Towards Healthy Schools

Reducing Risks to Children
Towards Healthy Schools: Reducing Risks to Children

For information or additional copies, please contact:

Healthy Schools Network, Inc.
773 Madison Avenue
Albany, NY 12208

Tel (518) 462-0632 • Fax (518) 462-0433

info@healthyschools.org

www.HealthySchools.org
www.NationalHealthySchoolsDay.org
wwwCleaningforHealthySchools.org
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Credits

The following individuals and organizations made major contributions to this report:

Support for the Narrative Introduction

W.K. Kellogg Foundation, National Institute of Environmental Health Sciences, Education Facilities Clearinghouse, The California Endowment, Park Foundation, and Mid-Atlantic Center for Children’s Health and the Environment

National Data Contributors


State Education School Facilities Office: Association for Learning Environments, http://www.a4le.org/


States Require Schools Keep Asthma/Allergy Incident Reports: Asthma and Allergy Foundation of America, Meryl Bloomrosen, MBI, MBA, Senior Vice President, Policy, Advocacy and Research, http://www.aafa.org/index.cfm


Healthy Schools Network coordinated the development of the Towards Healthy Schools report: Claire Barnett, Executive Director; Lauren Jesmer, Program Manager (2015); Alex Naidoo, Program Manager (2016); Jeff Jones, NYS Policy Consultant; Jerome Paulson, MD, Pediatric Consultant to Healthy Schools Network; and Interns Aidan McGovern, Alison Baxter, Ashley Rogers, and Maggie Zehr.

Designer: Kelly Fahey, Primeau-Fahey Studios, Latham, NY
State Commentaries

California: Center for Cities + Schools, University of California, Berkeley, Jeff Vincent, Deputy Director, http://citiesandschools.berkeley.edu/


Indiana: Improving Kids Environments (IKE), Margaret Frericks, Program Manager, http://ikecoalition.org/


Maryland: Maryland Environmental Health Network, Rebecca Ruggles, Director, http://www.mdehn.org/

Massachusetts: Massachusetts Coalition for Occupational Safety and Health, Tolle Graham, Healthy Schools Coordinator, http://www.masscosh.org/


Oregon: NEA Healthy Schools Caucus, Carolyn Smith-Evans, Co-Founder and Chair

Tennessee: Parents For Students Safety, Daniela Kunz, Founder and President, http://www.parentsforstudentssafety.org/

Texas: Jerry Lamping, Member of EPA's IAQ in Schools Master Class

Special Topics


PCBs and Schools: New York Lawyers for the Public Interest, Erin George, MSW, Community Organizer, Environmental and Health Justice Programs, http://www.nylpi.org/

Children and Climate Change: Healthy Schools Network, Aidan McGovern, Ashley Rogers, and Victoria Roggen, Graduate Interns, http://healthyschools.org/

Interviews with Environmental Health Directors: Healthy Schools Network, Alison Baxter, Graduate Intern, http://healthyschools.org/

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Healthy schools help children grow and learn. But providing children with healthy places to learn is too often an afterthought—or not thought of at all. School facilities have been neglected for decades.

Towards Healthy Schools: Reducing Risks to Children is the fourth in a series of triennial state of the states’ reports from Healthy Schools Network and its partners in the Coalition for Healthier Schools, dating from 2006. Previous reports assessed state-by-state environmental health hazards at schools, offered compelling personal narratives from parents and teachers, and provided data needed to assess the subsequent impact on children’s health. The last report, Towards Healthy Schools 2015, went deeper into specific issues such as asthma, and fracking and well water, while also using federal poverty statistics—e.g., the number of children in a school eligible for free or reduced-price meals—as a proxy for poverty and to highlight essential inequities and injustices. It also highlighted how greener, cleaner, healthier schools promote attendance and achievement.

Yet, no state publishes information regarding children at risk due to school and/or child care center environmental hazards. To drive home the national scope of the hidden environmental health crisis faced by children, this new report features published media reports on environmental conditions from every state in the nation. From Alabama, where Bay Minette parents threatened to keep their children home to avoid exposing them to asbestos, to Wyoming, where grass fires endangered students at South High, it is a disturbing summary, highlighting the fact that across the country teachers, parents, and guardians, and the children themselves, face numerous and serious unexamined and unaddressed risks to health and learning which are rarely acknowledged by public agencies.

All states require children to attend school, but no state ensures that those schools are environmentally safe and healthy. The findings in this report are that nationwide

- the number of children enrolled in public schools is increasing,
- there are more children in school receiving subsidized meals,
- there are more children receiving special education services,
- children outnumber personnel in schools by a wide margin,
- we are spending fewer dollars on education, and
- we have fewer staff in our schools.

Add in the emerging public health threats like lead in school drinking water, PCBs and asbestos in classrooms, and the growing climate crisis, and it becomes clear why this report concludes that all children are at risk for additional health and learning problems due solely to the unaddressed and unexamined threats in their schools and the absence of public health services for children. The report also finds that we cannot reduce risks to children unless and until public health and environment agencies rise to meet this too-long-ignored environmental health challenge.

Missing in action: federal and state agency leadership to reduce risks to children

Towards Healthy Schools: Reducing Risks to Children adds to the growing database on the environmental issues in schools in the United States. In this report, readers have access to the most up-to-date information on key characteristics of schools, staff, and poverty levels. The report looks at the structural support mechanisms that
exist for schools at the state level. It reviews the programs available in some states to address identified external impacts on children, such as food allergies, hazardous cleaning products, indoor air quality (IAQ), and lead and asbestos contamination.

