

SICK SCHOOLS 2009



**America's Continuing Environmental
Health Crisis for Children**

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SICK SCHOOLS 2009:

America's Continuing Environmental Health Crisis for Children

We know that healthy school buildings contribute to student learning, reduce health and operating costs, and ultimately, increase school quality and competitiveness.¹

However, 55 million of our children attend public and private K-12 schools where poor air quality, hazardous chemicals and other unhealthy conditions make students (and their teachers) sick and handicap their ability to learn.²

Differences in school resources for maintaining schools exacerbate social and economic inequities and academic disparities.³ However, “poor children, in poor schools with a poor environment may have poor academic achievement. To assume that the cause of their lack of achievement is solely due to curricular and teaching deficiencies ignores other strong confounding variables in the child’s environment.”⁴

*New York City summer school classroom for children
with autism and emotional disabilities, under renovation,
(Photo NY Daily News, August 18, 2008)*



In 2006, the *National Coalition for Healthier Schools* groundbreaking ***Lessons Learned: Children – Victims of a Public Health Crisis***, a national collaborative report from more than two dozen contributing organizations and individuals, provided case snapshots of children and personnel at risk as well as state-by-state impact data for the first time (see *Coalition Policy Position Statement in Appendix*).

The report galvanized advocates and policymakers and helped pass a federal law giving the US Environmental Protection Agency (EPA) new authority to issue federal guidelines on school environments and to offer a grant program to state agencies to accelerate healthy schools for all children.

¹ Gregory Kats, "Greening America's Schools Costs and Benefits," October 2006, available at <http://www.cap-e.com/ewebeditpro/items/O59F9819.pdf>. Also see "Green Schools: Attributes for Health and Learning", National Research Council of the National Academy of Science, 2006. http://books.nap.edu/catalog.php?record_id=11756 and excerpts in Appendix to this report highlighting the differences between conventional green design and facilities designed for health.

² Id. (Note- state data tables used in this report are for public schools: about 100,000 schools and 50 million school children)

³ Environmental Law Institute, "School Indoor Air Quality: State Policy Strategies for Maintaining Healthy Learning Environments," August 2009, available at http://www.elistore.org/Data/products/d19_06.pdf

⁴ Brent Ibata, PhD, JD, MPH. "Public Health Law and the Built Environment in American Public Schools: Detailed History with Policy Analysis", 2009: VDM Verlag Dr. Müller, ISBN 3639116402, p 163, available at http://www.amazon.com/Public-Health-Environment-American-Schools/dp/3639116402/ref=sr_1_1?ie=UTF8&s=books&qid=1258156460&sr=8-1

Also in 2006, a companion research report commissioned by Healthy Schools Network ***Who's In Charge?***⁵ documented that while adults in their school workplaces have some system of recourse and support through public health and labor laws, such as OSHA, bargaining contracts, union or professional association support, or occupational health services, no outside public health or environment agency is responsible for providing effective enforcement, protections or interventions specifically for school children at risk or suffering from the effects of poor air quality, chemical mismanagement and spills, or other hazards.

SICK SCHOOLS 2009 updates and expands the 2006 national collaborative report. It shows not only the deep, long struggles to pass and to secure enforcement of laws in the states and locally, but also the continuing environmental public health crisis that is devastating the health, and the ability to learn and to stay in school for tens of millions of American school children every day. At highest risk are children who are in the lowest income, worst-performing schools and those children with underlying health and learning impairments. “This exposure disproportionately compels the most vulnerable to a decade’s worth of exposure in the poorly regulated environment of our nation’s public schools.”⁶ At least six million school-age children are without health insurance (see this report’s state data tables), meaning that it is highly unlikely that their daily environmental exposures are being effectively detected and addressed.

More than 40 pounds of highly toxic elemental mercury found stored in an unlocked school cabinet in a Cool Whip container, sealed with duct tape. (Photo courtesy EPA)



As this report shows, parent, labor, health, and environmental advocates have struggled in the states for years to address unhealthy school environments. Today they are increasingly successful at urging policymakers to enact sound, science-driven, enforceable laws to reduce toxic threats in and around schools.

These root reforms include improving the siting of schools and the design and the construction of school buildings; requiring comprehensive school building inspections that address numerous factors related to Indoor Environmental Quality (IEQ); requiring the cleaning, maintenance, and repair of facilities with products and materials certified as greener and healthier for health and for the environment; controlling and/or removing asbestos, lead, radon, PCBs, and CCA-treated wood structures and leachate; fixing water leaks and remediating mold infestations; and eliminating the storage and use of toxic chemicals and pesticides indoors and out. With no agency oversight, authority and clear enforcement at the federal or local level, unhealthy school issues are continuing.

Federally, we urge Congress to fully fund and strengthen the US Environmental Protection Agency's programs for children's health protection and the Agency's multiple schools-focused programs, as authorized in the High Performance Green Buildings Act of 2007 (Sect. 504 of EISA), which includes providing federal-state partnership grants to accelerate work by qualified state agencies.

⁵ Healthy School Network. “Who’s in Charge?” April 2006, with Jerome Paulson, MD, found at <http://www.healthyschools.org/clearinghouse.html>

⁶ Ibata, p 145.

EPA's programs are long established and it has historically provided leadership for the federal agencies in addressing risks to children's environmental health "where they live, learn, and play" through a federal interagency task force.

The need is severe and immediate: in the previous administration, a federal Executive Order on Risks for Children's Environmental Health (EO 13045) was allowed to lapse and the former executive prevailed in his request to Congress to slash EPA's programs on children's health and schools.

Today, with new leadership in Washington, DC, help is on the way: the nation's agenda to improve the environment very much includes the places where children learn and play.

"EPA's mission is to protect the American public where they live, work, and play – and that certainly includes protecting children where they learn. Our nation's children, parents, and educators deserve to know that their schools provide a safe and healthy environment."

*EPA Administrator Lisa Jackson,
National Healthy Schools Day Message
April 20, 2009*

Among other changes, and thanks to two US Senate Environment and Public Works Committee hearings on school environments (October 2002; May 2007), there is now wide recognition and acceptance that children are at high risk of health and learning problems due to conditions of schools.

There is also greater acceptance that education reform is weakened if the very places where children learn and play erode their health and ability to learn; that health care reform will reap savings if school environments are swiftly and effectively addressed by knowledgeable agencies; and, that equitable health care reform must include environmental health services for children in harm's way.

Demonstrating the savings to both the educational and the health care systems is the chart⁷ below, detailing how health-related school facility features far outweigh savings generated by conservation.

Table A: Financial Benefits of Green Schools (\$/ft ²)	
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

Health Benefits Outweigh Conservation Savings

When construction plans deliberately design healthy indoor environments into conventional green school plans, the healthy benefits far outweigh energy and water savings (\$63 to \$11).

"Green schools" may be built at cost, or at a very slight increment: on average almost 2% more, or \$3 more per square foot, than conventional schools. The financial benefits of greening schools are about \$70 per square foot, more than 20 times as high as the cost of going green.

⁷ Kats, 2006, p4

Importantly, from the perspective of **SICK SCHOOLS 2009**, healthy schools advocates, and schools, not all environmental health reforms cost more money: the use of green cleaning products and a robust practice of Integrated Pest Management (IPM) for example both help save money. Better Indoor Air Quality (IAQ) reduces asthma-absenteeism. Energy efficiencies save money and reduce contributions to climate change.

Despite this knowledge, there is no systematic, national state-by-state assessment of building conditions that takes into account environmental factors and hazards known to impact children's health, learning and attendance. Today, 28 have conducted some kind of infrastructure assessment, 39 states have school facility offices, and 38 states offer grants for school construction. Only 20 states and the District of Columbia have all three in place.

To drive reforms to national scale, **EPA must realize the restoration and expansion of funds and resources to meet deadlines for new work that benefits all children, all families, and all schools and their communities.**



US Senator Frank Lautenberg (D-NJ) congratulated for sponsoring the High Performance Green Buildings Act: (l-r) Healthy Schools Network's John Shaw, Claire Barnett; Lautenberg; Laura Abulafia, AAIDD; Nse Obot-Wutherspoon, Children's Environmental Health Network. (January 2008)

- In 2007, the **Energy Independence and Security Act (EISA)**⁸ was passed to increase energy efficiency and the use of renewable energy. EISA authorizes an appropriation for EPA of \$10 million over five years to ramp up work on school environments.
- **Deadlines for federal guidelines.** EISA Subtitle E -- Healthy High Performance Schools (HHPS) -- direct US EPA to promote healthy school environments by working with state agencies, by creating federal guidelines for siting schools (**due June 2009**), and by developing model guidelines for children's environmental health in schools (**due December 2009**). Without fresh support, EPA has initiated work but not met the deadlines which affect some 14 different offices inside EPA, and include, in addition to siting, indoor air, chemical management, radon, inspections, and more.⁹
- The federal No Child Left Behind Act codified a "Healthy and High Performance School" definition of school design for the first time in terms of design, construction, operation, and maintenance.¹⁰
- In February 2009, President Obama signed the **American Recovery and Reinvestment Act** of 2009 (ARRA). It invests in education, energy, and other essential public services. Included in the overall package of benefits were federal funds that governors could allocate

⁸ P.L. 110-140, H.R. 6

⁹ Energy Independence and Security Act of 2007 Subtitle E—Healthy High-Performance Schools, available at http://www.healthyschools.org/documents/EnergyAct2007-HHPS_text.pdf

¹⁰ No Child Left Behind Act of 2002, Sec. 5581-86 ff, available at http://www.healthyschools.org/documents/School_Design_Guide.pdf

to school renovations and direct grant funds that Title I schools could allocate to public school renovations.¹¹

- The **American Recovery and Reinvestment Tax Act** of 2009 (ARRTA) provides greatly expanded federal bond financing for "the construction, rehabilitation, or repair of a public school facility, or for the acquisition of land on which such a facility is to be constructed."¹²
- In November 2009, Education Secretary Arne Duncan reported that ARRA education funds had retained or saved 400,000 education-related jobs

Sadly, **EPA's program funds for children's health and for schools slashed during the previous administration were not restored in ARRA** and not restored in President Obama's first executive budget.

As one senior federal official commented "children's environmental health just fell through the cracks."

SICK SCHOOLS 2009 gives agencies and advocates the evidence and the tools to set high standards for building and maintaining high-quality schools fit for learning. The nation's children, compelled to be in dank, dirty, dark, polluted and structurally unsound schools, will not be served by trading breathable indoor air for a "tight" energy efficient building, nor trading Indoor Environmental Quality for water conservation and recycling.

For the future of our country, and for an educated, competitive, healthy workforce, our children are waiting for the healthy, safe, clean schools they need to learn and play and grow.



State data tables on following pages: please note.

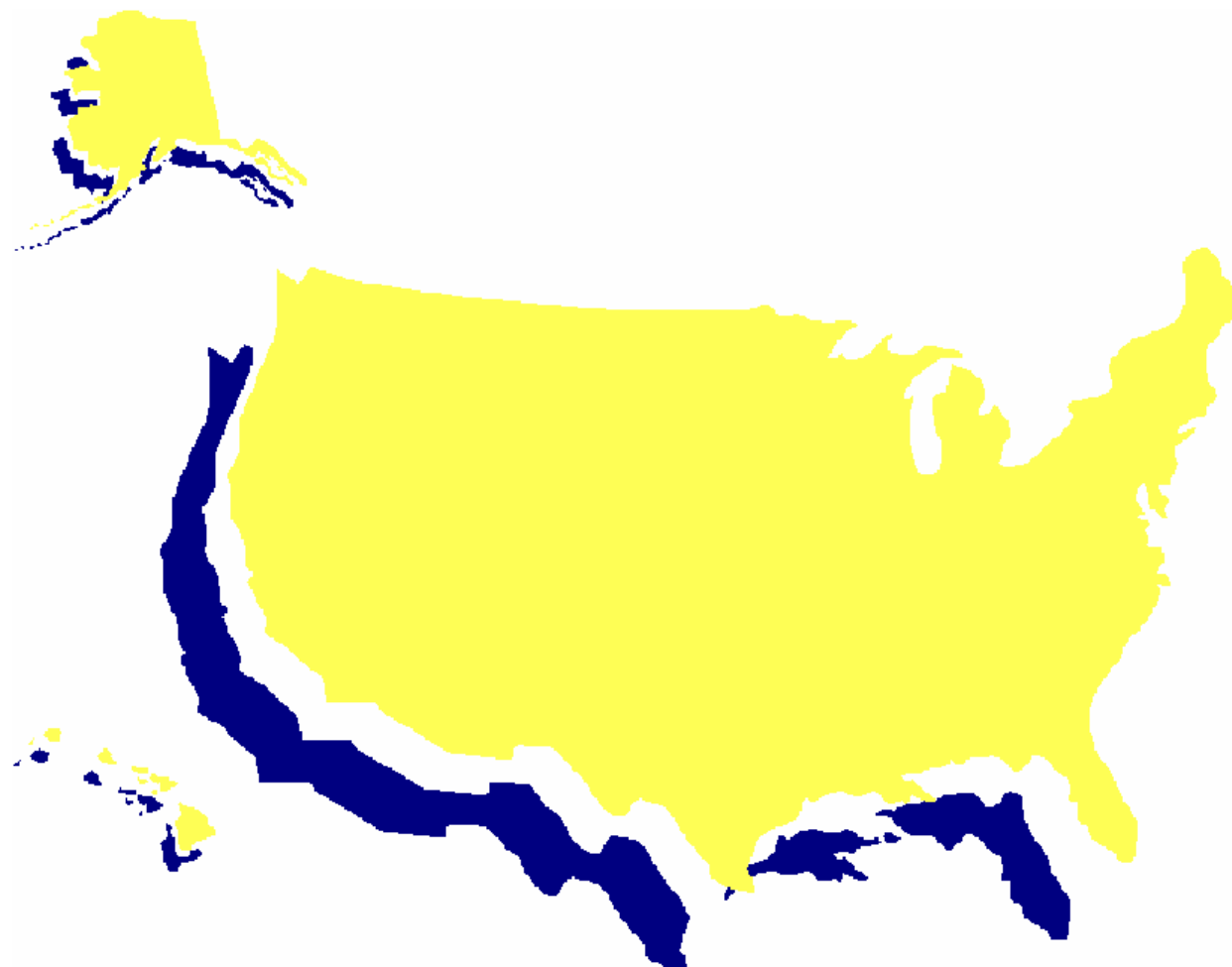
In the state-by-state data tables that follow, only federal and national sources were used in an effort to provide consistent data for public education K-12 schools across all states. State and local advocacy groups that generously contributed to this report did not independently research or review the data such as conditions of school facilities or numbers of buildings.

Please see the appendix for all footnotes and other resources.

¹¹ US Dept of Education Legislation - School Modernization: American Recovery and Reinvestment Act of 2009, page 166, Sec. 14002(b), available at <http://www.ed.gov/policy/gen/leg/recovery/modernization/leg-arra.html>

¹² Id.

National Data Summary



No. Public School Buildings	98,793	States Offering Grants for Construction	38
No. Public Schools Students	49,292,507	States Requiring School IPM Plans	15
No. Minority Students	21,904,510	States with Indoor Air Quality Laws	Footnote 8
No. Students in Special Education Program	6,247,443	States with Green Cleaning Laws	8
No. Employees in School System	6,215,635	States with High Performance Green School Design Programs	21
Percent of Youth 4-17 Ever Diagnosed with ADHD	7.74%	States with School Building Assessments	28
Percent of Schools with at Least One Inadequate Building Feature	68%	Percent of Children (18 or younger) Without Health insurance	12.5%
Percent of Schools with at Least One Unsatisfactory Environmental Factor	57%	Percent of Children with Asthma (under 18)	8.9%
Est. No. Students At High Risk Daily	32,000,000	States with School Facilities Offices	39
States with Adopted OSHA Plans	24		

Data for Public Schools Only: See Appendix

Government rethinking playground risks

School construction made students sick

EPA to review system gauging air emissions

POSSIBLE AIR HAZARDS RARELY CONSIDERED IN PLANS FOR SCHOOLS

School Drinking Water Contains Toxins

City says 19 school sites toxic with PCBs—Plans to clean up soil, not caulk in buildings

IDLING SCHOOL BUSES SPEW BLACK CARBON, FINE PARTICLES

Children Susceptible to Pesticides Longer Than Expected, Study

Why Do We Still Have Toxic Schools?

