools Keep Asthma/Allergy Incident Reports	FN 16
State School Green Cleaning Laws	FN 17
High Performance Green School Design	FN 18
Indoor Air Quality (IAQ) Policies	FN 19
Require Periodic Inspection of Drinking Water Outlets for Lead	FN 20
States with Integrated Pest Management (IPM) Plans	FN 21

1. The number of K-12 public schools in each state and the District of Columbia. The data are from the 2010-2011 school year, and are accessible at http://nces.ed.gov/programs/stateprofiles/index.asp, accessed 11/1/2012.

2. The number of students in K-12 public schools in each state and DC. The data are from the 2010-2011 school year, and are accessible at http://nces.ed.gov/programs/stateprofiles/index.asp, accessed 11/1/2012.

3. The number of minority students in K-12 public schools in each state and DC. This was determined by subtracting the number of white students from the total number of students. The data are from the 2010-2011 school year, and are accessible at http://nces.ed.gov/programs/stateprofiles/index.asp, accessed 11/1/2012.

Footnotes (cont'd)

4. This statistic was determined by adding the "free lunch eligible" and "reduced lunch eligible" figures together. The data are from the 2010-2011 school year, and are accessible at http://nces.ed.gov/programs/stateprofiles/index.asp, accessed 11/1/2012.

5. This is the number of employees in the public school system nationally. The data come from the National Center for Education Statistics at the US Department of Education. The data are from the 2010-2011 school year, and are accessible at http://nces.ed.gov/programs/stateprofiles/index.asp, accessed 11/1/2012.

6. The data come from the US Census Bureau, the American Community Survey of 2009, available at http://www.census.gov/prod/2010pubs/acsbr09-11.pdf

7. The data come from Behavioral Risk Factor Surveillance System (BRFSS) data collection from 2010, and contain data from 38 states, District of Columbia, and Puerto Rico. We included 38 states and DC. The data are accessible at http://www.cdc.gov/asthma/brfss/2010/child/current/tableC1.htm, accessed 11/22/2012. We decided to use BRFSS data because of the large sample size, data availability at a state level, and because data collected are for 2010, compared to other data sets where an average over a few year's time is provided. Please note: we calculated the national average (average of prevalence of 38 states and DC) to be 8.9%; BRFSS presents an overall prevalence of 8.4%.

8. The data come from the 2007 National Survey for Children's Health. The data are accessible at http://www.cdc.gov/ncbddd/adhd/prevalence.html, accessed 11/21/2012.

9. The data represent the number of students in special education programs in K-12 public schools. The data come from the National Center for Education Statistics at the US Department of Education. The data are from the 2010-2011 school year, and are accessible at http://nces.ed.gov/programs/stateprofiles/index.asp, accessed 11/1/2012.

10. The data come from the February 1995 US Government Accountability Office, "School Facilities: Conditions of America's Schools." The report is found at http://www.gao.gov/archive/1995/he95061.pdf

11. The data come from the February 1995 US Government Accountability Office, "School Facilities: Conditions of America's Schools." The report is found at http://www.gao.gov/archive/1995/he95061.pdf.

12. The data come from the Council of Educational Facility Planners International. A list of states with School Facilities Offices and their websites are available at http://www.cefpi.org/i4a/pages/index.cfm?pageid=4315, accessed 11/1/2012.

13. From the US Department of Labor, Directory of States with Approved Occupational Safety and Health Plans. There are 24 states with federally-approved state OSHA plans. Illinois has a non-federally approved public employee OSHA plan. The information can be found at http://www.osha.gov/dcsp/osp/states.html, accessed 11/1/2012.

14. List of states with grants for school construction. See "State Capital Spending on PK-12 School Facilities", 21st Century School Fund, November 2010, available at http://www.ncef.org/pubs/state_capital_spending_on_school_facilities.pdf. The 2006 and 2009 data were drawn from "School Climate", *Education Week and Teacher Magazine*, January 5, 2006. Note: In the current fiscal climate some states have significantly decreased or even suspended school construction funding.