In 1988, the Institute of Medicine (IOM) defined public health as “what we as a society collectively do to ensure the conditions for people to be healthy.” Its report underscores the importance of having federal and state coordinated programs to ensure that all children have healthy learning places. Problems abound. First is the federal Department of Education’s complete lack of any staff expertise in the physical environment of schools. Another is the lack of coordination inside the Centers for Disease Control and Prevention (CDC)—specifically, between its long-standing school health program and its National Center for Environmental Health/Agency for Toxic Substances and Disease Registry (NCEH/ATSDR) programs regarding children’s environmental health.

An underappreciated effort is that CDC NCEH/ATSDR and US EPA co-designate and co-fund Pediatric Environmental Health Specialty Units (PEHSUs), a small program with enormous potential to help children, families, and their PK-12 schools and communities. But EPA and CDC need to align their various program goals and objectives in a manner that gives clear direction to national, state, and local programs, like the PEHSUs. For example, when it comes to understanding and addressing the cause and effect of environmental triggers of asthma, or lead in school drinking water, if CDC and EPA program strategies and funding were more closely aligned, it could help state agencies, districts, and NGOs work more effectively and collaboratively on these tough issues. (See the Appendix for key Healthy People 2020 Environmental Health Objectives for Schools, showing a decline in meeting the objectives.)

What’s happening in the states? This edition of Towards Healthy Schools is the first to publish interviews with state and county environmental health directors regarding children and learning environments. The interviews underscore earlier findings that there is no system for logging, reporting, or following up on children’s school-based risks and exposures. School personnel, on the other hand, can call on an array of public program as well as on bargaining contracts. While a few state health departments acknowledged hearing reports from personnel, the general assumption was that most would notify their union or occupational health entity before turning to state or local education or other state departments to report an observed or suspected hazard. Fear of job retaliation, especially in tough fiscal times, was identified as a barrier for personnel, including school nurses, leading to the inescapable conclusion that public health queries and complaints from parents are the critical starting point for assessing issues affecting school children. And if personnel do file complaints or make use of occupational health services, providers and agencies should identify their school and the age and total enrollment of children as part of assessing the overall risks. Clearly, ignoring the most vulnerable and most numerous occupants of schools (and child care centers) does not meet the IOM definition of public health.

Unfortunately, there is as yet no model for tracking, cataloging, or following up on parental reports or child exposures. The interview study concludes that this ad hoc approach creates a “patchwork process [that] is not a system and appears ‘reactive,’ not proactive and preventive.” It also masks the real cost of failed facilities on children and families, the health care system, and state and local agencies.

This report offers an example of how identifying schools and enrollments expands the understanding of risks. For every local media report culled and presented naming specific schools in the following state pages, the total enrollment is also cited. The enrolled children at risk project is described briefly on the STATE PAGES title sheet.
This year’s report also expands our understanding of emerging health hazards faced by children in schools. Three topics of critical importance are PCBs, climate, and lead in water.

**PCBs and schools:** Polychlorinated biphenyls (PCBs) are extremely toxic chemicals. In the U.S., their manufacture was banned in 1977; their use has been illegal since 1979. But they remain present in the environment. In New York City, in the nation’s largest school district, parents and child advocates have succeeded in getting state and federal officials to begin removing PCB-containing caulk and light ballasts from classrooms. Advocates are taking action in other states and districts as well, pressing for full remediation of these legacy toxics.

**The climate crisis and schools:** As the report notes, children are uniquely vulnerable to a host of environmental threats, including the impacts of climate change. Temperatures are rising, so are the seas. How will the global climate crisis impact children in schools? Higher heat means lower test scores; more outdoor air pollution means more asthma and more missed school days; warmer weather also means more weeds and pests and pesticides, while more severe storms can be expected to wreak havoc on poorly constructed or poorly maintained facilities. It is time for federal and state agencies to deal with these issues. **Protecting children and school facility impacts in the era of increasingly severe weather events must become part of the national dialog on climate.**

**Lead-free drinking water in schools:** Realization of the scale of the crisis of contaminated drinking water in schools came too late for this issue to be fully captured in this report. But it is important to note significant errors on drinking water quality inspections in the CDC’s School Health Policy and Practices Survey (SHPPS 2006). The key-informant survey report that some 26 states require testing at the tap for lead is not accurate. That result points to the urgent need for CDC or EPA to invest in a legal analyses of various inspections states require of schools, if any.

Governors and legislators are stepping up. For example, in late June 2016, the New York State Legislature passed a first-in-the-nation comprehensive law mandating the testing of all public school drinking water for lead at the tap. (The governors of New Jersey and Oregon, and District of Columbia school officials, are also engaged.) New York’s Safe School Drinking Water Act is enhanced by instituting a formal relationship between the state departments of education and health, with standards and new regulations to be developed by public health officials, and a formula for state reimbursement for remediation. This is an example of the kind of cross-agency approach advocated in this report.

**Moving forward**

**Public health system for children needed.** It is clear that a system is needed to track complaints flowing to various state and local agencies within the states. The interviews suggest that without a known system, complaints are placed at the discretion of the complainant and may flow to any agency seen at the time as accessible or possibly involved. One result is that environmental health problems reported to multiple state and local agencies are never collected into one state-level report or logged by school identifier. In Oregon, for example, reports concerning radon would go to the health department, calls concerning asbestos would go to the environment department, and complaints about pesticides would be referred to the agriculture department. As Healthy Schools Network Executive Director Claire Barnett has presented, such a haphazard approach eliminates the ability to have data about the actual problems and real costs. Clearly, a coordinated federal-state and NGO strategy is needed to provide and track public health services to children with suspected exposures and to examine, track, and address environmental risks in schools. **Accordingly, a recommendation of this report is that we must strengthen the nation’s public health system to organize, field test, and ultimately deliver services for children at risk and with suspected exposures, and benchmark prevention by school and child care facilities.**

The report also documents progress. A series of grants to states from EPA have helped some states take steps toward healthier schools. While the EPA’s grants—awarded to Connecticut, Minnesota, New York, Ohio, and Wisconsin—were a potential turning point, they did not significantly alter what states were doing. Nonetheless, important lessons were learned: each of the five states has undergone a process of raising awareness about the impact of indoor school environments on learning and the health of students, teachers, and staff. However,
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none were asked and none created a structure for recording, identifying, and coordinating responses to instances of suspected environmental health impacts. But in each funded project, participants reached new levels of communication on critical issues and collaborative response.