Boxer plans hearing on toxic school drinking water

NYC Public School Parents: More Toxic Schools on the Way

Study finds pesticide link to childhood leukemia

EPA study: 2.2M live in areas where air poses cancer risk

Testing for toxics at schools sparks questions, lawsuits

EPA nominee pledges to use science

Health risks stack up for students near industrial plants

Wider Net Catches More Cases of Autism Disorders

EPA to monitor air outside toxic schools

'Weird' smell set off probe at Ohio school



**National Healthy Schools Day
By the Governor of the State of Alabama**

A Proclamation
April 21, 2009

WHEREAS, Alabama is dedicated to enhancing and preserving the safety, health, and well-being of our children, especially in the school environment; and

WHEREAS, Alabama schools were recognized for their work to improve school environmental quality by the US EPA Indoor Air Quality Tools for Schools Awards Program. During the past few years, the following Alabama school systems have been honored by the EPA: Excellence Award - Jefferson County Public Schools, Birmingham (2004), Leadership Award- Auburn City Schools, Auburn (2008), Jefferson County School District, Birmingham (2004), Great Start Award- Huntsville City Schools, Huntsville (2007), and Birmingham City Schools (2003); and

WHEREAS, Our schools are the building blocks of our communities and the keystone of our future; and

NOW, THEREFORE, I, Bob Riley, Governor of Alabama, do hereby proclaim April 27, 2009, as National Healthy Schools Day in the State of Alabama.

Given Under My Hand and the Great Seal of the Office of the Governor at the State Capitol in the City of Montgomery on the 21st day of April 2009.

Governor Bob Riley

No. School Buildings	1,587	State Grants for Construction	Y
No. Students	743,632	Integrated Pest Management Program	N
No. Minority Students	305,298	Indoor Air Quality Laws	Footnote 8
No. Students in Special Education Program	88,606	State School Green Cleaning Laws	N
No. Employees in School System	109,816	High Performance Green School Design	N
Percent of Youth 4-17 Ever Diagnosed with ADHD	11.09%	Statewide School Infrastructure Assessment	Y
Percent of Schools with at Least One Inadequate Building Feature	59%	Percent of Children (18 or younger) Without Health Insurance	9.7%
Percent of Schools with at Least One Unsatisfactory Environmental Factor	63%	Percent of Children with Asthma (under 18)	8.7%
No. Students At High Risk Daily	453,616	State Education School Facilities Office	Y
State OSHA Plan	N		



In 2000, **Alaska Community Action on Toxics (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 that has proven effective in reducing exposures to harmful pesticides. ACAT also worked to compel the State of Alaska to implement pesticide right-to-know regulations for schools throughout Alaska in 2001.

In preparation for the 2010 legislative session, Alaska Community Action on Toxics is 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. The act would require that schools take these actions to reduce the exposure of children to toxics:

- Eliminate the use of products and building materials that contain chemicals that are acutely toxic or proven to cause cancer, hormone disruption, birth defects, reproductive damage, immune system damage or nervous system toxicity;
- Use products which have been tested and are least toxic;
- Apply the precautionary principle to decisions about products used in schools: prevent harm to children's health by not using products containing chemicals that have not been fully tested;
- Educate children and school personnel about sources of toxic chemicals, their health effects and ways to reduce exposure.

For more information, visit, **Alaska Community Action on Toxics** at www.akaction.org

No. School Buildings	509	State Grants for Construction	Y
No. Students	132,608	Integrated Pest Management Program	N
No. Minority Students	56,453	Indoor Air Quality Laws	Footnote 8
No. Students in Special Education Program	17,760	State School Green Cleaning Laws	N
No. Employees in School System	16,853	High Performance Green School Design	N
Percent of Youth 4-17 Ever Diagnosed with ADHD	7.07%	Statewide School Infrastructure Assessment	N
Percent of Schools with at Least One Inadequate Building Feature	69%	Percent of Children (18 or younger) Without Health Insurance	14.5%
Percent of Schools with at Least One Unsatisfactory Environmental Factor	80%	Percent of Children with Asthma (under 18)	*
No. Students At High Risk Daily	98,793	State Education School Facilities Office	Y
State OSHA Plan	Y		

State data taken from federal-national sources: see footnotes in Appendix.



No. School Buildings	2,076	State Grants for Construction	Y
No. Students	1,065,082	Integrated Pest Management Program	N
No. Minority Students	581,956	Indoor Air Quality Laws	Footnote 8
No. Students in Special Education Program	124,019	State School Green Cleaning Laws	N
No. Employees in School System	102,390	High Performance Green School Design	Y
Percent of Youth 4-17 Ever Diagnosed with ADHD	5.89%	Statewide School Infrastructure Assessment	N
Percent of Schools with at Least One Inadequate Building Feature	64%	Percent of Children (18 or younger) Without Health Insurance	18.2%
Percent of Schools with at Least One Unsatisfactory Environmental Factor	69%	Percent of Children with Asthma (under 18)	7.7%
No. Students At High Risk Daily	708,280	State Education School Facilities Office	Y
State OSHA Plan	Y		



No. School Buildings	1,114	State Grants for Construction	Y
No. Students	476,409	Integrated Pest Management Program	N
No. Minority Students	154,542	Indoor Air Quality Laws	Footnote 8
No. Students in Special Education Program	65,262	State School Green Cleaning Laws	N
No. Employees in School System	71,616	High Performance Green School Design	N
Percent of Youth 4-17 Ever Diagnosed with ADHD	9.88%	Statewide School Infrastructure Assessment	Y
Percent of Schools with at Least One Inadequate Building Feature	42%	Percent of Children (18 or younger) Without Health Insurance	12.2%
Percent of Schools with at Least One Unsatisfactory Environmental Factor	62%	Percent of Children with Asthma (under 18)	8.5%
No. Students At High Risk Daily	247,733	State Education School Facilities Office	Y
State OSHA Plan	N		

State data taken from federal-national sources: see footnotes in Appendix.



California's students, teachers and staff deserve healthier school environments. While progress is being made, the trends remain disturbing. Contrary to the table's national statistics, the California Health Interview Survey (CHIS) found in 2003 asthma incidence in children was 14% for ages 1-11 and 19% for ages 12-17 (see: www.healthpolicy.ucla.edu/pubs/Publication.aspx?pubID=197).

For School Indoor Air Quality (IAQ), the California Department of Public Health introduced its first annual AIR Health Awards for Schools in 2009. The state's Emergency Repair Program has allocated nearly half of the \$800 million committed through the Williams Settlement legislation towards fixing eligible school facilities. The Healthy Schools Act of 2000 requires schools to disclose the use of pesticides and requires the state to promote a voluntary IPM program. However, there is still no mandate, standard or regulatory framework to address IAQ or reduce toxics used in schools.

Voluntarily, schools like the Fairfield-Suisun Unified School District have undertaken a variety of measures to improve indoor air quality, including the adoption of a "green" cleaning program. The list of schools in California voluntarily making the switch to less-toxic cleaners is growing, and 6 of the 10 largest school districts in the state have or are beginning pilot programs to test green cleaning products. Also in 2009, Assemblywoman Julia Brownley authored the Clean and Healthy Schools Act (AB821, still pending), which would require that K-12 schools in California switch to less-toxic independently certified cleaning products as long as it wouldn't cost schools more, supported widely across the state.

California may join Hawaii, Illinois, Connecticut, and New York as states that have adopted laws that reduce children's exposures to toxic cleaning supplies while at school. However, California has a long way to go to ensure that all of its school facilities have healthy indoor environments and are in good repair, adequately maintained, and designed for high performance.

For more information, visit Green Schools Initiative at www.greenschools.net.

No. School Buildings	10,063	State Grants for Construction	Y
No. Students	6,406,821	Integrated Pest Management Program	N
No. Minority Students	4,558,233	Indoor Air Quality Laws	Footnote 8
No. Students in Special Education Program	672,168	State School Green Cleaning Laws	N
No. Employees in School System	579,825	High Performance Green School Design	Y
Percent of Youth 4-17 Ever Diagnosed with ADHD	5.34%	Statewide School Infrastructure Assessment	Y
Percent of Schools with at Least One Inadequate Building Feature	71%	Percent of Children (18 or younger) Without Health Insurance	16.2%
Percent of Schools with at Least One Unsatisfactory Environmental Factor	87%	Percent of Children with Asthma (under 18)	7.1%
No. Students At High Risk Daily	5,061,389	State Education School Facilities Office	Y
State OSHA Plan	Y		

State data taken from federal-national, not state, sources: see footnotes in Appendix.

Colorado

Many Colorado schools currently participate in the EPA's Indoor Air Quality Tools for Schools Program. Several of these schools have received awards for excellence in indoor air quality management.

Colorado is also a member state of the Collaborative for High Performance Schools (CHPS) and has recently implemented the CHPS Criteria, a customized state-specific assessment tool for the design and construction of green schools in Colorado that are energy efficient, comfortable, environmentally responsible, and healthy spaces of learning.

For more information on Colorado's Indoor Air Quality programs for schools, visit **EPA Healthy School Environment Resources for Colorado** at http://cfpub.epa.gov/schools/top_sub.cfm?r_id=8&st_id=CO

For more information on green school planning in Colorado, visit the **Collaborative for High Performance Schools (CHPS)** at www.chps.net/dev/Drupal//node/457



Photo courtesy of www.greensage.com

No. School Buildings	1,736	State Grants for Construction	Y
No. Students	794,026	Integrated Pest Management Program	N
No. Minority Students	302,552	Indoor Air Quality Laws	Footnote 8
No. Students in Special Education Program	N/A	State School Green Cleaning Laws	N
No. Employees in School System	97,364	High Performance Green School Design	Y
Percent of Youth 4-17 Ever Diagnosed with ADHD	4.95%	Statewide School Infrastructure Assessment	Y
Percent of Schools with at Least One Inadequate Building Feature	58%	Percent of Children (18 or younger) Without Health Insurance	14.5%
Percent of Schools with at Least One Unsatisfactory Environmental Factor	63%	Percent of Children with Asthma (under 18)	8.5%
No. Students At High Risk Daily	480,386	State Education School Facilities Office	N
State OSHA Plan	N		

State data taken from federal-national sources: see footnotes in Appendix.



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.

However, the failure of this 2003 law to define minimum standards for an acceptable IAQ program remains a significant roadblock to protecting the health of school children and employees.

For further information on problems and solutions associated with the effective implementation of school environmental health laws in Connecticut, visit **Connecticut Foundation for Environmentally Safe Schools** at: www.pollutionfreeschools.org/connfess/reports/

No. School Buildings	1,115	State Grants for Construction	Y
No. Students	575,100	Integrated Pest Management Program	N
No. Minority Students	195,370	Indoor Air Quality Laws	Footnote 8
No. Students in Special Education Program	64,277	State School Green Cleaning Laws	Y
No. Employees in School System	86,709	High Performance Green School Design	Y
Percent of Youth 4-17 Ever Diagnosed with ADHD	7.38%	Statewide School Infrastructure Assessment	Y
Percent of Schools with at Least One Inadequate Building Feature	58%	Percent of Children (18 or younger) Without Health Insurance	7.9%
Percent of Schools with at Least One Unsatisfactory Environmental Factor	68%	Percent of Children with Asthma (under 18)	9.9%
No. Students At High Risk Daily	362,313	State Education School Facilities Office	Y
State OSHA Plan	Y		

State data taken from federal-national sources: see footnotes in Appendix.



No. School Buildings	242	State Grants for Construction	Y
No. Students	122,254	Integrated Pest Management Program	N
No. Minority Students	56,375	Indoor Air Quality Laws	Footnote 8
No. Students in Special Education Program	19,366	State School Green Cleaning Laws	N
No. Employees in School System	15,403	High Performance Green School Design	N
Percent of Youth 4-17 Ever Diagnosed with ADHD	9.74%	Statewide School Infrastructure Assessment	Y
Percent of Schools with at Least One Inadequate Building Feature	70%	Percent of Children (18 or younger) Without Health Insurance	7.5%
Percent of Schools with at Least One Unsatisfactory Environmental Factor	65%	Percent of Children with Asthma (under 18)	8.8%*
No. Students At High Risk Daily	82,521	State Education School Facilities Office	Y
State OSHA Plan	N		



Photo courtesy of Jennifer Aspelund



The District of Columbia community has rallied around a DC Asthma Strategic Plan that includes specific investment in the connections between environmental exposure in schools and child care environments. Work groups for each area are currently working to identify and implement opportunities for influencing protective policy changes.

For example, Section 5.5—School Responsibilities/Implement environmental guidelines for safe and healthy indoor air quality, which includes, "Safe and Healthy School Environments". Growing children are especially vulnerable to environmental hazards, such as lead and pesticides. For children with asthma and severe allergies, focus areas also should include improving indoor and outdoor air quality, eliminating pests safely, using appropriate cleaning agents, and reducing moisture and mold.

For more information, visit **Children's Environmental Health Network** at www.cehn.org

No. School Buildings	235	State Grants for Construction	Y
No. Students	72,850	Integrated Pest Management Program	N
No. Minority Students	69,196	Indoor Air Quality Laws	Footnote 8
No. Students in Special Education Program	8,806	State School Green Cleaning Laws	N
No. Employees in School System	12,194	High Performance Green School Design	Y
Percent of Youth 4-17 Ever Diagnosed with ADHD	6.74%	Statewide School Infrastructure Assessment	N/A
Percent of Schools with at Least One Inadequate Building Feature	91%	Percent of Children (18 or younger) Without Health Insurance	11.3%
Percent of Schools with at Least One Unsatisfactory Environmental Factor	73%	Percent of Children with Asthma (under 18)	10.3%*
No. Students At High Risk Daily	59,737	State Education School Facilities Office	Y
State OSHA Plan	N		

State data taken from federal-national sources: see footnotes in Appendix.



In 2007, Statute 1001.42(16)(a) was established in the state of Florida to uphold a standard of annual school improvement and education accountability by district school boards. The boards are required to create school improvement plans for each school in the district that address educational priorities and student performance standards. An amendment was added to this statute that expanded the responsibilities of school boards to other concerns, such as indoor environmental air quality.

As part of the State Uniform Building Code for Public Educational Facilities, Statute 1013.12 requires school boards to adopt policies, administer procedures, and conduct annual fiscal year inspections for upholding safety and health standards for occupants in schools and ancillary buildings. The Department of Education and other state or local agencies are also allowed to conduct safety inspections at any time.

Florida requires each school board to establish policies adopting US EPA's Integrated Pest Management in Schools guidelines, as mandated by the State Requirements for Educational Facilities, established in 2008.

For more information, visit **National Association of State Boards of Education** at www.nasbe.org

No. School Buildings	4,009	State Grants for Construction	Y
No. Students	2,671,513	Integrated Pest Management Program	N
No. Minority Students	1,421,925	Indoor Air Quality Laws	Footnote 8
No. Students in Special Education Program	396,931	State School Green Cleaning Laws	N
No. Employees in School System	321,600	High Performance Green School Design	Y
Percent of Youth 4-17 Ever Diagnosed with ADHD	9.21%	Statewide School Infrastructure Assessment	N
Percent of Schools with at Least One Inadequate Building Feature	57%	Percent of Children (18 or younger) Without Health Insurance	17.2%
Percent of Schools with at Least One Unsatisfactory Environmental Factor	80%	Percent of Children with Asthma (under 18)	8.9%
No. Students At High Risk Daily	1,829,986	State Education School Facilities Office	Y
State OSHA Plan	N		

State data taken from federal-national sources: see footnotes in Appendix.



No. School Buildings	2,506	State Grants for Construction	Y
No. Students	1,629,157	Integrated Pest Management Program	N
No. Minority Students	864,613	Indoor Air Quality Laws	Footnote 8
No. Students in Special Education Program	196,810	State School Green Cleaning Laws	N
No. Employees in School System	227,616	High Performance Green School Design	N
Percent of Youth 4-17 Ever Diagnosed with ADHD	9.37%	Statewide School Infrastructure Assessment	Y
Percent of Schools with at Least One Inadequate Building Feature	37%	Percent of Children (18 or younger) Without Health Insurance	12.8%
Percent of Schools with at Least One Unsatisfactory Environmental Factor	48%	Percent of Children with Asthma (under 18)	7.9%
No. Students At High Risk Daily	692,392	State Education School Facilities Office	Y
State OSHA Plan	N		



HB 1538, the Hawaii Green Cleaning for Schools Law, was passed in early May 2009 and requires all public schools to “...give first preference, where feasible, to the purchase and use of environmentally sensitive cleaning and maintenance products that have been approved by the Green Seal® program...”. The law also requires the Hawaii Department of Health to provide public schools with a list of Green Seal® approved products. For more information on green **cleaning in Hawaii**, visit <http://www.capitol.hawaii.gov/session2009/Bills/>

No. School Buildings	287	State Grants for Construction	Y
No. Students	180,728	Integrated Pest Management Program	N
No. Minority Students	145,375	Indoor Air Quality Laws	Footnote 8
No. Students in Special Education Program	21,099	State School Green Cleaning Laws	Y
No. Employees in School System	21,061	High Performance Green School Design	Y
Percent of Youth 4-17 Ever Diagnosed with ADHD	6.14%	Statewide School Infrastructure Assessment	Y
Percent of Schools with at Least One Inadequate Building Feature	57%	Percent of Children (18 or younger) Without Health Insurance	9.2%
Percent of Schools with at Least One Unsatisfactory Environmental Factor	78%	Percent of Children with Asthma (under 18)	10.9%
No. Students At High Risk Daily	121,991	State Education School Facilities Office	Y
State OSHA Plan	Y		

State data taken from federal-national sources: see footnotes in Appendix.