Footnotes (cont'd)

15. From the American Federation of Teachers, *Building Minds, Minding Buildings: School Infrastructure Funding Need*, December 2008. The data come from Table 1, Summary Table of Statewide School Infrastructure Assessments. The report is found at http://www.aft.org/pdfs/psrp/bmmbfunding1208.pdf

16. From the Asthma and Allergy Foundation "State Honor Roll 2012: Asthma and Allergy Policies for Schools." States that have a "Y" require schools to maintain asthma/allergy incident reports on reactions, attacks, and medications administered. Accessible at http://www.aafa.org/pdfs/2012%20State%20Honor%20Roll%20Full%20FINALa.pdf

17. States with a "Y" have laws requiring or guidelines promoting green cleaning in schools. States that require public and or private schools to use "third party certified" green cleaning products are: Connecticut, Hawaii, Iowa, Maine, Maryland, New York and Vermont. Accessible from the Environmental Law Institute, Green Cleaning in Schools: Developments in State Policy, at http://www.eli.org/Buildings/Green_Cleaning/index.cfm, accessed 12/8/2012 and updated by Healthy Schools Network.

18. States with a "Y" have high performance green building design standards under one or both of the following standards: Collaborative for High Performance Schools (accessible from CHPS Criteria, at http://www.chps.net/dev/Drupal/node/212, accessed 11/22/2012) and US Green Building Council/Leadership in Energy and Environmental Design (list of states accessible from Environmental Law Institute, Healthy, High Performance School Facilities: Developments in State Policy, at http://www.eli.org/Buildings/Healthy_Schools/, accessed 11/22/2012).

19. Indoor Air Quality Policies vary widely from state to state, and may consider factors such as IAQ laws (28 states with general laws, three states with recommendations), IAQ protocols consistent with EPA IAQ Tools for Schools (six states with laws), IAQ protocols consistent with Sheet Metal and Air Conditioning Contractors' National Association (SMACNA) guidelines (two states with laws), laws which require protection of occupants if still in building during construction (five states with laws), and laws which require states to log complaints on IAQ (two states with laws). As these policies are so varied from state to state, simply stating Yes/No for each state would be insufficient. Further, while the US EPA voluntary IAQ Tools for Schools program is a primary resource for school programs, some states do not permit the citing of voluntary guidance documents in bill drafting. Each state law or policy must be read carefully to determine the exact requirements or recommendations for school-based practices. The data come from the Environmental Law Institute's "Database of State Indoor Air Quality Laws: Database Excerpt: IAQ in Schools," accessible at http://www.elistore.org/reports_detail.asp?ID=11108, accessed 11/1/2012.

20. Data come from the State-Level School Health Policies and Practices: A State-by-State Summary from the School Health Policies and Programs Study 2006, accessible at http://cdc.gov/HealthyYouth/shpps/2006/summaries/pdf/ENV_State_Level_Summaries_SHPPS2006.pdf

21. States with a "Y" have either a law (15 states) or policy recommendations (10 states) promoting less hazardous Integrated Pest Management (IPM) in schools, for a total of 25 states with school IPM plans. The data come from Beyond Pesticides' "State and Local Pesticide Policies," accessible at http://www.beyondpesticides.org/schools/schoolpolicies/, accessed 11/1/2012.