Healthy People 2030: Work is beginning now at the federal level to develop the nation’s next decade-long public health objectives. As part of that process, the participating agencies should expand on how they benchmark healthy learning environments and children’s environmental health.

A national facilitated workshop in November 2015 of leading public health, healthy schools, and child health advocates produced a series of recommendations that would definitively move the country onto a pathway that puts children first (http://www.healthyschools.org/documents/SUMMARY_FINAL.pdf). As one of the workshop recommendations suggests, establishing a public-private partnership on Healthy Children and Healthy Schools, or a Commission, would be a significant next step. The entity would be charged with following up on key topics such as developing research, collecting and managing data, and posting the results of school assessments and registered complaints. In keeping with the call for greater coordination among agencies, it needs to be a partnership that includes EPA, CDC NCEH/ATSDR, the National Institute for Occupational Safety and Health (NIOSH), the National Institute of Environmental Health Sciences (NIEHS), the Department of Education, nongovernmental organizations, and knowledgeable parents and child health and community-based advocates.

Pediatrician Jerome Paulson, MD, FAAP, Professor Emeritus of Pediatrics and Environmental and Occupational Health, George Washington University School of Medicine and Health Sciences and George Washington University Milken Institute School of Public Health – “This report gives a peek into the impact of environmental factors on the health of children in our nation’s schools. It clearly shows the need for a comprehensive, systematic data collection system encompassing all children in all childcare centers and PK-12 schools. Without the data, it is impossible to adequately identify problems, implement preventive programs, create solutions to existing problems and track their implementation. We need answers to Who? What? Why? When? and Where? Absent a data system, we’ll never have answers.”

In addition, in light of the lack of current data on school environmental health, pilot studies of proposed prevention, intervention, and tracking programs should be conducted by groups like the Council of State and Territorial Epidemiologists (CSTE) and other entities. A related effort is to assess if and how disability and educational rights laws are addressing environmental factors (IDEA, ADA, Section 504).

And, finally, there is a need to develop effective prevention and intervention systems for children across the country. Such programs could draw from the efforts of the NIOSH and OSHA models for adults and would be developed to cover children in their workplaces (i.e., schools and child care centers). In addition, the PEHSUs and/or state health departments could receive complaints about environmental exposures at schools and child care facilities and work with state and local health departments to conduct onsite investigations.

Given the current state of politics in Washington, DC, there is little hope for the sweeping reforms that are needed to address risks to children and to make schools healthy. But significant steps can be taken. Agencies need to work together. Research is needed on indoor environmental risks and exposures, and for pilot projects that can become models for broader programs later. As Towards Healthy Schools: Reducing Risks to Children documents, the problems are known and the way forward is clear.

What is needed now are resources, leadership, and the courage to act.
## National Data — Summary

### NATIONAL TOTALS

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### CHARACTERISTICS OF CHILDREN

| Students in Special Education | 6,555,291 | 6,404,588 | 6,247,443 | 6,597,197 |
| “Fenceline” Students         | 4,929,357 | N/A       | N/A       | N/A       |

### STATES

| State Education School Facilities Office | 46 | 46 | 39 | DNR |
| States with Adopted OSHA Plan           | 24 | 24 | 24 | DNR |
| State Grants for Construction           | 38 | 40 | 36 | 36 |
| States with School Building Assessments | 28 | 28 | 28 | 28 |

### POLICIES

| Food Allergy | 22 | 23 | DNR | DNR |
| Green Cleaning | 12 | 12 | 8   | DNR |
| High Performance Green Building | 24 | 24 | 2   | DNR |
| Indoor Air Quality (IAQ) | 23 | 31 | FN  | DNR |
| Lead in Water* | 27 | 27 | DNR | DNR |
| IPM Plans | 26 | 25 | 15  | DNR |
| States that Responded to Senate Inquiry of State Asbestos Policy | 20 | N/A | N/A | N/A |

### NATIONAL AVERAGE

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### STATE SUPPORT

| % Change in State Funding Per Student 2008 - 2014 | -3.32 | DNR | DNR | DNR |
| % Change in Median Revenue Per Student 2012 - 2013 | -1.80 | DNR | DNR | DNR |
| % Change in Median Expenditures Per Student 2012 - 2013 | -0.50 | DNR | DNR | DNR |

*N/A = DATA NOT AVAILABLE
DNR = DATA NOT INCLUDED IN REPORT
* See footnote 23 and Appendix for Healthy People 2020 comments
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### CHARACTERISTICS OF SCHOOLS