No. School Buildings	732	State Grants for Construction	Y
No. Students	267,380	Integrated Pest Management Program	N
No. Minority Students	47,304	Indoor Air Quality Laws	Footnote 8
No. Students in Special Education Program	28,439	State School Green Cleaning Laws	N
No. Employees in School System	26,321	High Performance Green School Design	N
Percent of Youth 4-17 Ever Diagnosed with ADHD	6.38%	Statewide School Infrastructure Assessment	Y
Percent of Schools with at Least One Inadequate Building Feature	56%	Percent of Children (18 or younger) Without Health Insurance	15.5%
Percent of Schools with at Least One Unsatisfactory Environmental Factor	64%	Percent of Children with Asthma (under 18)	*
No. Students At High Risk Daily	160,428	State Education School Facilities Office	N
State OSHA Plan	N		



No. School Buildings	4,395	State Grants for Construction	N
No. Students	2,118,276	Integrated Pest Management Program	Y
No. Minority Students	959,701	Indoor Air Quality Laws	Footnote 8
No. Students in Special Education Program	326,539	State School Green Cleaning Laws	Y
No. Employees in School System	221,553	High Performance Green School Design	Y
Percent of Youth 4-17 Ever Diagnosed with ADHD	6.32%	Statewide School Infrastructure Assessment	Y
Percent of Schools with at Least One Inadequate Building Feature	62%	Percent of Children (18 or younger) Without Health Insurance	11.1%
Percent of Schools with at Least One Unsatisfactory Environmental Factor	70%	Percent of Children with Asthma (under 18)	9.0%
No. Students At High Risk Daily	1,398,062	State Education School Facilities Office	Y
State OSHA Plan	N		

State data taken from federal-national sources: see footnotes in Appendix.



In 2009, the Indiana General Assembly moved protection of school indoor air quality ahead for Indiana students by enacting Senate Enrolled Act 440. This law builds upon an earlier statute requiring the Indiana State Department of Health to conduct an indoor air quality inspection at any school for which they receive a complaint.

After five years of inspections and other improvements (approximately 20 a year), several legislators and advocates felt that the program was not being fully implemented and could be improved if the Department adopted regulations to give inspectors clearer authority to require schools to take corrective action when problems were found, to make sure that results of inspections were made available to the school community and other improvements. The law also requires the Department, with the help of an expert panel, to develop and make available to schools a best practices manual for indoor air quality at schools. See IC 16-41-37.5 at: www.in.gov/legislative/ic/code/title16/ar41/ch37.5.html.

Improving Kids' Environment publishes the results of all inspections and follow-up actions at: www.ikecoalition.org/Schools/IAQ_in_Schools.htm

No. School Buildings	1,969	State Grants for Construction	N
No. Students	1,045,940	Integrated Pest Management Program	N
No. Minority Students	243,011	Indoor Air Quality Laws	Footnote 8
No. Students in Special Education Program	178,652	State School Green Cleaning Laws	N
No. Employees in School System	134,681	High Performance Green School Design	N
Percent of Youth 4-17 Ever Diagnosed with ADHD	7.93%	Statewide School Infrastructure Assessment	N
Percent of Schools with at Least One Inadequate Building Feature	56%	Percent of Children (18 or younger) Without Health Insurance	10.1%
Percent of Schools with at Least One Unsatisfactory Environmental Factor	67%	Percent of Children with Asthma (under 18)	8.4%
No. Students At High Risk Daily	643,253	State Education School Facilities Office	Y
State OSHA Plan	Y		

State data taken from federal-national sources: see footnotes in Appendix.

Iowa

No. School Buildings	1,532	State Grants for Construction	N
No. Students	483,122	Integrated Pest Management Program	N
No. Minority Students	68,121	Indoor Air Quality Laws	Footnote 8
No. Students in Special Education Program	71,050	State School Green Cleaning Laws	N
No. Employees in School System	69,690	High Performance Green School Design	N
Percent of Youth 4-17 Ever Diagnosed with ADHD	8.35%	Statewide School Infrastructure Assessment	N
Percent of Schools with at Least One Inadequate Building Feature	50%	Percent of Children (18 or younger) Without Health Insurance	6.2%
Percent of Schools with at Least One Unsatisfactory Environmental Factor	67%	Percent of Children with Asthma (under 18)	7.1%
No. Students At High Risk Daily	282,626	State Education School Facilities Office	Y
State OSHA Plan	Y		

Kansas

No. School Buildings	1,428	State Grants for Construction	Y
No. Students	469,506	Integrated Pest Management Program	N
No. Minority Students	125,986	Indoor Air Quality Laws	Footnote 8
No. Students in Special Education Program	65,831	State School Green Cleaning Laws	N
No. Employees in School System	53,762	High Performance Green School Design	N
Percent of Youth 4-17 Ever Diagnosed with ADHD	8.14%	Statewide School Infrastructure Assessment	N
Percent of Schools with at Least One Inadequate Building Feature	55%	Percent of Children (18 or younger) Without Health Insurance	10.5%
Percent of Schools with at Least One Unsatisfactory Environmental Factor	74%	Percent of Children with Asthma (under 18)	8.8%
No. Students At High Risk Daily	302,831	State Education School Facilities Office	Y
State OSHA Plan	N		

State data taken from federal-national sources: see footnotes in Appendix.



On December 19, 2003, a 300-pound mobile folding cafeteria table tipped over and killed a six-year-old Ohio boy named Jarod Bennett.

On August 6, 2009 I realized in horror that there were dozens of these same tables neatly laid out awaiting the arrival of hundreds of lower elementary children in my children's new school.

I have a five year old daughter who has big brown eyes like Jarod and I have to hope that these tables are never folded up; and if they are folded up I hope it never happens with children present; and if children are present I hope they are not allowed to move the tables; and if they are allowed to move the tables I hope the table does not tip; and if it tips I hope it does not fall; and if it falls I hope a child is not injured. I informed the principal of the risks posed by the tables, but the tables are still there for the same reason Jarod's law was recently repealed in Ohio – money.

When policy makers are unwilling to allocate money to prevent injuries – a parent can only hope that their children are not harmed.

Contributed by Brent Ibata, PhD JD MPH

No. School Buildings	1,538	State Grants for Construction	Y
No. Students	683,173	Integrated Pest Management Program	Y
No. Minority Students	138,311	Indoor Air Quality Laws	Footnote 8
No. Students in Special Education Program	109,354	State School Green Cleaning Laws	N
No. Employees in School System	98,812	High Performance Green School Design	Y
Percent of Youth 4-17 Ever Diagnosed with ADHD	10.12%	Statewide School Infrastructure Assessment	Y
Percent of Schools with at Least One Inadequate Building Feature	59%	Percent of Children (18 or younger) Without Health Insurance	10.3%
Percent of Schools with at Least One Unsatisfactory Environmental Factor	63%	Percent of Children with Asthma (under 18)	10.4%
No. Students At High Risk Daily	416,735	State Education School Facilities Office	Y
State OSHA Plan	Y		

State data taken from federal-national sources: see footnotes in Appendix.



Arsenic contamination in New Orleans soil associated with flooding

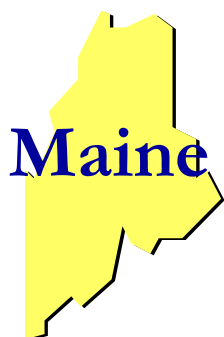
“.... At virtually all of these sites (97%), arsenic concentrations decreased substantially by 18 months into the recovery period when the average concentration of matched samples was 3.26mg/kg (95% CI 1.86–4.66). However, 21 (30%) of the samples taken during the recovery period still had higher concentrations of arsenic than the matched sample taken prior to the flooding. In addition, 33% of **samples from schoolyards** and 13% of samples from **playgrounds** had elevated arsenic concentrations above the screening guidelines during the recovery period.

“These findings suggest that the flooding resulted in the deposition of arsenic-contaminated sediments. Diminution of the quantity of sediment at many locations has significantly reduced overall soil arsenic concentrations, but some locations remain of concern for potential long-term soil contamination.”

Rotkin-Ellman, M., et al., Arsenic contamination in New Orleans soil: Temporal changes associated with.... Environ. Res. (2009), doi:10.1016/j.envres.2009.09.004

No. School Buildings	1,527	State Grants for Construction	N
No. Students	675,851	Integrated Pest Management Program	Y
No. Minority Students	337,334	Indoor Air Quality Laws	Footnote 8
No. Students in Special Education Program	89,422	State School Green Cleaning Laws	N
No. Employees in School System	95,226	High Performance Green School Design	Y
Percent of Youth 4-17 Ever Diagnosed with ADHD	10.31%	Statewide School Infrastructure Assessment	N
Percent of Schools with at Least One Inadequate Building Feature	50%	Percent of Children (18 or younger) Without Health Insurance	17.3%
Percent of Schools with at Least One Unsatisfactory Environmental Factor	66%	Percent of Children with Asthma (under 18)	8.3%
No. Students At High Risk Daily	391,994	State Education School Facilities Office	N
State OSHA Plan	N		

State data taken from federal-national sources: see footnotes in Appendix.



Green cleaning in schools is a voluntary program in Maine, but it is about to become more visible. Green cleaning questions have been incorporated into a mandatory school facility survey which must be completed by March 2010. By Spring 2010, the Maine Department of Education (DOE) will have the data needed to begin listing on its website schools taking action to provide a safer, healthier school environment.

In 2006, the Maine Legislature passed two Resolves requiring the Maine DOE to develop and disseminate information to public schools to promote safer cleaning practices. Unfortunately, a key component of the action required by the Resolves has been missing until now. Due to budget constraints and the resulting staff vacancies, the Department has been unable to generate and maintain a list of school administrative units that implement at least some green cleaning procedures or use one or more green cleaning chemicals as required by the Resolves.

The Maine DOE encourages schools to use “green” cleaning chemicals by listing preferable, third-party certified cleaning chemicals: www.maine.gov/education/const/chem002.xls. The list gives a great deal of information including which organization certified the product and whether or not the product contains fragrance. For information about “Best ‘Green’ Cleaning Management Practices” see: www.maine.gov/education/const/chem004.doc.

Also on the Maine DOE website is best practice information for carpet cleaning and maintenance: www.maine.gov/education/const/chem003.ppt. The Department’s Chemicals in Schools homepage can be found at: www.maine.gov/education/const/chem.htm.

For more information, visit the **American Lung Association of New England** at www.lungne.org

No. School Buildings	672	State Grants for Construction	Y
No. Students	193,986	Integrated Pest Management Program	Y
No. Minority Students	10,567	Indoor Air Quality Laws	Footnote 8
No. Students in Special Education Program	34,340	State School Green Cleaning Laws	Y
No. Employees in School System	36,785	High Performance Green School Design	Y
Percent of Youth 4-17 Ever Diagnosed with ADHD	7.92%	Statewide School Infrastructure Assessment	Y
Percent of Schools with at Least One Inadequate Building Feature	60%	Percent of Children (18 or younger) Without Health Insurance	7.0%
Percent of Schools with at Least One Unsatisfactory Environmental Factor	71%	Percent of Children with Asthma (under 18)	*
No. Students At High Risk Daily	127,061	State Education School Facilities Office	Y
State OSHA Plan	N		

State data taken from federal-national sources: see footnotes in Appendix.



The use of green cleaning products in schools can be, if done properly, a major step towards improving indoor air quality by reducing the air pollutants in the building, and a major step towards improving the health and safety of children and custodial workers. Unfortunately, the Maryland legislature recently enacted a law on procurement of green cleaning products in schools supported by the cleaning chemical manufacturers, but without necessary input from health, parent, environment, and labor groups who are well aware of the risks of conventional hazardous cleaning products.

In testifying on the bill in Spring 2009, MD PTA requested the bill be amended to include all cleaning and maintenance products, as both are used at a school during custodial activities. In addition, MD PTA urged that the bill define “green,” consistent with model bill text from the National Collaborative Work Group on Green Cleaning and HB 709 which would require the use of third-party certified green cleaning products.

For more information, visit **Maryland PTA** at:
www.mdpta.org/bridge_legislation.html

For more information about the **National Collaborative Work Group on Green Cleaning and Chemical Policy Reform in Schools**, see
www.cleaningforhealthyschools.org

No. School Buildings	1,446	State Grants for Construction	Y
No. Students	851,640	Integrated Pest Management Program	Y
No. Minority Students	444,876	Indoor Air Quality Laws	Footnote 8
No. Students in Special Education Program	105,962	State School Green Cleaning Laws	Y
No. Employees in School System	113,474	High Performance Green School Design	Y
Percent of Youth 4-17 Ever Diagnosed with ADHD	9.11%	Statewide School Infrastructure Assessment	Y
Percent of Schools with at Least One Inadequate Building Feature	67%	Percent of Children (18 or younger) Without Health Insurance	9.7%
Percent of Schools with at Least One Unsatisfactory Environmental Factor	65%	Percent of Children with Asthma (under 18)	10.8%
No. Students At High Risk Daily	562,082	State Education School Facilities Office	Y
State OSHA Plan	Y		

State data taken from federal-national sources: see footnotes in Appendix.



Healthy Schools advocates in Massachusetts see steady progress at improving health and environmental conditions through policies, but see huge gaps in resources and enforcements locally. Challenged by State budget cuts, school staff and advocates must utilize their organizing power to improve maintenance when schools cannot get funding for major renovations, create school-based committees to identify asthma triggers and integrated pest control measures, and partner with local allies to continue to improve on policies we have won.

Some key statewide efforts to improve school conditions are:

- Mass School Building Authority (www.massschoolbuildings.org) provides financial incentives for High Performance Green School Design Guidelines and has standards for indoor air quality, school environmental siting analysis, and health and safety protections for occupants during construction.
- Voluntary use of “green cleaners.” Some of the larger school districts such as Boston, Brookline, Newton and Springfield, and many smaller districts are voluntarily adopting the use of 3rd party certified cleaning products. School districts can use the updated State Contract for these products (www.mass.gov/epp).
- Statewide MA Asthma Action Coalition’s five-year action plan (http://www.mass.gov/Eeohhs2/docs/dph/com_health/asthma/state_plan.pdf) includes goals for expanding the number of schools adopting the EPA IAQ Tools for Schools Program; expanding use of green cleaners; coordination of state agencies as a resource; and improving school-based health and wellness on asthma.

For more information, visit **MassCOSH** at www.masscosh.org

No. School Buildings	1,879	State Grants for Construction	Y
No. Students	968,661	Integrated Pest Management Program	Y
No. Minority Students	275,706	Indoor Air Quality Laws	Footnote 8
No. Students in Special Education Program	159,551	State School Green Cleaning Laws	N
No. Employees in School System	136,563	High Performance Green School Design	Y
Percent of Youth 4-17 Ever Diagnosed with ADHD	8.51%	Statewide School Infrastructure Assessment	Y
Percent of Schools with at Least One Inadequate Building Feature	75%	Percent of Children (18 or younger) Without Health Insurance	6.9%
Percent of Schools with at Least One Unsatisfactory Environmental Factor	80%	Percent of Children with Asthma (under 18)	12.1%
No. Students At High Risk Daily	750,712	State Education School Facilities Office	Y
State OSHA Plan	N		

State data taken from federal-national sources: see footnotes in Appendix.



The 1994 Natural Resource and Environmental Act 451 implemented rules pertaining to the development of training programs for integrated pest management systems in schools. This law also requires parents and guardians of children to be notified in detail prior to pesticide application at schools in the beginning of each school year.

The 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.

In 2003, the State Board of Education adopted the Policy on Coordinated School Health Programs to Support Academic Achievement and Healthy Schools, which urges school districts to promote a positive and safe school environment by monitoring air quality in schools for molds, dust, and property humidity as part of a Coordinated School Health Program.

In 2005, the Board also adopted the Policy on the Management of Asthma in Schools that promotes practices to improve indoor and outdoor air quality. Such practices could include preventative maintenance on heating/cooling systems, construction and remodeling projects, bus idling, dust mites, and molds, integrated pest management techniques, and pesticide application notification.

For more information, visit the **National Association of State Boards of Education** at www.nasbe.org

No. School Buildings	4,136	State Grants for Construction	N
No. Students	1,714,709	Integrated Pest Management Program	Y
No. Minority Students	494,464	Indoor Air Quality Laws	Footnote 8
No. Students in Special Education Program	241,889	State School Green Cleaning Laws	N
No. Employees in School System	212,320	High Performance Green School Design	N
Percent of Youth 4-17 Ever Diagnosed with ADHD	9.21%	Statewide School Infrastructure Assessment	N
Percent of Schools with at Least One Inadequate Building Feature	52%	Percent of Children (18 or younger) Without Health Insurance	7.6%
Percent of Schools with at Least One Unsatisfactory Environmental Factor	61%	Percent of Children with Asthma (under 18)	9.4%
No. Students At High Risk Daily	968,811	State Education School Facilities Office	N
State OSHA Plan	Y		

State data taken from federal-national sources: see footnotes in Appendix.