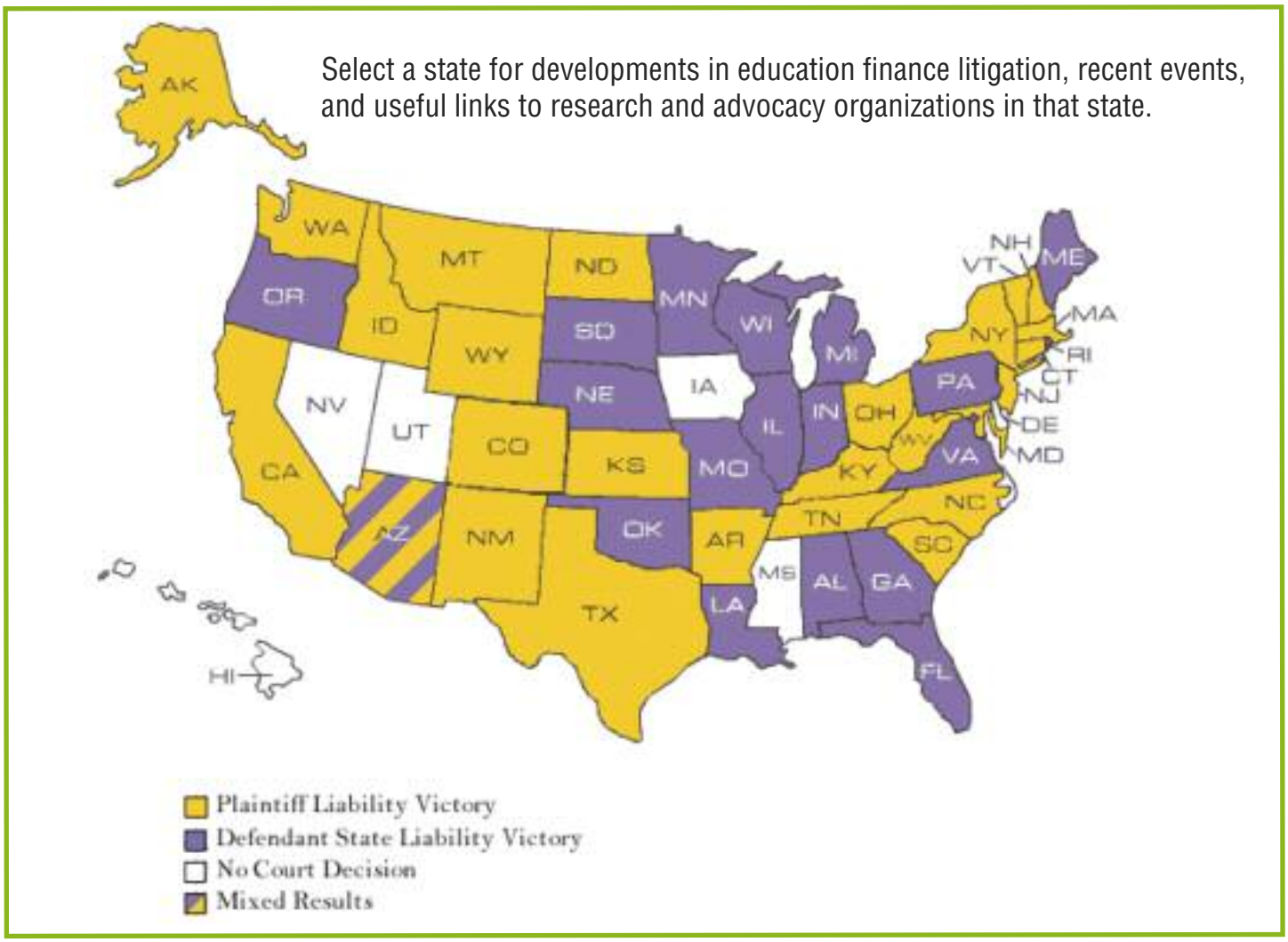
From: http://www.epa.gov/schools/

From: http://www2.ed.gov/programs/green-ribbon-schools/index.html

School Equity Funding Lawsuits in the States:
National Access Network, Teachers College, Columbia University

Recognizing that the poorest children often have the poorest schools, many campaigns in the states are challenging state financing of K-12 education to ensure a more equitable distribution of resources. An equitable distribution of resources is necessary to ensure safe and adequate school facilities for all children. The map and its web link provide a snapshot of the current status (2001-2011) of these court challenges.

Importantly, from the perspective of *Towards Healthy Schools 2015* and healthy schools advocates, equitable funding is critical for major repairs, such as roof repairs and remediation of PCBs, lead in drinking water, asbestos and radon. But for many schools, environmental health improvements do not cost more money: green cleaning and IPM both help save money. So does energy efficiency. And as Kats (2006) pointed out, the health benefits and savings of good Indoor Environmental Quality far outweigh energy savings from conventional green schools. Sadly, there is no systematic, national state by state assessment of building conditions that deliberately takes into account environmental factors and hazards known to impact children's health, learning and attendance.



From the National Access Network, Teachers College, Columbia University. © 2001-2011. For more information, see map detail at: http://www.schoolfunding.info/states/state_by_state.php3

Coalition *for* Healthier Schools

…providing the national platform and the forum for environmental health at school, since 2001…

Coordinated by Health Schools Network

Position Statement and Policy Recommendations

Each school day, 55 million children and 7 million adults — 20% of the total U.S. population and 98% of children—spend their days inside school buildings. Unfortunately, too many of our nation's 130,000 public and private schools are "unhealthy" buildings that can harm their health and hinder learning. Today, clear and convincing research shows that improving specific factors such as school indoor environmental quality improves attendance, academic performance, and productivity (*IOM 2011; NRC, 2006; US EPA*).