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<td>542,205</td>
<td>54,654</td>
<td>353,918</td>
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<td>Free &amp; Reduced-Price Lunch Eligible</td>
<td>FN 4</td>
<td>763,448</td>
<td>417,589</td>
<td>281,580</td>
<td>753,224</td>
<td>65,636</td>
<td>426,387</td>
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<td>Number of Employees in School System</td>
<td>FN 5</td>
<td>248,468</td>
<td>85,151</td>
<td>59,768</td>
<td>243,020</td>
<td>17,311</td>
<td>72,401</td>
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<td><strong>CHARACTERISTICS OF CHILDREN</strong></td>
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<td>Uninsured Children</td>
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<td>6.2</td>
<td>5.5</td>
<td>5.9</td>
<td>7.0</td>
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<tr>
<td>Asthma</td>
<td>FN 7</td>
<td>9.7</td>
<td>11.0</td>
<td>8.4</td>
<td>10.2</td>
<td>11.7</td>
<td>N/A</td>
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<tr>
<td>ADHD</td>
<td>FN 8</td>
<td>13.3</td>
<td>11.1</td>
<td>8.8</td>
<td>10.2</td>
<td>11.1</td>
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<tr>
<td>Students in Special Education</td>
<td>FN 9</td>
<td>254,187</td>
<td>105,671</td>
<td>83,207</td>
<td>298,274</td>
<td>23,360</td>
<td>99,100</td>
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<tr>
<td>“Fenceline” Students</td>
<td>FN 10</td>
<td>161,240</td>
<td>62,601</td>
<td>65,475</td>
<td>212,267</td>
<td>10,517</td>
<td>50,614</td>
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<td><strong>STATES</strong></td>
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<td>State Education School Facilities Office</td>
<td>FN 11</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
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<tr>
<td>States with Adopted OSHA Plan</td>
<td>FN 12</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
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<td>State Grants for Construction</td>
<td>FN 13</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
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<td>States with School Building Assessments</td>
<td>FN 14</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
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<td>States that Responded to Senate Inquiry of State Asbestos Policy</td>
<td>FN 15</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>Y</td>
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<td>% Change in State Funding Per Student 2008–2014</td>
<td>FN 16</td>
<td>-2.2</td>
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<td>6.3</td>
<td>N/A</td>
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<td>% Change in Median Revenue Per Student 2012–2013</td>
<td>FN 17</td>
<td>-5.9</td>
<td>-1.5</td>
<td>-0.4</td>
<td>-0.1</td>
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<td>% Change in Median Expenditures Per Student 2012–2013</td>
<td>FN 18</td>
<td>-2.7</td>
<td>-0.2</td>
<td>-1.5</td>
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<tr>
<td>Food Allergy</td>
<td>FN 19</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>N</td>
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<tr>
<td>Green Cleaning</td>
<td>FN 20</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
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<tr>
<td>High Performance Green Building</td>
<td>FN 21</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
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<tr>
<td>Indoor Air Quality (IAQ)</td>
<td>FN 22</td>
<td>N</td>
<td>N</td>
<td>N</td>
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<td>N</td>
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<tr>
<td>Lead in Water</td>
<td>FN 23</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
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<tr>
<td>IPM Plans</td>
<td>FN 24</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
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<td>Texas</td>
<td>Utah</td>
<td>Vermont</td>
<td>Virginia</td>
<td>Washington</td>
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<td><strong>CHARACTERISTICS OF SCHOOLS</strong></td>
<td>FN 1</td>
<td>1,863</td>
<td>9,312</td>
<td>1,007</td>
<td>318</td>
<td>2,197</td>
<td>2,409</td>
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<td>Number of Public Schools</td>
<td>FN 2</td>
<td>993,556</td>
<td>5,153,702</td>
<td>625,461</td>
<td>88,690</td>
<td>1,273,825</td>
<td>1,058,936</td>
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<tr>
<td>Number of Public School Students</td>
<td>FN 3</td>
<td>341,744</td>
<td>3,635,883</td>
<td>147,937</td>
<td>7,431</td>
<td>609,308</td>
<td>442,993</td>
</tr>
<tr>
<td>Number of Minority Students</td>
<td>FN 4</td>
<td>578,414</td>
<td>3,092,087</td>
<td>231,165</td>
<td>33,639</td>
<td>503,811</td>
<td>489,870</td>
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<tr>
<td>Free &amp; Reduced-Price Lunch Eligible</td>
<td>FN 5</td>
<td>125,506</td>
<td>658,340</td>
<td>54,945</td>
<td>18,299</td>
<td>178,202</td>
<td>105,365</td>
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<td>Number of Employees in School System</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
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</table>

| **CHARACTERISTICS OF CHILDREN**                      | FN 6      | 6.0            | 13.4           | 9.6            | 3.5            | 5.8            | 6.3            | 6.1           |
| Uninsured Children                                   | FN 7      | 8.4            | 9.1            | 6.1            | 11.0           | N/A            | 6.9            | 8.7           |
| Asthma                                              | FN 8      | 11.3           | 7.7            | 6.7            | 9.9            | 10.2           | 9.5            | 13.3          |
| ADHD                                                |           |                |                |                |                |                |                |               |
| Students in Special Education                        | FN 9      | 130,729        | 451,623        | 77,525         | 14,008         | 162,165        | 133,459        | 44,267        |
| “Fenceline” Students                                 | FN 10     | 62,857         | 713,446        | 42,232         | 2,769          | 34,925         | 102,181        | 18,656        |

| **STATES**                                           | FN 11     | Y              | Y              | Y              | Y              | Y              | Y              | Y             |
| State Education School Facilities Office            | FN 12     | Y              | N              | Y              | Y              | Y              | Y              | N             |
| States with Adopted OSHA Plan                       | FN 13     | N              | Y              | Y              | Y              | Y              | Y              | Y             |
| State Grants for Construction                       | FN 14     | Y              | Y              | N              | N              | Y              | Y              | Y             |
| States with School Building Assessments             | FN 15     | Y              | N              | Y              | Y              | N              | Y              | Y             |
| States that Responded to Senate Inquiry of State Asbestos Policy | FN 16 | 0.4 | -11.0 | -8.3 | 10.3 | -11.2 | -0.9 | N/A |
| % Change in State Funding Per Student 2008–2014     | FN 17     | -3.2           | -2.5           | -20.4          | 0.4            | 0.8            | 0.2            | -14.4         |
| % Change in Median Revenue Per Student 2012–2013    | FN 18     | -2.4           | 0.1            | 3.1            | 6.4            | -0.2           | 0.1            | -4.1          |