Minnesota has several protective policies to safeguard the well-being of public school children, including Indoor Air Quality (IAQ) standards, the Parent's Right to Know Act, and Integrated Pest Management. The success of these programs is based on full implementation – which in the face of massive budget cuts may be questionable.

Minnesota law (Statute 123B.57) requires public school districts to adopt a plan to monitor and improve indoor air quality. To comply, the education department adopted the US EPA's Indoor Air Quality Tools for Schools program. To support this effort the Minnesota health department (MDH) has offered several trainings & resources. MDH has also issued guidance documents for mold and environmental asthma trigger management. See: www.health.state.mn.us/divs/eh/indoorair/schools/index.html

The Parent's Right to Know Act (RTK) (M.S. 121A.30) was enacted in 2000. It includes recommendations for schools to use Integrated Pest Management (IPM), and for all schools to provide notices to parents and employees prior to pesticide application. See: www.health.state.mn.us/divs/eh/pesticide/notices/index.html and www.mda.state.mn.us/plants/pestmanagement/ipm/school-ipm-policy.aspx

Today, new efforts are underway to introduce non-toxic cleaning legislation, championed by **Preventing Harm Minnesota** (PHM) and M-PIRG. PHM and the Ecopaulitans successfully introduced a green cleaning pilot in the Saint Paul Public Schools and Minneapolis Public Schools recently initiated a green cleaning program.

For more information, **Preventing Harm MN** at www.preventingharmmn.org

No. School Buildings	2,673	State Grants for Construction	Y
No. Students	840,565	Integrated Pest Management Program	N
No. Minority Students	191,272	Indoor Air Quality Laws	Footnote 8
No. Students in Special Education Program	117,924	State School Green Cleaning Laws	N
No. Employees in School System	106,701	High Performance Green School Design	N
Percent of Youth 4-17 Ever Diagnosed with ADHD	7.53%	Statewide School Infrastructure Assessment	N
Percent of Schools with at Least One Inadequate Building Feature	57%	Percent of Children (18 or younger) Without Health Insurance	5.9%
Percent of Schools with at Least One Unsatisfactory Environmental Factor	66%	Percent of Children with Asthma (under 18)	7.8%
No. Students At High Risk Daily	516,947	State Education School Facilities Office	Y
State OSHA Plan	Y		

State data taken from federal-national sources: see footnotes in Appendix.



Mississippi lacks state regulations on pesticide use in the school environment.

For further information, visit **National Association of State Boards of Education** at www.nasbe.org

No. School Buildings	1,062	State Grants for Construction	Y
No. Students	495,026	Integrated Pest Management Program	N
No. Minority Students	264,770	Indoor Air Quality Laws	Footnote 8
No. Students in Special Education Program	67,016	State School Green Cleaning Laws	N
No. Employees in School System	68,815	High Performance Green School Design	N
Percent of Youth 4-17 Ever Diagnosed with ADHD	9.59%	Statewide School Infrastructure Assessment	N
Percent of Schools with at Least One Inadequate Building Feature	50%	Percent of Children (18 or younger) Without Health Insurance	11.6%
Percent of Schools with at Least One Unsatisfactory Environmental Factor	54%	Percent of Children with Asthma (under 18)	8.4%*
No. Students At High Risk Daily	257,414	State Education School Facilities Office	Y
State OSHA Plan	N/A		



Missouri presently lacks state policies addressing air quality and pesticide use in and around schools.

For more information, visit **National Association of State Boards of Education** at www.nasbe.org

No. School Buildings	2,384	State Grants for Construction	N
No. Students	920,353	Integrated Pest Management Program	N
No. Minority Students	217,918	Indoor Air Quality Laws	Footnote 8
No. Students in Special Education Program	141,406	State School Green Cleaning Laws	Y
No. Employees in School System	127,020	High Performance Green School Design	N
Percent of Youth 4-17 Ever Diagnosed with ADHD	7.67%	Statewide School Infrastructure Assessment	N
Percent of Schools with at Least One Inadequate Building Feature	54%	Percent of Children (18 or younger) Without Health Insurance	5.3%
Percent of Schools with at Least One Unsatisfactory Environmental Factor	58%	Percent of Children with Asthma (under 18)	8.6%
No. Students At High Risk Daily	515,398	State Education School Facilities Office	Y
State OSHA Plan	N		

State data taken from federal-national sources: see footnotes in Appendix.

Montana

Montana does not have a specific policy addressing indoor air quality in schools.

For more information, visit **National Association of State Boards of Education** at www.nasbe.org

No. School Buildings	832	State Grants for Construction	N
No. Students	144,418	Integrated Pest Management Program	N
No. Minority Students	23,249	Indoor Air Quality Laws	Footnote 8
No. Students in Special Education Program	18,557	State School Green Cleaning Laws	N
No. Employees in School System	19,023	High Performance Green School Design	N
Percent of Youth 4-17 Ever Diagnosed with ADHD	7.09%	Statewide School Infrastructure Assessment	Y
Percent of Schools with at Least One Inadequate Building Feature	45%	Percent of Children (18 or younger) Without Health Insurance	15.6%
Percent of Schools with at Least One Unsatisfactory Environmental Factor	69%	Percent of Children with Asthma (under 18)	*
No. Students At High Risk Daily	82,318	State Education School Facilities Office	N
State OSHA Plan	N		

Nebraska

Nebraska currently has no state policies for air quality and pesticide use in and around schools.

For more information, visit **National Association of State Boards of Education** at www.nasbe.org

No. School Buildings	1,190	State Grants for Construction	N
No. Students	287,580	Integrated Pest Management Program	N
No. Minority Students	67,684	Indoor Air Quality Laws	Footnote 8
No. Students in Special Education Program	44,838	State School Green Cleaning Laws	N
No. Employees in School System	42,938	High Performance Green School Design	N
Percent of Youth 4-17 Ever Diagnosed with ADHD	6.39%	Statewide School Infrastructure Assessment	N
Percent of Schools with at Least One Inadequate Building Feature	44%	Percent of Children (18 or younger) Without Health Insurance	8.0%
Percent of Schools with at Least One Unsatisfactory Environmental Factor	61%	Percent of Children with Asthma (under 18)	8.7%*
No. Students At High Risk Daily	150,980	State Education School Facilities Office	N
State OSHA Plan	N		

State data taken from federal-national sources: see footnotes in Appendix.



Photo courtesy of New York State United Teachers

I work in a building that made me very sick. The teacher before me had to leave due to the fact she could not breathe in the room. She was denied workers comp. Another teacher in the building couldn't breathe without using an inhaler first. **Lead, arsenic, cadmium and chromium were found in the dust** throughout the building but not in the air. Mold present but no money to fix. Maintenance is told to spray with bleach and drywall over it. I would like to find the proper way to take care of these issues so teachers stop getting sick.

Arizona Teacher

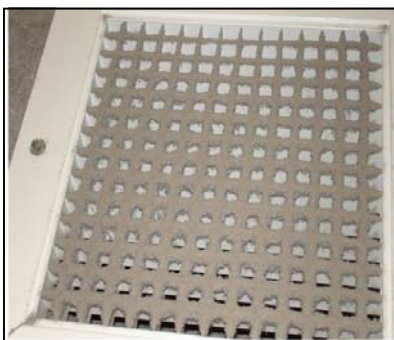
The National School Plant Management Association encourages everyone to support the efforts of school districts across the nation in making our nation's schools as safe and healthy as possible. We must all work together to ensure that our children have every opportunity to succeed. Learning is much easier in schools where the air is fresh, the water pure and the building is clean. NSPMA encourages everyone to do their part.

Art Bode, Executive Director, National School Plant Management Association



My 4 year old daughter has been attending preschool in NJ. The indoor air quality is horrible. They use **toxic cleaners** around the kids, sometimes spraying the stuff when the kids are eating their snacks. There is **no ventilation**. It's a horrible situation. I have complained to the director of the school about this with another parent and nothing has been done. My next step is to report to child care services and possibly go to the news.

New Jersey Parent



Vent that was tested as 90% Aspergillus mold at an Elementary Middle School in WI. Photo courtesy of Jeanne Black

Children need healthy, clean places in which to learn and grow. All school occupants including teachers, educational support professionals, parents, administrators, and community members deserve to have wholesome, safe environments in which to work and teach. High Performance School Design, Green products and well maintained buildings help protect school communities by reducing chemical exposures and providing dry, properly ventilated, and often, beautifully constructed schools. When these elements are in place everyone's performance improves, test scores rise, and the health of occupants is protected. For too many years too many schools have gotten F's on their report cards for safe environments. It really is time for Green AND healthy schools to go to the head of the class and earn an A+ for accomplishing the changes that create environmentally safe and healthy schools.

Carolyn Smith-Evans, President, National Education Association's Healthy Schools Caucus



MIKE DERER / Associated Press

Children learn best in buildings free of environmental hazards. The EcoLogo program encourages all schools to recognize the importance of protecting our nation's most vulnerable citizens from environmental hazards and we actively encourage and assist schools in the US and in Canada in using **safer, greener cleaning products** that have been certified to meet comprehensive environmental standards.

Scot Case, Executive Director, Terra Choice/EcoLogo

My son and I have **allergies**. I work at the school now and have problems with the smells. I do find **coal dust on shelves**. I sometimes get headaches and stuffiness when inside the building. My child used to get headaches and had a hard time concentrating. He is in the high school now and has less problems. I have heard of **mold in tunnels and ceilings** from roof leakage. The school has been checked, but by someone who is an employee or whose spouse is an employee.

North Dakota Parent & School Employee

I have a daughter with Multiple Chemical Sensitivities who is in the 4th grade in a Catholic School. She is having headaches and blurry vision due to **hand sanitizer, cleaning products and Expo markers**.

Illinois Parent

I have recently become aware that my **fatigue** and numerous other symptoms are related to exposure to **mold** in my former classroom. The onset of my symptoms coincides with the renovation of ceiling tiles and lights in the elementary building where my former classroom was. The elementary building is much cleaner than the middle school which I work for. Renovations will soon begin in both schools and I am concerned that the mold and/or its removal will create further health problems for me and for the students and the rest of the staff. Appeals to my administration have yet to bring any changes.

South Carolina Teacher



Photo courtesy of New York State United Teachers

Preventing toxic environmental exposures is a key goal in protecting the nation's children and those with disabilities. Numerous pollutants in the environment including contaminants such as **lead, mercury, pesticides, carbon monoxide, radon, polychlorinated biphenyls (PCBs), brominated flame retardants (PBDEs) and solvents, tobacco smoke and alcohol** can affect brain development and function and contribute to adverse health outcomes and health disparities. These environmental threats needlessly impact prenatal and early childhood development and often result in significant disabilities.

AAIDD strongly believes that all people with intellectual and developmental disability have the right to live, work, learn, worship and play in environments that are healthy and safe. Clearly, we must do all that we can to maintain good health and to prevent unnecessary disability from occurring by keeping toxicants out of the environment.

Laura Abulafia, Director, Environmental Health Initiative, American Association on Intellectual and Developmental Disabilities (AAIDD)



By Tim J. Mueller for USA TODAY

Benzene has been associated with bronchitis, asthma, and wheezing in children and linked to leukemias, hematologic neoplasms, blood disorders, Hodgkin's lymphoma, and myelodysplastic syndrome (MDS) (*TEACH Chemical Summary for Benzene, EPA*). see Footnote 15

Schools near industry face chemical peril

Schools glad to have EPA sample air

In metropolitan areas, strong associations have been found between **high traffic areas** and increased risks of many adverse respiratory illnesses, especially recurrent bronchitis, bronchiolitis, and pneumonia (*Ciccone et al., 1998*).



Composite Map by Healthy Schools Network, Inc.



Photo courtesy of the Parents for Nontoxic Alternatives

In a Utah Valley school district, 1% of the students sampled were absent each day directly due to **particulate matter (PM)** exposure (*Ransom & Pope, 1992*).

PM10 Levels have been linked to higher absence rates (*Gilliland et al., 2001*).

Schools can be hit by chemicals from several industries



USA Today Special Report "The Smokestack Effect: Toxic Air and America's Schools," found at <http://content.usatoday.com/news/nation/environment/smokestack/index>

Children are less capable of regulating **Manganese (Mn)** intake and elimination than adults. Inhaled **Mn**, unlike ingested **Mn**, is completely absorbed and can travel directly to CNS (*Pediatric Environmental Health, AAP, 2003*).

EPA nominee pledges to address toxic hot spots around schools



File photo by The Courier-Journal



Higher concentrations of **manganese** in hair and blood have been linked to learning disabilities in children (*TEACH Chemical Summary for Manganese, EPA*).

Air tests reveal elevated levels of toxics at schools

The **volume of air inhaled** by a **resting child** is much greater than that inhaled by a resting adult (*Child Specific Exposure Factors Handbook, EPA*).

Highest associations of metals with resulting increased risk of autism occurred among **mercury, cadmium, nickel, trichloroethylene, and vinyl chloride** (*Windham et al., 2006*).

Young students often most vulnerable to toxic air



Photo from USA TODAY

US EPA School Air Toxic Monitoring Project. For information on all 64 schools being monitored in 22 states and 2 tribal nations, visit www.epa.gov/schoolair



Picture Courtesy of US EPA's Schools Chemical Cleanout Campaign

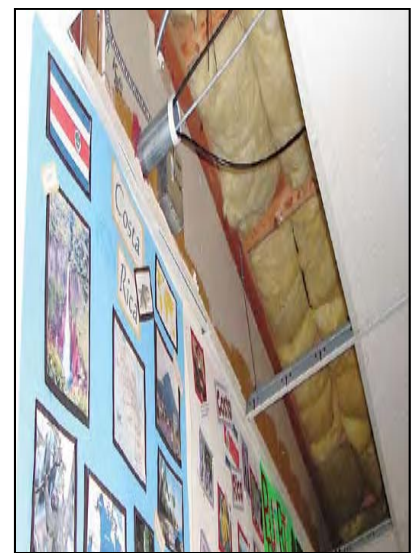
I worked at a **sick school** for 4 years where I developed severe **asthma** and other symptoms. Many other employees developed **allergy symptoms** such as ear infections, bronchitis, nasal allergies, and asthma. One colleague resigned and I took a leave of absence, returned and worked in a portable building (which the district conveniently installed during my leave), then resigned at the end of the year. School officials were called and reported that no mold was detected. I have changed districts many times but continue to have severe asthma attacks when I'm at an old school. Currently, I take 5 medications to control my symptoms.

Texas School Employee

I first became aware of your organization because our **daughter** (our whole family, really) suffered so terribly with **multiple chemical sensitivities**. I did a lot of research and worked really hard during our years in Northern Virginia trying to get school accommodations for her -- the schools were so unhealthy and difficult for her to tolerate, and the administrations often difficult to work with. We ultimately succeeded in getting an appropriate **504 Plan** for her at the time we moved to New York. The school here was new, nontoxic (no carpet, no mold!), and the administration was very easy to work with. NY had just begun their green cleaning program.

Thanks to groups like Healthy Schools Network and school people that were/are willing to work with us, and a great doctor, our daughter enjoys an excellent school environment and good health. She will always have to be diligent in protecting her health, but she has become a very successful student, able to enjoy a normal school experience. She will graduate from HS near the top of her class in a couple of weeks! I consider hers a success story. As a former teacher myself who quit teaching just in time to save my health, I have seen lots of ill students and staff who weren't so lucky.

New York Parent



Damaged ceiling tiles were removed in this California classroom, exposing students to electrical wiring and insulation fibers. Photo courtesy of American Federation of Teachers



Photo courtesy of nycpublicschool-parents.blogspot.com

Poorly managed indoor learning environments compromise the health, performance and overall well-being of every building occupant, while reflecting poorly on the job performance of the school business officials charged with ensuring overall environmental quality. **Safe, healthy, high performance learning environments improve student and staff performance**, increase district revenue, minimize risk, reduce operational costs, and improve the health and well-being of students, teachers and staff. **The Association of School Business Officials International (ASBO)** is committed to providing school business officials with the training (live and Web-based); on-site technical support; and information necessary to optimize the quality of the learning environment and, hence, the learning experience, to the benefit of all district stakeholders.

**John Gayetsky, Environmental Management Specialist,
Association of School Business Officials International**

During this school year my children developed **allergic rhinitis** to the dust mite, pollen, mold, chalk dust and household chemicals. Both of them have reactions to triggers in the classroom. Their teacher uses **air freshener spray** in the class. Children have severe allergic reactions.