About children

Children are more vulnerable than adults to environmental hazards because they're smaller, have developing organs, and breathe more air per pound of body weight. They cannot identify hazards. Adverse exposures and injuries during childhood may have a lifetime impact. See www.EPA.gov/children

School factors affecting health

Many school environmental factors can affect the health of children and employees. Too many schools are sited near industrial plants or toxic waste sites; some are on abandoned landfills. Many school facilities are poorly maintained. Schools densely occupied magnify problems. Thousands of schools are severely overcrowded, which compromises ventilation systems, acoustics, food service, recess, and sanitation and lavatories. Children also spend extra hours in vehicles or buses when their schools are beyond safe walking and biking distances.

The U.S. EPA has estimated that up to half of all schools have problems with indoor environmental quality (see www.EPA.gov/schools). Children and staff are all affected by:

- polluted indoor and outdoor air
- toxic chemical and pesticide uses; chemical spills
- mold infestations
- asbestos and radon
- lead in paint and drinking water
- inadequate chemical management
- poor siting, design, engineering
- hazardous materials purchased and stored onsite
- heavy metals and other toxics, such as mercury, CCA, PCBs

Results of unhealthy schools:

- 60% of all children suffer health and learning problems due *solely* to the conditions of their schools;
- Increased child and staff health problems and absenteeism;
- More asthma, allergies, headaches, fatigue, nausea, rashes and chronic illnesses;
- Sick Building Syndrome/Building Related Illness
- More medication use by children and staff;
- Learning and behavior difficulties that worsen;
- Greater liability for school districts;
- Reduced academic achievement; and
- Reduced revenues due to poor attendance.

Coalition *for* Healthier Schools

Coalition Position

Our nation is committed to raising academic performance for all children and to improving the environment of every neighborhood. Thus, we have a moral obligation to protect all children and to accommodate
vulnerable children and personnel who already have impairments. To promote child and adult health, improve education, and create healthier communities, all schools should:

- adopt high performance design and siting standards,
- promote and sustain quality indoor air,
- use safer cleaning and maintenance products, and non-toxic products for instruction,
- use safer/least-toxic integrated pest control and weed control,
- provide quality lighting, including more natural light,
- provide good acoustics and noise control,
- select durable, easy-to-clean flooring,
- offer wholesome food and exercise opportunities,
- provide safe spaces for outdoor activities,
- build or retrofit facilities for energy and other resource efficiencies, and
- remediate lead, CCA, PCBs, mold infestations, and clean out old chemicals.

Federal Policy

- **Adequate funding for EPA's Green and Healthy Schools Initiative.**
- **Restoring full staffing and resources for U.S. EPA IAQ Tools for Schools** program at greater than Fiscal Year 2010 levels, focusing on restoring national and regional grants and staffing
- **Sufficient funding and staffing for federal agencies** to develop a coordinated federal strategy to address healthy school environments for all children (CDC, EPA, Education, Energy, Labor, Homeland Security).
- **Re-authorize and expand the Healthy High Performance Schools** (Subtitle E) of the Energy Independence and Security Act of 2007 that directs EPA to issue voluntary guidelines and partnership grants to states to advance school environmental health programs.
- **Fund school construction/renovation and urgent repairs, such as the Fix America's Schools Today (FAST) Act** to ensure that renovated facilities are healthy places for children.

State and Local Policy

- **Promote, adopt, fund, and implement healthy, high performance school facility design**. Factors include: facility oversight and safe siting; adequate, safe space for outdoor activities; low-emission construction materials; pollutant source controls; ventilation; durable and easy-to-clean surfaces and floors; moisture and mold controls; temperature and humidity controls; acoustics and noise controls; ergonomics; safety and security; daylighting (maximizing natural light); and energy conservation.
- **Promote, adopt, and fund standards and programs to promote use of environmentally preferable materials** for school construction, instruction, maintenance, and cleaning, such as **integrated pest management** (IPM) and **third party certified green cleaning products.**
- **Support state agency programs to reduce use or storage of toxic chemicals**, such as mercury, pesticides and solvents.
- **Remediate hazards** such as PCBs, asbestos, and lead in drinking water.
- Ensure that parents and employees have an active **"right to know"** about hazards.
- **Ensure that all facilities are fully accessible** to students and employees with asthma and environmental, learning, and physical disabilities and do **no further harm** their

For more information, including supporting organizations, see www.HealthySchools.org/coalition.html

Towards Healthy Schools 2015

Healthy Schools Network, Inc.

www.healthyschools.org