<p>| <strong>POLICIES</strong>                                         | FN 19     | Y              | N              | Y              | Y              | Y              | Y              | Y             |
| Food Allergy                                        | FN 20     | N              | N              | N              | Y              | N              | N              | N             |
| Green Cleaning                                      | FN 21     | N              | Y              | N              | Y              | Y              | Y              | N             |
| High Performance Green Building                     | FN 22     | Y              | Y              | N              | Y              | N              | N              | Y             |
| Indoor Air Quality (IAQ)                            | FN 23     | N              | Incomplete Data| Incomplete Data| Y              | Y              | N              | Y             |
| Lead in Water                                       | FN 24     | N              | Y              | Y              | Y              | N              | N              | Y             |
| IPM Plans                                           | FN 25     | N              | Y              | Y              | Y              | N              | N              | Y             |</p>
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<th>Wisconsin</th>
<th>Wyoming</th>
<th>National Totals</th>
<th>National Average</th>
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<td><strong>CHARACTERISTICS OF SCHOOLS</strong></td>
<td></td>
<td></td>
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<tr>
<td>Number of Public Schools</td>
<td>FN 1</td>
<td>2,293</td>
<td>370</td>
<td>100,551</td>
<td>1,972</td>
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<tr>
<td>Number of Public School Students</td>
<td>FN 2</td>
<td>874,414</td>
<td>92,732</td>
<td>50,044,522</td>
<td>981,265</td>
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<tr>
<td>Number of Minority Students</td>
<td>FN 3</td>
<td>241,546</td>
<td>19,131</td>
<td>25,018,175</td>
<td>490,552</td>
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<td>Free &amp; Reduced-Price Lunch Eligible</td>
<td>FN 4</td>
<td>365,711</td>
<td>34,861</td>
<td>25,601,355</td>
<td>501,987</td>
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<td>Number of Employees in School System</td>
<td>FN 5</td>
<td>102,475</td>
<td>16,930</td>
<td>6,094,868</td>
<td>119,507</td>
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<td><strong>CHARACTERISTICS OF CHILDREN</strong></td>
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<td></td>
</tr>
<tr>
<td>Uninsured Children</td>
<td>FN 6</td>
<td>4.8</td>
<td>7.1</td>
<td>N/A</td>
<td>6.9</td>
</tr>
<tr>
<td>Asthma</td>
<td>FN 7</td>
<td>7.8</td>
<td>N/A</td>
<td>N/A</td>
<td>9.2</td>
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<tr>
<td>ADHD</td>
<td>FN 8</td>
<td>9.9</td>
<td>9.1</td>
<td>N/A</td>
<td>9.9</td>
</tr>
<tr>
<td>Students in Special Education</td>
<td>FN 9</td>
<td>120,434</td>
<td>3,081</td>
<td>6,555,291</td>
<td>128,535</td>
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<tr>
<td>“Fenceline” Students</td>
<td>FN 10</td>
<td>167,066</td>
<td>3,965</td>
<td>4,929,357</td>
<td>193,308</td>
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<td><strong>STATES</strong></td>
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<td></td>
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<tr>
<td>State Education School Facilities Office</td>
<td>FN 11</td>
<td>Y</td>
<td>Y</td>
<td>46 Yes</td>
<td>N/A</td>
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<tr>
<td>States with Adopted OSHA Plan</td>
<td>FN 12</td>
<td>N</td>
<td>Y</td>
<td>24 Yes</td>
<td>N/A</td>
</tr>
<tr>
<td>State Grants for Construction</td>
<td>FN 13</td>
<td>N</td>
<td>Y</td>
<td>38 Yes</td>
<td>N/A</td>
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<tr>
<td>States with School Building Assessments</td>
<td>FN 14</td>
<td>N</td>
<td>N</td>
<td>28 Yes</td>
<td>N/A</td>
</tr>
<tr>
<td>States that Responded to Senate Inquiry of State Asbestos Policy</td>
<td>FN 15</td>
<td>N</td>
<td>N</td>
<td>20 Yes</td>
<td>N/A</td>
</tr>
<tr>
<td>% Change in State Funding Per Student 2008–2014</td>
<td>FN 16</td>
<td>-14.2</td>
<td>4.0</td>
<td>N/A</td>
<td>-3.32</td>
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<td>% Change in Median Revenue Per Student 2012–2013</td>
<td>FN 17</td>
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<td>-0.3</td>
<td>N/A</td>
<td>-1.80</td>
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<td>% Change in Median Expenditures Per Student 2012–2013</td>
<td>FN 18</td>
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<td>-1.5</td>
<td>N/A</td>
<td>-0.50</td>
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<tr>
<td>Food Allergy</td>
<td>FN 19</td>
<td>N</td>
<td>N</td>
<td>22 Yes</td>
<td>N/A</td>
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<tr>
<td>Green Cleaning</td>
<td>FN 20</td>
<td>N</td>
<td>N</td>
<td>12 Yes</td>
<td>N/A</td>
</tr>
<tr>
<td>High Performance Green Building</td>
<td>FN 21</td>
<td>N</td>
<td>N</td>
<td>24 Yes</td>
<td>N/A</td>
</tr>
<tr>
<td>Indoor Air Quality (IAQ)</td>
<td>FN 22</td>
<td>Y</td>
<td>N</td>
<td>23 Yes</td>
<td>N/A</td>
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<tr>
<td>Lead in Water</td>
<td>FN 23</td>
<td>N</td>
<td>N</td>
<td>27 Yes</td>
<td>N/A</td>
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<tr>
<td>IPM Plans</td>
<td>FN 24</td>
<td>N</td>
<td>N</td>
<td>26 Yes</td>
<td>N/A</td>
</tr>
</tbody>
</table>
Honor Roll States

States with policies and programs in place to reduce risks to all occupants. However, none of these states have a specific program to address children at risk or suspected exposures.