New York Parent



Photo courtesy of New York State United Teachers

The **vulnerability of infants and children to the harmful effects of pesticides** has attracted national attention over the last decade. Schools from across the country document a growing trend to adopt safer pest management strategies that dramatically reduce pesticides in the schools, providing children with a healthier learning environment. Schools that have chosen to adopt such strategies, such as an **Integrated Pest Management (IPM) program**, use alternatives to the prevailing chemical-intensive practices because of the health risk such practices pose to children and other school users, and it is proven to be cost effective and yield better pest control results. In absence of a federal law, some states and local school districts have attempted to provide children the protection they need from hazardous chemical exposure while at school, yet the level of protection is uneven and inadequate across the country, with the majority of children left unprotected. There is no reason to expose our children to hazardous pesticides. The tools and experience are available to ensure an environmentally safe school environment for children.

Jay Feldman, Executive Director, Beyond Pesticides



By Garrett Hubbard, USA TODAY

Every year there are more children in my children's classroom with asthma, eczema, all manner of allergies. It is happening in front of my eyes. We as parents and teachers do a good job of recycling for example, but have done nothing for natural light, fresh air, the floor in the school is positively toxic, and to my horror when I walked into the bathroom last week I saw kids licking the soap! And licking the nasty chemicals which are used for cleaning around the sink.

California Parent

Children spend more hours in school than any place other than their homes. The schools they attend need to have a healthy environment – one that is **dry, clean, and quiet** and has **good indoor air quality**. Because funding for school buildings is public money, we all have a responsibility to see that public funds result in schools that are Healthy and Green. Every day should be a healthy school day for every child.

Susan Wooley, PhD, CHES, Executive Director, American School Health Association

We at the Collaborative for High Performance Schools (CHPS) believe that all schools have the opportunity to be high performance schools. Our goal is to provide the best possible information and resources to decision makers to help them make the right choices that will impact their future generations of school children.

Charles Eley, Executive Director, Collaborative for High Performance Schools
(April 2009)



WI Senate Hearing on IEQ in Schools Photo courtesy of Jeanne Black

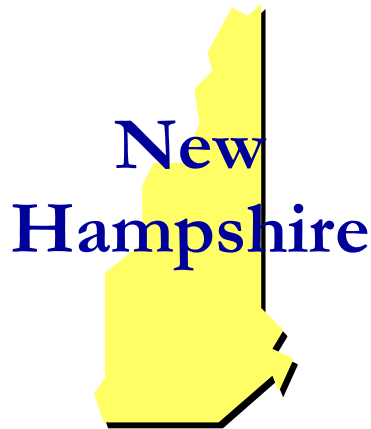
Nevada

In 2009, the state of Nevada passed SB 185, requiring all public school districts to use environmentally sensitive cleaning and maintenance products to clean floor surfaces in schools. Nevada's Department of Education (DOE) is required to provide school districts with a list of products that meet these environmental standards, as determined by the Nevada DOE.

For more information on **green cleaning in Nevada**, see <http://www.leg.state.nv.us/75th2009/Bills/SB/SB185.pdf>

No. School Buildings	591	State Grants for Construction	N
No. Students	424,240	Integrated Pest Management Program	N
No. Minority Students	236,479	Indoor Air Quality Laws	Footnote 8
No. Students in Special Education Program	48,230	State School Green Cleaning Laws	Y
No. Employees in School System	33,949	High Performance Green School Design	N
Percent of Youth 4-17 Ever Diagnosed with ADHD	7.22%	Statewide School Infrastructure Assessment	N
Percent of Schools with at Least One Inadequate Building Feature	42%	Percent of Children (18 or younger) Without Health Insurance	17.3%
Percent of Schools with at Least One Unsatisfactory Environmental Factor	57%	Percent of Children with Asthma (under 18)	4.4%*
No. Students At High Risk Daily	209,999	State Education School Facilities Office	N
State OSHA Plan	Y		

State data taken from federal-national sources: see footnotes in Appendix.



Several years ago, New Hampshire adopted the building performance standards embodied in the Collaborative for High Performance Schools (CHPS) design and construction protocol and immediately, with the NH Department of Education leading the way, began offering up to a 3% financing incentive to schools which met the standard. There are now 5 such projects in the state, one completed and four moving ahead in some stage of design and construction.

The Jordan Institute's (TJI) NH Partnership for High Performance Schools has worked since 2005 to move school districts toward incorporating such high performance strategies in their buildings. Recently, TJI has expanded its services and is under contract with two NH public school districts to provide the high performance consulting necessary to successfully complete high performance projects in their communities – a renovation of an elementary school in Mason, NH, and a new middle school building in Keene, NH. On both projects, part of our contract includes oversight and assistance in completing the full building commissioning required by the CHPS guidelines. We have also managed the commissioning on a new, small, private K-6 independent school in Nashua, NH, which is now operating successfully. It is meeting the performance goals we helped to design into the project, and we will continue to monitor the building to be sure it consistently performs as desired.

For more information, visit **New Hampshire Partnership for High Performance Schools** at: www.thejordaninstitute.org

No. School Buildings	482	State Grants for Construction	Y
No. Students	203,551	Integrated Pest Management Program	N
No. Minority Students	14,810	Indoor Air Quality Laws	Footnote 8
No. Students in Special Education Program	31,399	State School Green Cleaning Laws	N
No. Employees in School System	32,174	High Performance Green School Design	Y
Percent of Youth 4-17 Ever Diagnosed with ADHD	9.14%	Statewide School Infrastructure Assessment	N
Percent of Schools with at Least One Inadequate Building Feature	59%	Percent of Children (18 or younger) Without Health Insurance	6.5%
Percent of Schools with at Least One Unsatisfactory Environmental Factor	78%	Percent of Children with Asthma (under 18)	7.5%*
No. Students At High Risk Daily	139,432	State Education School Facilities Office	Y
State OSHA Plan	N		

State data taken from federal-national sources: see footnotes in Appendix.



New Jersey's IAQ standard applies to buildings occupied by public employees, including school facilities, and is enforced by the Public Employees Occupational Safety and Health (PEOSH) Program. If a PEOSH inspector finds a school district out of compliance with the standard, the district can be issued orders to comply.

The standard was updated and improved in 2007 due to efforts of public employee unions. It presents a significant opportunity to improve IAQ in New Jersey's public school buildings for both staff and students. For this to happen, monitoring PEOSH enforcement will be crucial since it has been weak in the past. Inspections take place only when complaints are filed by employees or unions - parents cannot file complaints - and PEOSH conducts no IAQ inspections on their own initiative.

The IAQ standard will be most effective when used as part of a union plan that includes member education, a health and safety committee, and active rank and file and parent involvement, as well as enforcement of the IAQ standard. Complaint forms must be completed clearly and describe problems in detail since inspections are limited to complaint items.

PEOSH IAQ publications are online at:

www.state.nj.us/health/coh/peoshweb/peoshiaq.htm.

A **New Jersey Education Association (NJEA)** fact sheet is online at:

www.njea.org/pdfs/HS_IndoorAirQuality_Jan08.pdf.

For more information, visit the **New Jersey Work Environmental Council** at www.jnwec.org

No. School Buildings	2,477	State Grants for Construction	Y
No. Students	1,388,850	Integrated Pest Management Program	Y
No. Minority Students	615,190	Indoor Air Quality Laws	Footnote 8
No. Students in Special Education Program	N/A	State School Green Cleaning Laws	N
No. Employees in School System	205,372	High Performance Green School Design	Y
Percent of Youth 4-17 Ever Diagnosed with ADHD	7.2%	Statewide School Infrastructure Assessment	Y
Percent of Schools with at Least One Inadequate Building Feature	53%	Percent of Children (18 or younger) Without Health Insurance	9.6%
Percent of Schools with at Least One Unsatisfactory Environmental Factor	69%	Percent of Children with Asthma (under 18)	8.8%
No. Students At High Risk Daily	847,199	State Education School Facilities Office	Y
State OSHA Plan	Y		

State data taken from federal-national sources: see footnotes in Appendix.

New Mexico

New Mexico does not have a specific policy addressing indoor air quality (IAQ) in schools. However, a 2003 addition to the New Mexico Administrative Code (NMAC) requires each school district to provide facilities and grounds that are safe, healthy, orderly, clean and in good repair.

NMAC further requires 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 prior to the anticipated pesticide application.

In 2009, an additional rule was added to NMAC that details the health education content standards, which includes asthma education. Health education standards include asthma awareness for grades K-12.

For more information, visit **National Association of State Boards of Education** at www.nasbe.org

No. School Buildings	839	State Grants for Construction	Y
No. Students	328,220	Integrated Pest Management Program	N
No. Minority Students	227,919	Indoor Air Quality Laws	Footnote 8
No. Students in Special Education Program	47,917	State School Green Cleaning Laws	N
No. Employees in School System	46,551	High Performance Green School Design	Y
Percent of Youth 4-17 Ever Diagnosed with ADHD	6.1%	Statewide School Infrastructure Assessment	Y
Percent of Schools with at Least One Inadequate Building Feature	69%	Percent of Children (18 or younger) Without Health Insurance	20.8%
Percent of Schools with at Least One Unsatisfactory Environmental Factor	75%	Percent of Children with Asthma (under 18)	8.6%
No. Students At High Risk Daily	236,318	State Education School Facilities Office	N
State OSHA Plan	Y		

State data taken from federal-national sources: see footnotes in Appendix.



Despite education laws on school indoor environments requiring IAQ and IPM Plans and the use of certified green cleaning products, a recent New York State Health Department survey reported that, "Almost all (99%) schools reported dust or reservoirs of dust in classrooms, 84% reported mold or moisture problems, 42% reported potential exposure to diesel exhaust, and 40% reported pets in at least one classroom."

"In addition, some policies and practices designed to improve school IAQ are not being implemented in the majority of schools, including anti-idling policies to limit diesel pollution, and airing out of new carpets and use of green-rated cleaning products to limit pollution from chemical contaminants" (*Asthma and the School Environment in New York State*, 2008, p8).

Further, the state has for more than ten years supported occupational health centers for workers, which many school employees have benefited from, but there are no funded services or even tracking for children who outnumber staff and who are more vulnerable to environmental hazards.

For more information, visit **Healthy Schools Network** at www.healthyschools.org and **New York State United Teachers** at www.nysut.org >Resources > Workplace Health and Safety

No. School Buildings	4,710	State Grants for Construction	Y
No. Students	2,809,649	Integrated Pest Management Program	Y
No. Minority Students	1,360,718	Indoor Air Quality Laws	Footnote 8
No. Students in Special Education Program	450,276	State School Green Cleaning Laws	Y
No. Employees in School System	373,360	High Performance Green School Design	Y
Percent of Youth 4-17 Ever Diagnosed with ADHD	6.27%	Statewide School Infrastructure Assessment	Y
Percent of Schools with at Least One Inadequate Building Feature	67%	Percent of Children (18 or younger) Without Health Insurance	10.7%
Percent of Schools with at Least One Unsatisfactory Environmental Factor	76%	Percent of Children with Asthma (under 18)	10.2%
No. Students At High Risk Daily	2,008,899	State Education School Facilities Office	Y
State OSHA Plan	Y		

State data taken from federal-national sources: see footnotes in Appendix.



No. of School Buildings	2,513	State Grants for Construction	N
No. of Students	1,444,481	Integrated Pest Management Program	Y
No. Minority Students	640,502	Indoor Air Quality Laws	Footnote 8
No. Students in Special Education Program	192,733	State School Green Cleaning Laws	N
No. Employees in School System	196,657	High Performance Green School Design	N
Percent of Youth 4-17 Ever Diagnosed with ADHD	9.54%	Statewide School Infrastructure Assessment	Y
Percent of Schools with at Least One Inadequate Building Feature	55%	Percent of Children (18 or younger) Without Health Insurance	11.5%
Percent of Schools with at Least One Unsatisfactory Environmental Factor	68%	Percent of Children with Asthma (under 18)	8.1%
No. Students At High Risk Daily	888,356	State Education School Facilities Office	Y
State OSHA Plan	Y		



No. of School Buildings	534	State Grants for Construction	N
No. of Students	96,670	Integrated Pest Management Program	N
No. Minority Students	12,775	Indoor Air Quality Laws	Footnote 8
No. Students in Special Education Program	N/A	State School Green Cleaning Laws	N
No. Employees in School System	15,157	High Performance Green School Design	N
Percent of Youth 4-17 Ever Diagnosed with ADHD	9.39%	Statewide School Infrastructure Assessment	N
Percent of Schools with at Least One Inadequate Building Feature	49%	Percent of Children (18 or younger) Without Health Insurance	9.4%
Percent of Schools with at Least One Unsatisfactory Environmental Factor	62%	Percent of Children with Asthma (under 18)	*
No. Students At High Risk Daily	53,652	State Education School Facilities Office	Y
State OSHA Plan	N		

State data taken from federal-national sources: see footnotes in Appendix.



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 February 2008, **ALLY's Growing Green and Healthy Schools Network** initiated a series of meetings with City Council Member Roxanne Qualls and county, city and Lower Price Hill stakeholders to systematically address the air quality surrounding high risk schools where the community has documented a disproportionate burden of contaminants.

The high level of contaminants results in school children with a greater risk for asthma, upper respiratory infections, chronic illnesses and absenteeism, neurological problems and hyperactivity disorders. This translates into poor educational performance. As a result of these meetings, Hamilton County Department of Environmental Services targeted Metro and businesses surrounding Oyster to seek their voluntary adoption of a No-Idling policy. CPS has adopted a No-Idling policy for all of their schools.

We are still unclear as to what **rescinding Jerod's Law** will mean for Ohio schools.

For more information, visit **Alliance for Leadership and Interconnection, (ALLY)** at www.allyohio.org.

No. School Buildings	3,977	State Grants for Construction	Y
No. Students	1,836,096	Integrated Pest Management Program	N
No. Minority Students	433,092	Indoor Air Quality Laws	Footnote 8
No. Students in Special Education Program	272,947	State School Green Cleaning Laws	N
No. Employees in School System	242,574	High Performance Green School Design	Y
Percent of Youth 4-17 Ever Diagnosed with ADHD	8.88%	Statewide School Infrastructure Assessment	Y
Percent of Schools with at Least One Inadequate Building Feature	76%	Percent of Children (18 or younger) Without Health Insurance	9.0%
Percent of Schools with at Least One Unsatisfactory Environmental Factor	83%	Percent of Children with Asthma (under 18)	10.2%
No. Students At High Risk Daily	1,459,696	State Education School Facilities Office	Y
State OSHA Plan	N		

State data taken from federal-national sources: see footnotes in Appendix.



No. School Buildings	1,796	State Grants for Construction	N
No. Students	639,391	Integrated Pest Management Program	N
No. Minority Students	264,517	Indoor Air Quality Laws	Footnote 8
No. Students in Special Education Program	95,860	State School Green Cleaning Laws	N
No. Employees in School System	81,831	High Performance Green School Design	N
Percent of Youth 4-17 Ever Diagnosed with ADHD	8.11%	Statewide School Infrastructure Assessment	N
Percent of Schools with at Least One Inadequate Building Feature	54%	Percent of Children (18 or younger) Without Health Insurance	16.8%
Percent of Schools with at Least One Unsatisfactory Environmental Factor	64%	Percent of Children with Asthma (under 18)	10.8%
No. Students At High Risk Daily	377,241	State Education School Facilities Office	Y
State OSHA Plan	N		



Photo Courtesy of Jennifer Aspelund

Awareness of glass fiber particulates has caused many school districts to look at the possibility of glass fiber contamination. It comes from the acoustic ceiling tile, the ventilation system, and thermal insulation. Often acoustical ceiling tiles are not sealed on the perimeter and as a result vibration causes flaking **glass fiber particulates** from the ceiling tile to enter the occupied space.

**Chip Halverson, ND Candidate,
IEQ Activist, and Teacher**



In Oregon, a broad-based healthy schools coalition worked to pass 2009 legislation that will reduce student and staff exposure to chemicals of concern, improve academic performance and staff productivity, and reduce facility maintenance and operational costs.

We passed both our Healthy School Bus Bill (requiring that diesel school buses be replaced or fit with toxic reducing filters) and our Integrated Pest Management bill bringing healthier, cost-effective pest management to schools across Oregon.

These bills go a long way toward making Oregon schools healthier places for our kids—with little or no additional costs to the schools. We successfully advocated for the inclusion of an IAQ assessment in a statewide school facilities inventory that will be completed as part of a soon-to-be initiated governor convened **School Facilities Task Force**.

In addition, we have begun laying the groundwork for legislation requiring green cleaning in schools and requiring green building technology for all new schools and remodels. Over the past two years, we've built a diverse coalition of teachers unions, school board associations, school employee associations, public health, and environmental health groups which has been key to our recent success. We will continue to expand our partnerships, working together on outreach, education, and legislation to improve the environmental health of all Oregon schools.

For more information, visit **Oregon Environmental Council** at: www.oconline.org

No. School Buildings	1,285	State Grants for Construction	Y
No. Students	562,574	Integrated Pest Management Program	Y
No. Minority Students	166,659	Indoor Air Quality Laws	Footnote 8
No. Students in Special Education Program	77,819	State School Green Cleaning Laws	N
No. Employees in School System	51,067	High Performance Green School Design	N
Percent of Youth 4-17 Ever Diagnosed with ADHD	7.15%	Statewide School Infrastructure Assessment	N
Percent of Schools with at Least One Inadequate Building Feature	63%	Percent of Children (18 or younger) Without Health Insurance	11.8%
Percent of Schools with at Least One Unsatisfactory Environmental Factor	84%	Percent of Children with Asthma (under 18)	8.1%
No. Students At High Risk Daily	413,492	State Education School Facilities Office	N
State OSHA Plan	Y		

State data taken from federal-national sources: see footnotes in Appendix.



National Healthy Schools Day in Pennsylvania, April 27, 2009, was recognized by both the Pennsylvania State Education Association (PSEA) and the Pennsylvania House of Representatives.

PSEA recommended that PA schools participate in National Healthy Schools Day by: switching to green cleaning products, conducting regular cleaning of ventilation systems, and stopping bus idling outside of school premises. (www.psea.org/general.aspx?id=4706)

For the second consecutive year, Pennsylvania Representative Mark Longietti sponsored House Resolution 162 recognizing April 27 as "National Healthy Schools Day" in Pennsylvania.

A goal of Pennsylvania Governor Rendell's "Governor's Green Government Council" (GGGC) is to "lead the Commonwealth towards zero emissions in air, land, and water by having all employees routinely consider the environmental effects of their policies, practices, and daily actions at all levels of decision making." Included in these goals are "green schools." (<http://www.gggc.state.pa.us/gggc/cwp/view.asp?a=516&q=157111&gggcNav=|6833|>)

The Governor's Council states: High performance green schools enhance students' ability to learn by providing an environment with lots of natural light, high indoor air quality, and good acoustics, as well as incorporating environmental lessons throughout their curriculum and using the building as a tool for illustrating how man-made environments interact with natural systems.

For more information visit, **Green Grannies & Friends** at www.greengrannies.blogspot.com

No. School Buildings	3,287	State Grants for Construction	Y
No. Students	1,871,060	Integrated Pest Management Program	Y
No. Minority Students	475,765	Indoor Air Quality Laws	Footnote 8
No. Students in Special Education Program	292,649	State School Green Cleaning Laws	N
No. Employees in School System	241,024	High Performance Green School Design	Y
Percent of Youth 4-17 Ever Diagnosed with ADHD	8.17%	Statewide School Infrastructure Assessment	Y
Percent of Schools with at Least One Inadequate Building Feature	42%	Percent of Children (18 or younger) Without Health Insurance	7.0%
Percent of Schools with at Least One Unsatisfactory Environmental Factor	57%	Percent of Children with Asthma (under 18)	9.9%
No. Students At High Risk Daily	926,175	State Education School Facilities Office	Y
State OSHA Plan	N		

State data taken from federal-national sources: see footnotes in Appendix.



The RI Department of Education (RIDE) has worked very closely with the Northeast Collaborative for High Performance Schools (NECHPS), with regulations to ensure that any new construction or major reconstruction which seeks funding/reimbursement from the state meets all the CHPS requirements for energy use, indoor air quality, overall environmental quality on site, etc.

In close cooperation with the RI Department of Health and various community partners, RIDE has applied for Federal funding for a major Tools for Schools project which would include help to individual schools and districts in preventing potential problems, as well as cleaning up existing ones. School IAQ is specifically included as a major section of the State Asthma Control Plan, which has helped sponsor walkthroughs and trainings on green cleaning and other issues.

School siting as well as other school air quality issues are a major focus of the Environmental Justice League of RI. The Toxics Information Project has produced the Good Green Schools Guide and organized school facilities managers and public health groups to get Integrated Pest Management requirements implemented and try to get green cleaning legislation passed.

In the 2009 legislative session, the bill introduced failed to get third party certification added, and was therefore held in Committee by friendly legislators. Overall, there is a lot of momentum on healthy schools issues which is becoming more and more coordinated. As in many states, the state and municipal budget crises make this coordination of resources a key factor in actually achieving improvements.

For more information, visit **American Lung Association of New England** at www.lungne.org

No. School Buildings	336	State Grants for Construction	Y
No. Students	151,612	Integrated Pest Management Program	Y
No. Minority Students	46,260	Indoor Air Quality Laws	Footnote 8
No. Students in Special Education Program	30,390	State School Green Cleaning Laws	N
No. Employees in School System	17,902	High Performance Green School Design	Y
Percent of Youth 4-17 Ever Diagnosed with ADHD	9.81%	Statewide School Infrastructure Assessment	N
Percent of Schools with at Least One Inadequate Building Feature	61%	Percent of Children (18 or younger) Without Health Insurance	4.7%
Percent of Schools with at Least One Unsatisfactory Environmental Factor	75%	Percent of Children with Asthma (under 18)	10.5%
No. Students At High Risk Daily	103,096	State Education School Facilities Office	Y
State OSHA Plan	N		

State data taken from federal-national sources: see footnotes in Appendix.



No. of School Buildings	1,195	State Grants for Construction	Y
No. of Students	703,119	Integrated Pest Management Program	N
No. Minority Students	324,130	Indoor Air Quality Laws	Footnote 8
No. Students in Special Education Program	61,750	State School Green Cleaning Laws	N
No. Employees in School System	74,709	High Performance Green School Design	N
Percent of Youth 4-17 Ever Diagnosed with ADHD	9.98%	Statewide School Infrastructure Assessment	Y
Percent of Schools with at Least One Inadequate Building Feature	52%	Percent of Children (18 or younger) Without Health Insurance	12.0%
Percent of Schools with at Least One Unsatisfactory Environmental Factor	66%	Percent of Children with Asthma (under 18)	8.1%
No. Students At High Risk Daily	414,840	State Education School Facilities Office	Y
State OSHA Plan	Y		



No. School Buildings	736	State Grants for Construction	N
No. Students	121,158	Integrated Pest Management Program	N
No. Minority Students	18,752	Indoor Air Quality Laws	Footnote 8
No. Students in Special Education Program	17,712	State School Green Cleaning Laws	N
No. Employees in School System	17,297	High Performance Green School Design	N
Percent of Youth 4-17 Ever Diagnosed with ADHD	6.49%	Statewide School Infrastructure Assessment	N
Percent of Schools with at Least One Inadequate Building Feature	45%	Percent of Children (18 or younger) Without Health Insurance	8.7%
Percent of Schools with at Least One Unsatisfactory Environmental Factor	50%	Percent of Children with Asthma (under 18)	*
No. Students At High Risk Daily	57,550	State Education School Facilities Office	N
State OSHA Plan	N/A		

State data taken from federal-national sources: see footnotes in Appendix.

Tennessee

Passed in 2005, Tennessee Code 49-2-121 encourages each school district to conduct an inspection and evaluation program, such as the EPA's Indoor Air Quality Tools for Schools Program, for its facilities. Other measures may include addressing that an adequate amount of air is being supplied, testing for radon, and separating students and staff from construction and renovation areas.

Tennessee currently has no state policy on pesticide use. However, Code 49-2-121 also urges schools to reduce use of certain products, such as pesticides, adhesives, and floor-care products, that require ventilation during use.

For more information, visit **National Association of State Boards of Education** at www.nasbe.org

No. School Buildings	1,710	State Grants for Construction	Y
No. Students	978,368	Integrated Pest Management Program	N
No. Minority Students	302,430	Indoor Air Quality Laws	Footnote 8
No. Students in Special Education Program	98,706	State School Green Cleaning Laws	N
No. Employees in School System	123,218	High Performance Green School Design	N
Percent of Youth 4-17 Ever Diagnosed with ADHD	9.87%	Statewide School Infrastructure Assessment	Y
Percent of Schools with at Least One Inadequate Building Feature	56%	Percent of Children (18 or younger) Without Health Insurance	7.5%
Percent of Schools with at Least One Unsatisfactory Environmental Factor	64%	Percent of Children with Asthma (under 18)	7.3%
No. Students At High Risk Daily	587,021	State Education School Facilities Office	N
State OSHA Plan	Y		

State data taken from federal-national sources: see footnotes in Appendix.



In Texas, there are no laws to prevent new schools from being sited on or near sources of environmental pollution. **Clean Schools Initiative** is working with state Representatives and Senators, as well as local and national advocacy groups, to form comprehensive school siting guidelines for the state of Texas. A specific process for site assessment and remediation (if needed), as well as meaningful public participation, will provide the guidance necessary for decision makers to protect the health of children and faculty from environmental hazards in educational facilities.

Healthy Schools Are Safer—Children are especially vulnerable and should be protected from unnecessary exposure to chemicals in our schools.

Healthy Schools Are Cost Effective—By taking the necessary steps to properly evaluate a site in the beginning, decision makers can eliminate candidate sites that may require costly remediation and corrective action.

Healthy Schools Are Smarter—Poor indoor environmental and air quality can have a negative impact on learning environments.

For more information, visit **Clean Schools Initiative** at:
www.cleanschoolsinitiative.org

No. School Buildings	8,856	State Grants for Construction	Y
No. Students	4,599,509	Integrated Pest Management Program	Y
No. Minority Students	2,959,701	Indoor Air Quality Laws	Footnote 8
No. Students in Special Education Program	494,302	State School Green Cleaning Laws	N
No. Employees in School System	616,155	High Performance Green School Design	Y
Percent of Youth 4-17 Ever Diagnosed with ADHD	7.69%	Statewide School Infrastructure Assessment	Y
Percent of Schools with at Least One Inadequate Building Feature	46%	Percent of Children (18 or younger) Without Health Insurance	22.7%
Percent of Schools with at Least One Unsatisfactory Environmental Factor	60%	Percent of Children with Asthma (under 18)	7.9%
No. Students At High Risk Daily	2,437,740	State Education School Facilities Office	Y
State OSHA Plan	N		

State data taken from federal-national sources: see footnotes in Appendix.

Utah

Air quality is a major issue of interest in the state of Utah. The Utah Department of Health (DOH) Asthma Program, established in 2001, works to improve the quality of life for those who suffer from asthma by developing partnerships, conducting continuous surveillance and evaluations, promoting the use of best practices, and opening up communication among organizations that share the concerns. Asthma in Utah, a data report begun in 1997 by the UTAH DOH Asthma Working Group, is an annually updated report that provides an analysis of asthma patterns across the state.

The UTAH DOH Asthma Program often collaborates with school communities to assess air quality concerns and their impact on students. For example, the Utah Asthma Task Force teamed up with local parents, students, and school administrators at several Utah elementary schools to determine to what extent air quality both inside and outside the schools affect students' lung function.

For more information, visit the **Utah Department of Health** at www.health.utah.gov/asthma

No. School Buildings	1,008	State Grants for Construction	Y
No. Students	523,586	Integrated Pest Management Program	N
No. Minority Students	100,301	Indoor Air Quality Laws	Footnote 8
No. Students in Special Education Program	61,421	State School Green Cleaning Laws	N
No. Employees in School System	47,365	High Performance Green School Design	N
Percent of Youth 4-17 Ever Diagnosed with ADHD	5.49%	Statewide School Infrastructure Assessment	N
Percent of Schools with at Least One Inadequate Building Feature	62%	Percent of Children (18 or younger) Without Health Insurance	10.4%
Percent of Schools with at Least One Unsatisfactory Environmental Factor	72%	Percent of Children with Asthma (under 18)	4.4%*
No. Students At High Risk Daily	350,803	State Education School Facilities Office	Y
State OSHA Plan	Y		

State data taken from federal-national sources: see footnotes in Appendix.



Last year, the **Vermont Public Interest Research Group (VPIRG)** gave a failing grade to Act 125, the law charged with reducing environmental health hazards in Vermont schools. Under Act 125, the state was required to create a model school environmental health plan and award environmental health certificates to schools that voluntarily excelled in improving indoor air quality.

Passed by the Legislature in 2000, Act 125 established a goal of having at least 50% of schools qualify for an environmental health certificate by January 2005. Only 7% of schools had received a certificate by the end of 2006.

VPIRG is now working with the **Alliance for a Clean and Healthy Vermont** – a diverse coalition committed to protecting public health from exposure to toxic chemicals – to ensure that all children have access to safe and healthy learning environments.

This year, VPIRG and the Alliance will support legislation that requires all Vermont schools to use environmentally preferable cleaning products.

To read the full report, visit **Vermont Public Interest Research Group** at <http://www.vpirg.org/eh/documents/Act125ReportCard.pdf>.

No. School Buildings	330	State Grants for Construction	Y
No. Students	95,399	Integrated Pest Management Program	N
No. Minority Students	5,406	Indoor Air Quality Laws	Footnote 8
No. Students in Special Education Program	11,872	State School Green Cleaning Laws	N
No. Employees in School System	19,232	High Performance Green School Design	Y
Percent of Youth 4-17 Ever Diagnosed with ADHD	6.90%	Statewide School Infrastructure Assessment	N
Percent of Schools with at Least One Inadequate Building Feature	53%	Percent of Children (18 or younger) Without Health Insurance	4.9%
Percent of Schools with at Least One Unsatisfactory Environmental Factor	58%	Percent of Children with Asthma (under 18)	*
No. Students At High Risk Daily	52,946	State Education School Facilities Office	Y
State OSHA Plan	Y		

State data taken from federal-national sources: see footnotes in Appendix.



In 2009, Jackie Lombardo with the Sierra Clubs National Toxics Committee and the Sierra Club's Piedmont Chapter testified for a new state law to reduce school pesticide use: “Approximately 140 districts in VA apply an average of 300 pesticides inside their school buildings each year. That’s about 42,000 routine pesticide applications per year. Reducing 42,000 routine applications, and reserving pesticides only for when needed, will go a long way to protecting our water, our wildlife, and Virginia’s children.

“Just as there are protective laws regarding smoke detectors, drinking and driving, drugs, and seat belts, we are asking for protective legislation on routine pesticides near children. Fortunately, Virginia Tech already offers a free program with free training on protective, modern techniques of pest management.

“Now that top government and university scientists are certain pesticides are accumulating not only in rivers and in wildlife, but also inside the bodies of children, it is no longer accepted in the scientific community that small amounts of routine poison are harmless. Science has changed. Children’s health has changed. Public policy needs to catch up. We are hoping you are the group of men and women who will be able to stop routine pesticide use in schools near school children and support HB 1836.”

The law passed in 2009 and the state will issue voluntary guidelines to all schools by July 2010 on implementing IPM in Virginia schools.

For more information, visit **Piedmont Group of the Sierra Club** at www.virginia.sierraclub.org/piedmont/

No. School Buildings	2,203	State Grants for Construction	Y
No. Students	1,220,440	Integrated Pest Management Program	N
No. Minority Students	512,983	Indoor Air Quality Laws	Footnote 8
No. Students in Special Education Program	171,647	State School Green Cleaning Laws	N
No. Employees in School System	239,815	High Performance Green School Design	N
Percent of Youth 4-17 Ever Diagnosed with ADHD	9.28%	Statewide School Infrastructure Assessment	Y
Percent of Schools with at Least One Inadequate Building Feature	60%	Percent of Children (18 or younger) Without Health Insurance	10.6%
Percent of Schools with at Least One Unsatisfactory Environmental Factor	58%	Percent of Children with Asthma (under 18)	8.7%
No. Students At High Risk Daily	720,060	State Education School Facilities Office	Y
State OSHA Plan	Y		

State data taken from federal-national sources: see footnotes in Appendix.



Since 1993, citizens have advocated for enforcement of existing Washington State Codes. In 2004-2005, the Washington State Board of Health assembled an Ad Hoc Committee called the School Rule Development Committee to propose revisions in the Washington Administrative Code for school environmental health. The code had not been updated substantially in 40 years. After several sets of revisions, to accommodate objections from schools, and government agencies, a set of new rules was finally adopted by the Washington State Board of Health.

Implementation of these new school environmental health rules, however, has been blocked by the legislature for two years, owing to the current budget crisis. After this two year period is over, the rules will be implemented only if funding is provided by the legislature. However, funding for improvements in school environmental health must still compete with a list of other state funding priorities.

A federal No-Interest Loan Program is urgently needed to fix hazards in decaying schools throughout the United States, particularly leaky roofs, asbestos, contaminated school drinking water, and contaminated playgrounds. The EPA has the experience and technical capability of implementing such a program. The financial plight of Washington State shows that federal assistance to states is urgently needed to implement EPA guidelines for healthy schools.