**Criteria**

1. State OSHA Plan

2. State Funding Construction

3. No Drop in Mean Expenditure per Student (2012 – 2013)

4. Meet 3 of the 5 Policy Goals:
   a. Food Allergy
   b. Green Cleaning
   c. High Performance Green Building
   d. Indoor Air Quality
   e. IPM Plans

**States**

- California
- Connecticut
- Hawaii
- Maryland
- New Jersey
- New Mexico
- New York
Data Footnotes

Footnotes – Data is for Public Schools only, Private School data is not included


12. From the US Department of Labor, Directory of States with Approved Occupational Safety and Health Plans. There are 24 states with federally approved state OSHA plans. Illinois has a non-federally approved public employee OSHA plan. Available at http://www.osha.gov/dcsp/osp/states.html


24. States with Integrated Pest Management (IPM) Plans, Beyond Pesticides, Personal Communication (3/10/2016) from Jennifer Ruocco (Beyond Pesticides)
Footnote 13: State Grants for Construction

12 States Pay Nothing Toward District Capital Construction

State share of funding for capital outlay, FY 1994–2013


See Interviews with Environmental Health Directors, page 49
There are no state or national databases regarding school environmental problems and no state or national databases regarding school children at risk or with suspected exposures in schools or childcare centers.

But no data does not mean no problem.

To illustrate school environmental issues affecting children, Healthy Schools Network's graduate interns set up media news feeds based on key search words, then culled the daily feeds for all of calendar 2015. The reports were then sorted by state and by topic, and enrollments found for each identified school. Most of the over 500 news clips and photos collected were from local media sources; some were national.

The content of the media reports is not surprising, but the sheer volume is. Coast to coast, the reports show a range of problems, such as vulnerability to severe weather, floods, wind, and fire; evacuations due to chemical spills or unnamed odors; occupants sickened by growing molds, pesticide sprays, or carbon monoxide; lead in drinking water; and risks to children from uncontrolled facility renovations while school is in session. The reports show hundreds, if not thousands, of children at risk or with suspected exposures, every day.

The state pages also identify if the state applied for and received a voluntary US EPA planning grant to address school environments, identify if a state or county environmental health official was interviewed about how incoming health complaints are managed, and quote advocates and NGOs regarding state issues.

Towards Healthy Schools: Reducing Risks to Children underscores the critical need to establish preventive public health services for children that include tracking their risks and exposures at school.

Web links to online media can expire. If a link does not work, you can search that media site by date, event or name of school, or you can find the story in our media files:

for Alabama to Missouri featured clips, see https://drive.google.com/file/d/0B-ji-Uqv_J65cjZaMUhoOFh6ems/view?usp=sharing

for Montana to Wyoming featured clips, see https://drive.google.com/file/d/0B-ji-Uqv_J65bjRwR2RILXBXMGs/view?usp=sharing
Storms drop more than 5 inches of rain, damage schools (Headland)
November 2, 2015
http://www.washingtontimes.com/news/2015/nov/2/storms-drop-more-than-5-inches-of-rain-damage-scho/
Children Enrolled: 359

Lanett Principal helps clean-up after storm flooded school causing over $200,000 worth of damage
December 29, 2015
Children Enrolled: N/A

Baldwin school meeting: Bay Minette parents threaten to keep kids out of school amid asbestos concerns
April 17, 2015
Children Enrolled: 1180

Scorched Earth Is Big Climate Concern in Alaska Wildfires
July 1, 2015
Children Enrolled: N/A

No injuries as ‘incredibly devastating’ fire rages through Bethel school building
November 3, 2015
Children Enrolled: 300

For Enrollment Counts see: http://www.greatschools.org/ or School Website

See Interviews with State Environmental Health Directors, page 49
Arizona

School kitchen fails health inspection (Cholla)

September 19, 2015

Children Enrolled: 1613

Training aims to reduce pesticides in schools

April 28, 2015
http://www.havasunews.com/news/training-aims-to-reduce-pesticides-in-schools/article_907f3626-edce-11e4-84ae-a0c0e49b490f.html

Children Enrolled: N/A

Arkansas

Eureka Springs: Raze school

July 6, 2015

Children Enrolled: N/A

Camden Fairview High School damaged by overnight storm

September 11, 2015
http://katv.com/archive/camden-high-school-damaged-by-overnight-storm

Children Enrolled: 724

For Enrollment Counts see: http://www.greatschools.org/ or School Website
LAUSD authorizes relocating students, staff from 2 Porter Ranch schools due to gas leak (Castlebay Lane & Porter Ranch)

December 17, 2015

Children Enrolled: 1804

Summer Begins with PCB Remediation at MHS

June 11, 2015

Children Enrolled: 1243

Families seek damages over ‘dangerous’ asbestos at 3 closed Ocean View schools (Hope View, Lake View, & Oak View)

January 21, 2015
http://www.hbindependent.com/news/tn-hbi-me-0129-ovsd-claim-20150121,0,6301663.story

Children Enrolled: 1880

Sewer gas found inside Boulder school (Casey)

February 24, 2015

Children Enrolled: 546

Greeley-Evans School District 6 in the Middle of Huge Asbestos Removal Project

August 1, 2015

Children Enrolled: 21,000

Jeff Vincent, Deputy Director, Center for Cities and Schools, University of California, Berkeley – “In California, we know that we have widespread educational and environmental health deficiencies in many of our PPK-12 school facilities. Unfortunately, we don’t know the scale and scope of these problems statewide. As a result, inequities continue and we can’t adequately target resources for effective remedies.”