Contributed by **Coalition for Environmentally Safe Schools**

No. School Buildings	2,326	State Grants for Construction	Y
No. Students	1,026,774	Integrated Pest Management Program	N
No. Minority Students	332,564	Indoor Air Quality Laws	Footnote 8
No. Students in Special Education Program	122,979	State School Green Cleaning Laws	N
No. Employees in School System	102,948	High Performance Green School Design	Y
Percent of Youth 4-17 Ever Diagnosed with ADHD	7.18%	Statewide School Infrastructure Assessment	Y
Percent of Schools with at Least One Inadequate Building Feature	60%	Percent of Children (18 or younger) Without Health Insurance	10.9%
Percent of Schools with at Least One Unsatisfactory Environmental Factor	74%	Percent of Children with Asthma (under 18)	7.4%
No. Students At High Risk Daily	687,939	State Education School Facilities Office	Y
State OSHA Plan	Y		

State data taken from federal-national sources: see footnotes in Appendix.



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.

In 2004, West Virginia passed Board Policy 4336, which prohibits school bus idling while waiting for or loading students. Diesel exhaust fumes from school bus idling is a huge air quality concern near schools.

West Virginia currently enforces Code 18-9E-5, passed in 2008, which requires the state board, in consultation with the division of health, to develop rules requiring each county board to investigate all indoor air quality problem reports within the county.

For more information, visit **National Association of State Boards of Education** at www.nasbe.org

No. School Buildings	771	State Grants for Construction	Y
No. Students	281,939	Integrated Pest Management Program	Y
No. Minority Students	18,802	Indoor Air Quality Laws	Footnote 8
No. Students in Special Education Program	48,489	State School Green Cleaning Laws	N
No. Employees in School System	39,217	High Performance Green School Design	N
Percent of Youth 4-17 Ever Diagnosed with ADHD	10.08%	Statewide School Infrastructure Assessment	Y
Percent of Schools with at Least One Inadequate Building Feature	67%	Percent of Children (18 or younger) Without Health Insurance	10.8%
Percent of Schools with at Least One Unsatisfactory Environmental Factor	82%	Percent of Children with Asthma (under 18)	*
No. Students At High Risk Daily	210,045	State Education School Facilities Office	Y
State OSHA Plan	N		

State data taken from federal-national sources: see footnotes in Appendix.



My family has experienced the effects of poor indoor air quality in our public and private schools to our children. My daughter, now a freshman in college, has been declared with a disability due to toxic exposure in her public school. She is receiving disability benefits from our state of Wisconsin at this time. She also received a settlement from the state of Wisconsin due to toxic exposure of poor indoor air quality/mold in a state of Wisconsin building.

We took this information to the Wisconsin Legislature. Bills on indoor air quality in schools passed the Senate and the Assembly in October 2009.

Senate Bill 41 Indoor Air Quality in our public schools was voted into law on Nov 5th, 2009 by WI Assembly. WI may have its first indoor air quality law for public and private schools. The bill has been sent to Governor Doyle for signature.

This is a moral/civil rights responsibility we all have to our children and staff of our nation's schools. We have a national crisis in our schools in our country. Laws are needed to provide safe and healthy buildings to all that walk through our public and private schools in our nation.

Senate Bill 41 can be viewed at www.legis.state.wi.us/2009/data/SB41hst.html

No. School Buildings	2,241	State Grants for Construction	Y
No. Students	876,700	Integrated Pest Management Program	N
No. Minority Students	199,373	Indoor Air Quality Laws	Footnote 8
No. Students in Special Education Program	128,526	State School Green Cleaning Laws	N
No. Employees in School System	105,033	High Performance Green School Design	N
Percent of Youth 4-17 Ever Diagnosed with ADHD	8.06%	Statewide School Infrastructure Assessment	N
Percent of Schools with at Least One Inadequate Building Feature	49%	Percent of Children (18 or younger) Without Health Insurance	6.7%
Percent of Schools with at Least One Unsatisfactory Environmental Factor	60%	Percent of Children with Asthma (under 18)	8.6%
No. Students At High Risk Daily	477,802	State Education School Facilities Office	N
State OSHA Plan	N		

State data taken from federal-national sources: see footnotes in Appendix.



Statute 35-7-375 mandates notification of pesticide use on school or district property at least 72 hours prior to application. The school district is required to notify all students and staff.

Pesticide storage, use, and disposal are all highly regulated in Wyoming by Statute 35-5-374.

For more information on pesticide laws, visit **Wyoming Legislative Service Office** at <http://legisweb.state.wy.us/statutes/statutes.aspx?file=titles/Title35/T35CH7AR3.htm>

No. School Buildings	385	State Grants for Construction	Y
No. Students	85,193	Integrated Pest Management Program	N
No. Minority Students	13,217	Indoor Air Quality Laws	Footnote 8
No. Students in Special Education Program	13,945	State School Green Cleaning Laws	N
No. Employees in School System	15,233	High Performance Green School Design	N
Percent of Youth 4-17 Ever Diagnosed with ADHD	7.13%	Statewide School Infrastructure Assessment	N
Percent of Schools with at Least One Inadequate Building Feature	49%	Percent of Children (18 or younger) Without Health Insurance	13.2%
Percent of Schools with at Least One Unsatisfactory Environmental Factor	68%	Percent of Children with Asthma (under 18)	*
No. Students At High Risk Daily	49,838	State Education School Facilities Office	Y
State OSHA Plan	Y		

State data taken from federal-national sources: see footnotes in Appendix.

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Footnotes to State Data Tables (*Public School Building Data Only*)

No. School Buildings	FN1
No. Students	FN1
No. Minority Students	FN1
No. Students in Special Education Program	FN1
No. Employees in School System	FN1
Percent of Youth 4-17 Ever Diagnosed with ADHD	FN2
Percent of Schools with at Least One Inadequate Building Feature	FN3
Percent of Schools with at Least One Unsatisfactory Environmental Factor	FN3
No. Students At High Risk Daily	FN4
State OSHA Plan	FN5
State Grants for Construction	FN6
Integrated Pest Management Program	FN7
Indoor Air Quality Laws	FN8
State School Green Cleaning Laws	FN9
High Performance Green School Design	FN10
Statewide School Infrastructure Assessment	FN11
Percent of Children (18 or younger) Without Health Insurance	FN12
Percent of Children with Asthma (under 18)	FN13
State Education School Facilities Office	FN14

1. State Education Data Profiles, 2006-2007, <http://www.nces.ed.gov/programs/stateprofiles/index.asp>
N/A: Not Available.

2. CDC - **ADHD**, Prevalence - NCBDDD. 2003. www.cdc.gov/ncbddd/adhd/prevalence.html

3. American Society of Civil Engineers Infrastructure Report Card. www.asce.org/reportcard/2005.

4. **Estimated No. Students at risk daily** calculation based on 2006 formula used in *Lessons Learned* (2006)

- 1 % Schools with at least one inadequate building feature = 59%
- 2 % Schools with at least one unsatisfactory environmental factor = 63%
- 3 Total No. Students = 743,632
- 4 Calculation: 59%+ 63% = 122/2 = 61%
- 5 61% x 743,632 = 453,616 (Estimated Number of Students at High Risk Daily)

- **Note:** All states have compulsory attendance laws. Children are more vulnerable to environmental hazards than adults. School facility conditions vary widely from state to state and within states and even within districts. Some states have rapid enrollment growth and cannot keep with new construction or with repairs; other states have declining enrollments and excess seats and decaying older buildings.

The lack of any current standardized national data on environmental conditions of facilities used every day by 20% of Americans, including 98% of all American children, is a failure to invest in children, in environment, in health, in communities, and in education. (*Healthy Schools Network*)

5. "Chart of State **OSHA** and Right-to-Know Laws for Public Workers", <http://www.afscme.org/publications/2846.cfm>. N/A: Not Applicable

6. Education Week and Teacher Magazine. January 5, 2006. p.95 (also see Note in #4, above)

7. Owens, K. (2009). Schooling of State Pesticide Laws: 2010 Update. *Pesticides and You. Beyond Pesticides*. 9-20. "Yes" indicates that state requires **IPM** in schools.

8. **IAQ laws are highly variable and difficult to categorize.** Some are process-driven (*create an IAQ committee*), some detail building inspections, some have explicit elements such as employee complaint procedures, or require specific steps to protect occupant health in schools under renovation. These laws may be in addition to state laws on specific issues affecting IAQ such as pests and pesticides, mercury, green cleaning products, radon, and High Performance School design, or ventilation standards in building codes.

The Environmental Law Institute produced a report in 2009, *School Indoor Air Quality: State Policy Strategies for Maintaining Healthy Learning Environments*, which discusses leading state laws that take a broad-based approach to addressing IAQ in existing school facilities. The report includes case studies of five state laws -- Ohio, New Jersey, New York, Minnesota and Connecticut -- that provide useful examples for other states to consider, and then builds on this and previous ELI reports by outlining key elements for an effective state policy.

ELI also publishes an annual Database of State IAQ Laws, which includes a more comprehensive listing of state laws addressing IAQ in schools. See http://eli.org/Program_Areas/indoor_environments.cfm.

Data not used. This report does not use the results of the CDC School Health Policies and Programs Survey (SHPPS 2006), a self-reporting survey, which addressed environmental factors for the first time in 2006. It reported that 51% of local school respondents said they had an “IAQ management program.” Unfortunately, that was not further defined, nor did the survey request specific citations for policies or laws. SHPPS also reported on states that Require Districts or Schools to Have an Indoor Air Quality (IAQ) Management Programs (responding yes: **CT, DE, IL, IN, ME, MN, NJ, NY, NC, WV**).

Because of the ambiguity in the SHPPS questions, and because state and local education officials have little training in IAQ, *Sick Schools 2009* **strongly recommends that IAQ advocates ask** state health, ask state education, and ask state labor agencies to provide copies of current policies, laws, or regulations that specifically address IAQ requirements for K-12 schools and/or child care centers.

9. Several states have enacted strong **green cleaning** for schools, requiring them to use 3rd party certified green cleaning products: **New York State, Hawaii** and **Connecticut**. Other states have enacted weaker laws which do not necessarily require that schools buy only those products whose claims have been verified by third party certifiers: **Illinois, Maryland** and **Nevada**. Two other states have voluntary programs for schools: **Maine** and **Missouri**. Reliable third-party certifiers of green cleaning products widely available in the U.S. and Canada include Green Seal and Eco-Logo. US EPA’s Design for the Environment is not a certification program.
- Advocates and schools should be aware that the chemical industry is campaigning for its own weakly worded green cleaning bill. General all-purpose cleaning products remove almost all germs; disinfectants are registered for use with EPA and are prohibited from carrying a “green” label. Disinfectants should be used cautiously when required, or as recommended by CDC or your state health department. For more information about the green cleaning products, disinfectants, costs and benefits, as well as a free poster and tips for bill drafting, visit www.cleaningforhealthyschools.org
10. **CHPS and LEED design criteria for schools**, required or voluntary by state. See: CHPS, www.chps.net > Fact Sheet for eleven states that have adopted Collaborative for High Performance Schools (CHPS) criteria. *Healthy, High Performance School Facilities: Developments in State Policy*. <http://www2.eli.org/research/healthyschool/healthyschools.htm> and, National Clearinghouse on Educational Facilities, “High Performance Green Schools”, http://www.ncef.org/rl/high_performance.cfm
11. Building Minds, Minding Buildings: School Infrastructure Funding Need, a state-by-state assessment and an analysis of recent court cases. 2008. www.aft.org/topics/building-conditions/downloads/BMMB_Funding.pdf
12. **Children with Health Insurance:** 2001. U.S. Census Bureau, Current Population Survey, 2002 Annual Social and Economic Supplement. Table 4: “Percent of Children Without Health Insurance for the Entire Year by State (3 Year Average) 1999-2001. www.census.gov/prod/2003pubs/p60-224.pdf

13. **Asthma.** t"Advance Data: From Vital and Health Statistics", 2006, CDC, www.cdc.gov/nchs/data/ad/ad381.pdf "Prevalence data were obtained from the National Health Interview Survey (NHIS), a cross-sectional household interview survey of the U.S. civilian noninstitutionalized population. Excluded are patients in long-term care facilities, Armed Forces active duty personnel (although dependents are included), and U.S. nationals living in foreign countries. NHIS interviewing is continuous throughout each year, and follows a multistage area probability design that permits the representative sampling of households. From each family in the NHIS, one sample adult and, for families with children under 18 years of age, one sample child are randomly selected to participate in the detailed health survey. A responsible adult, usually a parent, reports in proxy for the sample child." **Individual states may have more detailed information based on local surveys.**
- * Estimates with an asterisk are considered unreliable. Estimates preceded by an asterisk have a relative standard error greater than 30 percent and less than or equal to 50 percent and should be interpreted with caution. Estimates not shown have a relative standard error greater than 50 percent.
14. Council of Educational Facility Planners. www.cefpi.org/pdf/state.doc
15. Citations for **Composite Map** Photo Pages
- American Academy of Pediatrics Committee on Environmental Health. In: Etzel RA, ed. *Pediatric Environmental Health*. 2nd ed. Elk Grove Village, IL: American Academy of Pediatrics; 2003.
- Child Specific Exposure Factors Handbook, EPA, Retrieved from <http://cfpub.epa.gov/ncea/cfm/recordisplay.cfm?deid=55145>
- Ciccone G, Forastiere F, Agabiti N, et al. Road traffic and adverse respiratory effects in children. SIDRIA Collaborative Group. *Occupational and Environmental Medicine*. 1998;55:771-778.
- Gilliland, Frank et al. "The Effects of Ambient Air Pollution on School Absenteeism Due to Respiratory Illness." *Epidemiology*. 2001;12: 43-54
- Ransom, Michael and Pope, C.. Arden. "Elementary School Absences and PM10 Pollution in Utah Valley." *Environmental Research*. 1992;58: 204-219.
- TEACH Chemical Summary for Benzene, EPA, Retrieved from http://www.epa.gov/TEACH/chem_summ/BENZ_summary.pdf
- TEACH Chemical Summary for Manganese, EPA, Retrieved from http://www.epa.gov/teach/chem_summ/manganese_summary.pdf
- Windham, G.C., et al. 2006. "Autism spectrum disorders in relation to distribution of hazardous air pollutants in the San Francisco Bay area." *Environ.Health Perspect*. 114(9):1438-1444.

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Healthy School Environments

More than 53 million children and about 6 million adults spend a significant portion of their days in more than 120,000 public and private school buildings. Many of these buildings are old and in poor condition, and may contain environmental conditions that inhibit learning and pose increased risks to the health of children and staff. The healthy school environments web site is designed to provide one-stop access to the many programs and resources available to help prevent and resolve environmental issues in schools.



EPA has released the enhanced Version 2 of its HealthySEAT software tool to help school districts establish and manage comprehensive school facility self-assessment programs. [Learn more about HealthySEAT Version 2...](#)

Healthy School Environments Web Resources (Schools Web Portal)

On-line resources to help facility managers, school administrators, architects, design engineers, school nurses, parents, teachers and staff address environmental health issues in schools. Visitors can browse resources by [topic](#) or by [geographic area](#), or search all resources by entering specific keywords into the search box at the top of each page.

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In the next few decades, thousands of schools around the country will be built and renovated. Where and how schools are built will profoundly affect the communities they serve and the quality of their air and water. [Read more...](#)

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Listen to and/or view one hour recordings of four special webcasts focused on healthy and safe school environments. [Read more...](#)

Recent Additions	Express Links to EPA School Programs
PCBs in Building Caulk Assessing Outdoor Air Near Schools Formaldehyde Emissions from Pressed Wood Products Updated CDC Guidance for Schools for the Upcoming Flu Season, 8/7/09	IAQ Tools for Schools Program Indoor Air Quality Design Tools for Schools ENERGY STAR for K-12 School Districts Smart Growth And Schools Integrated Pest Management (IPM) in Schools Asbestos in Schools Schools Chemical Cleanup Campaign (SC3) Drinking Water in Schools and Child Care Facilities Clean School Bus USA Sunwise Protecting Health and the Environment at K-12 Schools, Including Art Programs (EPA Region 2) EPA New England K-12 Schools Managing Your Environmental Responsibilities: A Planning Guide for Construction and Development Children's Health Protection Environmental Education Protect the Environment at School--Information for Students

[Schools Home](#)

[HealthySEAT](#)

[Healthy School Environment Web Resources](#)

[Siting of School Facilities](#)

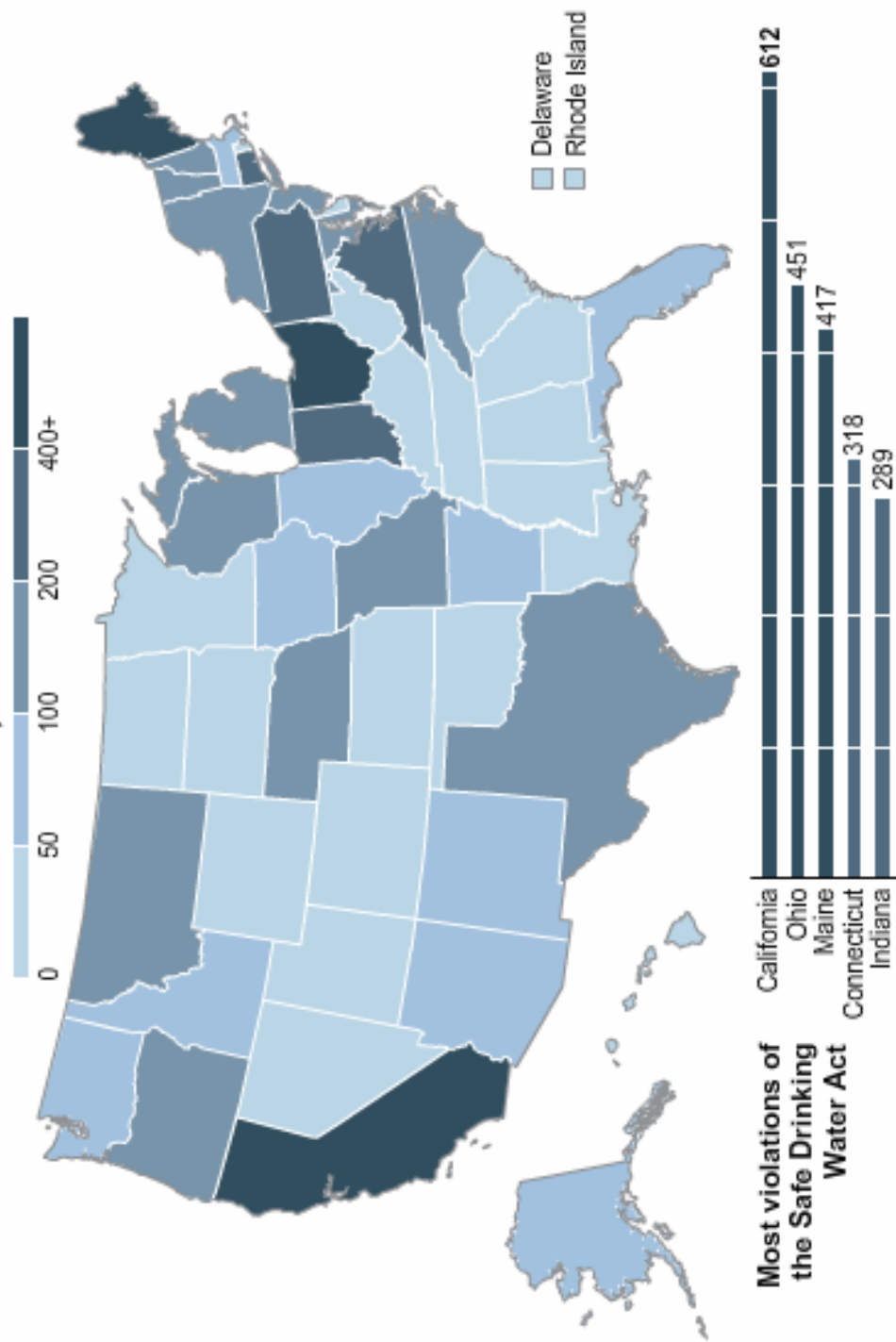
[On-Demand Children's Health Month Webcasts](#)

[E-mail Updates](#)

Contaminated water: Children exposed to toxins at school taps

An Associated Press investigation has found that thousands of schools that operate their own water systems have violated the Safe Drinking Water Act in the last decade.

Number of schools with water violations, 1998-2008 Click state for schools and contaminants



Lead in drinking water in US schools

Yanna Lambrinidou, PhD , Parents for Nontoxic Alternatives, Washington, DC. Slide from scientific panel presentation at American Public Health Association annual convention, November 2009.

“In the last four years alone, lead-in-water problems in the Seattle, WA; Baltimore, MD; Los Angeles, CA; Washington, DC; Davidson County, NC; and Medford, OR school systems were uncovered not by school officials, but by parents, teachers, independent scientists, and investigative reporters.”

Case studies

School	How Problem was Discovered	Extent of Problem
LAUSD Los Angeles	Parent requested testing in 2007	92% of schools tested high (2008-09)
DCPS Washington DC	Public pressure in 2004 & Freedom of Information Act request in 2006	75% of schools had at least one problem tap (2007)
BCPS Baltimore	2003 parent inquiry about disconnected fountains & teacher whistleblower/informant	12% of fountains tested high (2007)
SDP Philadelphia	SDP test results leaked to EPA after SDP told EPA to get a search warrant to do its own sampling	38% of fountains & 48% of faucets had lead-in-water problems (2000-01)
SPS Seattle	Parents took samples in 2003	>70% of schools had at least one problem tap (2004)

The National Academies Press

Green Schools: Attributes for Health and Learning (2006, 180pp)

Board on Infrastructure and the Constructed Environment

Excerpts below. To read extensive findings and recommendations in full,

access full report at http://books.nap.edu/openbook.php?record_id=11756&page=R1



... The committee identified those building characteristics and practices typically emphasized in current green school guidelines. The committee determined that green schools have two complementary, but not identical, goals and resulting outcomes. The goals are (1) to support the health and development (physical, social, intellectual) of students, teachers, and staff by providing a healthy, safe, comfortable, and functional physical environment; and (2) to have positive environmental and community attributes. Because they were first developed to minimize adverse environmental effects, current green school guidelines place less emphasis on features supporting human health and development (*emphasis added*). In line with its charge, the committee focused on outcomes associated with student and teacher health, learning, and productivity. (p2)

....

The concept that the design of school buildings may affect students' and teachers' health and development is not new. 123 years ago in 1886, a report on the State of Maine's Schools linked moisture, lighting, and ventilation of school buildings to health and learning.... (p15)

....

GREEN SCHOOL BUILDING ATTRIBUTES THAT WOULD SUPPORT HEALTH AND DEVELOPMENT

After evaluating the research literature, the committee concluded that a green school with the following attributes would support student and teacher health, learning, and productivity: (p3f)

- *Dryness:* Excessive moisture, which has been associated with adverse health effects, particularly asthma and respiratory diseases, is not present.
- *Good indoor air quality and thermal comfort:* Ventilation rates, air pollutants, humidity levels, and temperature ranges, which have been linked to human health, learning, and productivity, are effectively controlled.
- *Quietness:* The acoustical quality, which has been shown to affect student learning and the development of language skills, meets the newly released Standard 12.60, "Acoustical Performance Criteria, Design Requirements, and Guidelines for Schools," of the American National Standards Institute.
- *Well-maintained systems:* Building systems are commissioned¹ to ensure that they perform as intended, and their performance is monitored over time. Routine preventive maintenance is implemented throughout a school's service life.

- *Cleanliness*: Surfaces are disinfected to interrupt the transmission of infectious diseases, and measures are implemented to help control indoor pollutants that have been associated with asthma and other respiratory diseases.

Additional green school attributes that should be aspired to include durability, increased acoustical quality for more sensitive groups, and improved cleaning practices to prevent the accumulation of allergens and irritants. The committee's specific findings and recommendations are presented below.

SELECTED FINDINGS AND RECOMMENDATIONS (p4ff)

.... Current green school guidelines reflect (a building subsystem) approach, and in so doing, they allow for buildings focused on specific objectives (e.g., energy efficiency) at the expense of overall building performance.

.... Future green school guidelines should place greater emphasis on operations and maintenance practices over the lifetime of a building. Systems that are durable, robust, and easily installed, operated, and maintained should be encouraged.

.... Cleaning of surfaces that are commonly touched (e.g., doors, faucets, desktops) is effective for interrupting the transmission of infectious agents. Disinfecting surfaces with water and detergents is apparently as effective as applying germicidal agents.

.... Green schools represent a significant public investment. That investment can be undermined if educators, support staff, students, and other stakeholders do not have the knowledge or training to appropriately use or operate a green school.

....Future green school guidelines should require for all new schools a building commissioning process

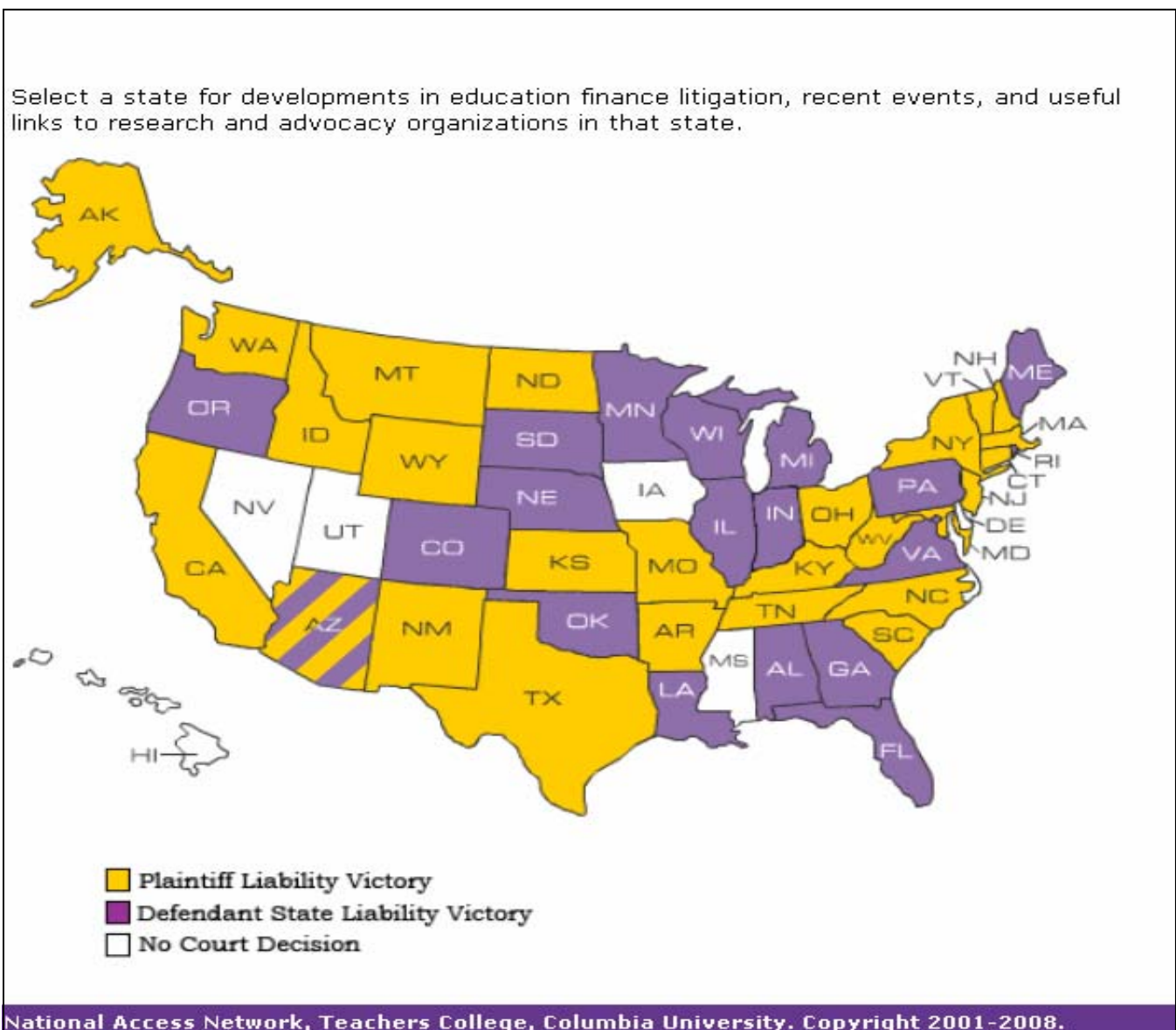
.... Future green school guidelines should encourage the periodic monitoring of indoor environmental characteristics....

....

National Access Network, Teachers' College, Columbia University

Recognizing that the poorest children often have the poorest schools, there are many campaigns in the states to challenge state financing of K-12 education to ensure a more equitable distribution of resources. The map and its web links provide a snapshot of the current status (2001-2008) of these court challenges.

Importantly, from the perspective of SICK SCHOOLS 2009 and healthy schools advocates, not all environmental health reforms cost more money: green cleaning and IPM for example both help save money. So does energy efficiency. And as the Kats (2006) pointed out, the health benefits and savings of good IEQ 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. Today, only 39 states have school facility offices, 28 have conducted some kind of infrastructure assessment, and 38 states offer grants for school construction. (*Healthy Schools Network*)



For more information, see map detail at: www.schoolfunding.info/states/state_by_state.php3

Coalition for Healthier Schools

Position Statement and Recommendations

...providing the platform and the forum for school environmental health...

Each school day, 55 million children and 7 million adults—that's 20% of the total U.S. population and 98% of all children—spend their workdays inside school buildings. Unfortunately, too many of our nation's 125,000 public and private K-12 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.

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.

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 sited on abandoned landfills. Many school facilities are poorly maintained. Schools are more densely occupied and more intensively used than office buildings, magnifying 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. Children and staff are all affected by:

- polluted indoor air and outdoor air
- toxic chemical and pesticide use; chemical spills
- mold infestations
- asbestos, radon
- lead in paint and drinking water
- heavy metals and persistent toxics, such as mercury, CCA, PCBs

Results of unhealthy schools

School environmental problems contribute to:

- child and staff poor health and absenteeism
- 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
- greater liability for school districts
- reduced funding due to poor attendance

An estimated 1 in 8 U.S. school-aged children has asthma, resulting in an estimated 15 million missed school days annually (CDC). Asthma is the leading cause of absenteeism from chronic illness. Asthma is also a leading work-related disease of teachers and custodians—they get it on the job.

Coalition Position

When the nation is committed to raising academic performance and honoring each child's potential, and to improving the environment of every neighborhood, we have a **moral obligation** to protect all children and to accommodate children who already have impairments, and personnel. 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
- use non-toxic products for instruction
- use integrated pest control and weed control
- provide quality lighting, including daylighting
- 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

A powerful array of groups support new policies and actions to ensure all schools are environmentally safe and healthy, including parents, unions, educators, health and environment groups, and advocates for the millions of students in special education programs.

National Policy

- ✦ **Support full staffing and resources for U.S. EPA** children's health protection and schools programs (at greater than FFY 06 levels)
- ✦ **Support full funding and staffing for federal agencies** to coordinate federal plans to address healthy school environments (CDC, EPA, Education, Energy, Labor, Homeland Security), including high performance school design, siting, construction, and the greening of schools with preventive maintenance (IAQ, IPM, green cleaning, and more)
 - Fund the Healthy and High Performance Schools Act in No Child Left Behind that authorizes Education, advised by EPA and Energy, to develop a state grant program to accelerate improved school design and construction
 - Fund and extend the Healthy High Performance Schools (Subtitle E) of the Energy Independence and Security Act of 2007 that directs EPA to create new guidelines for school environmental health programs (siting, IAQ, IPM, PCBs, building inspections).
- ✦ **Support federal funding for school construction/renovation and urgent repairs**, consistent with enacted laws promoting healthy school environments

State and Local Policy

- ✦ Promote, adopt, fund, and implement **healthy, high performance school facility design**. Factors include: facility oversight and 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 **certified green cleaning products**
- ✦ Support and promote state 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 health.

This message sponsored by: American Association on Intellectual and Developmental Disabilities; American Federation of State, County, and Municipal Employees; Alliance for Healthy Homes; American Lung Association; American Public Health Association; Apollo Alliance; Beyond Pesticides; Children's Environmental Health Network; Healthy Children-Healthy World; Connecticut Foundation for Environmentally Safe Schools; Environmental Defense; Funders Forum on Environment and Education; Healthy Kids: The Key to Basics (MA); Green Schools Initiative/CA; Healthy Schools Network; Improving Kids Environment (IN); Initiative for Children's Environmental, Health; Learning Disabilities Association of America; Marin Golden Gate Learning Disabilities Association (CA); Massachusetts Healthy Schools Network; National Center for Environmental Health Strategies; National Education Association; National Education Association Health Information Network; National PTA; Natural Resources Defense Council; New Jersey Work Environment Council; New Jersey Environmental Federation; Oregon Environmental Council; Physicians for Social Responsibility; Public Education Network; Twenty-first Century Schools Fund (DC); West Harlem Environmental Action; and League of Conservation Voters, Washington, DC; National Clearinghouse for Educational Facilities; National Association of Pediatric Nurse Practitioners; **and over 200 more organizations nationwide.**

About the Coalition. Convened in 2001, and coordinated by Healthy Schools Network, it provides the national forum and platform for healthy schools, through networking conference calls, meetings, and joint reports and actions. For more information, see www.healthyschools.org >coalition.

Suggested reading: *Lessons Learned*, 2006; *Green Schools: Costs and Benefits*, Greg Kats, 2006; *Green Schools*, National Academies Press, 2006; *Learning Curve: Putting Healthy School Principles into Practice*, Environmental Health Perspectives, 2009; www.epa.gov/schools for a suite of voluntary practices for school environments.



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