For Enrollment Counts see: http://www.greatschools.org/ or School Website
Consultants Detail Asbestos, Lead Paint, PCB Levels at Saxe Middle School

February 8, 2015
http://newcanaanite.com/consultants-detail-asbestos-lead-paint-pcb-levels-at-saxe-middle-school-22167

Children Enrolled: 1232

Coleytown Elementary parents hot under the collar about air-conditioning lack

October 16, 2015

Children Enrolled: 480

Short day at BHS; school dismissed due to flooding in building

June 1, 2015
http://www.centralctcommunications.com/newbritainherald/article_c5d955c2-085e-11e5-9d87-47dc77140729.html

Children Enrolled: 976

Delaware

Gas Leak Causes Evacuation at Delaware Elementary School (Harland)

Feb. 18, 2015

Children Enrolled: 393

See Interviews with State Environmental Health Directors, page 49
See EPA grant results, page 41

For Enrollment Counts see: http://www.greatschools.org/ or School Website
**SNOWverReaction?: Snow leads to school closures and delays**

January 14, 2015

_Children Enrolled: 47,548_

**Dangerous Cold Follows Winter Storm; Most Schools Closed Friday**

March 6, 2015

_Children Enrolled: 47,548_

**Pictures of Unsanitary Conditions at Miami High School Go Viral (Sunset)**

January 18, 2015
http://www.opposingviews.com/i/society/pictures-unsanitary-conditions-miami-high-school-go-viral-photos

_Children Enrolled: 1774_

**Students Sickened, Hospitalized by a Mysterious Stink at School (Gray)**

October 2, 2015
http://www.theblaze.com/stories/2015/10/02/students-sickened-hospitalized-by-a-mysterious-stink-at-school/

_Children Enrolled: 1058_

**Continued rains, flooding affect Pasco school programs (Fox Hollow, Chasco, & Marlowe)**

August 3, 2015

_Children Enrolled: N/A_

See Interviews with State Environmental Health Directors, page 49
Asbestos Found Inside Port Wentworth Elementary
June 5, 2015
http://wsav.com/2015/06/05/asbestos-found-inside-port-wentworth-elementary/
Children Enrolled: 656

UPDATE: Myers Middle School safe after Freon leak sends Savannah children to hospital
October 7, 2015
Children Enrolled: 851

Newnan High evacuated because of chemical smell
November 3, 2015
Children Enrolled: 2440

Honokaa High evacuated due to chemical odor, dozens taken to hospital
September 18, 2014
Children Enrolled: 964

Cooler classrooms should be DOE priority
September 25, 2015
Children Enrolled: N/A

House bill addresses students getting sick from pesticide use
February 5, 2015
Children Enrolled: N/A
Towards Healthy Schools

Idaho

To pass or play? Unhealthy air quality keeps some kids inside (Boise)

October 12, 2015

Children Enrolled: 62,500

U.S. files whistle-blower suit against Idaho Falls School District

January 26, 2015

Children Enrolled: N/A

For Enrollment Counts see: http://www.greatschools.org/ or School Website -
http://www.boiseschools.org/cms/One.aspx?portalId=508306&pageId=1299811

Illinois

Carbon monoxide sickens scores of students at Chicago elementary school (Ernst Prussing)

October 30, 2015

Children Enrolled: 668

Elementary school closed due to mold, asbestos (Schiller)

August 14, 2015
http://stlouis.suntimes.com/stl-news/7/139/176796/elementary-school-closed-due-to-mold-asbestos

Children Enrolled: 173

Parents, Students Say George Washington High Is Falling Apart

March 13, 2015
http://chicago.cbslocal.com/2015/03/13/parents-say-george-washington-high-is-falling-apart/

Children Enrolled: 1577

Ruth Kerzee, Executive Director, Midwest Pesticide Action Center – “I am happy to report that many of the issues of pesticide use in schools and on school grounds are beginning to resonate more in communities, especially school communities, across the Midwest. We have seen an uptick in the number of inquiries by concerned parents and community groups regarding the use of pesticides and other lawn care chemicals on school grounds asking for help in moving their schools toward more healthful pest management practices. Illinois, for example, has seen three new bills introduced to the state legislature in the past 12 months addressing those concerns and other outdoor chemical applications. We will continue to follow these initiatives and report back their impact on creating healthier schools.”

For Enrollment Counts see: http://www.greatschools.org/ or School Website
Chicken farm near school raising concerns (Eastbrook)
October 29, 2015
http://fox59.com/2015/10/29/chicken-farm-near-school-raising-concerns/
Children Enrolled: 849

PCBs in local water continue to spur controversy
April 15, 2015
Children Enrolled: N/A

Beech Grove School fixing air quality issues
August 5, 2015
Children Enrolled: N/A

Report: Students possibly exposed to asbestos at Cedar Rapids school (Washington)
December 8, 2015
Children Enrolled: 1410

Margaret Frericks, Program Manager, Improving Kids Environments (IKE) – “In June of 2014 Indiana enacted new, more stringent indoor air quality rules for schools. Under the new rules schools must develop policies to prevent vehicle idling, limit allergens and asthma triggers in classrooms and routine maintenance of HVAC systems, immediately clean up and repair damage from water leaks, and designate an Indoor Air Quality Coordinator. The rule also requires an investigation by the State Dept. of Health if a complaint about air quality in schools is made.”

For Enrollment Counts see: http://www.greatschools.org/ or School Website
Kansas

Chemical smell reported at Northwest High School
August 31, 2015
Children Enrolled: 1439

WFISD addressing complaints about dirty schools
November 5, 2015
Children Enrolled: N/A

See Interviews with State Environmental Health Directors, page 49

Kentucky

Another Fayette School Has High Radon Levels (Yates)
January 23, 2015
http://www.lex18.com/story/27927776/lex-18-investigates-another-fayette-school-has-high-radon-levels
Children Enrolled: 491

Kentucky School Bus Stranded by Flooding
April 3, 2015
http://www.wbko.com/home/headlines/Kentucky-School-Bus-Stranded-by-Flooding-298589501.html
Children Enrolled: N/A

Local school rushing to clean up mold growth (Heath)
July 27, 2015
Children Enrolled: 446

For Enrollment Counts see: http://www.greatschools.org/ or School Website
Bill would ban building schools on toxic sites (Booker T. Washington)
April 7, 2015
Children Enrolled: 1318

Classes to resume Monday after chemical spill at Ascension Christian High School
August 19, 2015
Children Enrolled: 154

Brunswick elementary, junior high school flunk safety code, ADA review
June 24, 2015
Children Enrolled: N/A

Deering High School cited for safety violations
October 19, 2015
Children Enrolled: 920

See Interviews with State Environmental Health Directors, page 49

Ginny Mott, President, Maine Parent Teacher Association – “The need continues for all facility managers to be adequately trained and for them to be supported by their administrators and school boards. It’s critical everyone making decisions affecting the management of school facilities understands how schools impact the health of the occupants and what needs to be done to ensure schools are healthful places.”

For Enrollment Counts see: http://www.greatschools.org/ or School Website
Prince George’s County students claim school lunches are undercooked, contain mold
September 15, 2015
Children Enrolled: N/A

Concerns about mold in schools still linger for Howard County parents
September 24, 2015
Children Enrolled: 1841

Md. Senator Demanding Answers After Dire Conditions Found Inside City School (New Era Academy)
July 29, 2015
Children Enrolled: 408

Rebecca Ruggles, Director, Maryland Environmental Health Network – “Maryland’s law mandating Green Cleaning in public schools went into effect in 2013. In 2015, an assessment of implementation indicated that many school districts were in need of technical assistance. In November 2015, 21 of Maryland’s 24 public school districts participated in a peer learning workshop on implementation. This event was jointly mounted by the Maryland State Department of Education and the Maryland Environmental Health Network. Although the law unfortunately allows districts to opt out on the basis of hardship, to date no district has requested a waiver. Districts’ progress in implementing Green Cleaning will be reassessed in 2016.”
Towards Healthy Schools

Massachusetts

Dozens of students taken to hospital after chemical scare at Boston school (Boston Arts Academy)

November 9, 2015

Children Enrolled: 418

Southampton school has dozens of health and safety violations (William H. Norris)

August 27, 2015

Children Enrolled: N/A

Tolle Graham, Healthy Schools Coordinator, Massachusetts Coalition for Occupational Safety and Health – “Massachusetts schools should benefit from federal, state and local policies and programs aimed at improving health and environmental building conditions, but advocates continue to see huge gaps in compliance and the political will to implement them. For example - 1,000 of the 2,649 school asbestos reports filed in MA were deemed severely deficient according to Senator Markey’s National report: “Schools Fail to Keep Track of Asbestos”.”

For Enrollment Counts see: http://www.greatschools.org/ or School Website

Michigan

Detroit’s Public Schools Are in Crisis: Students and Teachers Deal Daily with Rats, Mold and No Heat

February 3, 2015
http://www.people.com/article/inside-detroit-public-schools

Children Enrolled: 47,000

Toxic lead levels found in water at three Flint schools (Eisenhower, Freeman, & Brownell/Holmes)

October 8, 2015

Children Enrolled: >600
Minnesota

Asbestos to be abated at W-K (Washington-Kosciusko)
September 23, 2015
http://www.winonapost.com/Article/ArticleID/45821/Asbestos-to-be-abated-at-W-K

Children Enrolled: 293

Teachers, Students Say Jordan Elementary Mold Made Them Ill
April 8, 2015
http://minnesota.cbslocal.com/2015/04/08/teachers-students-say-jordan-elementary-mold-made-them-ill/

Children Enrolled: 650

Mississippi

Have legislators thwarted a chance to bring funds to cash-strapped Mississippi schools?
http://hechingerreport.org/have-legislators-thwarted-chance-to-bring-funds-to-cash-strapped-mississippi-schools/
January 14, 2015

Children Enrolled: N/A

First day of school brings construction worries for Amite parents
August 6, 2015

Children Enrolled: 428

Possible Allergic Reaction to Mold

See Interviews with State Environmental Health Directors, page 49
See EPA grant results, page 41

For Enrollment Counts see: http://www.greatschools.org/ or School Website
Crews clean up water damage in Camdenton School (Oak Ridge)
August 13, 2015
Children Enrolled: 627

Eureka High School took on some floodwater, but nothing ‘extreme’
December 31, 2015
Children Enrolled: 1959

Frenchtown schools closed Monday after flood
December 14, 2015
Children Enrolled: 1959

U.S. cleanup would leave some asbestos in contaminated Libby, Montana
May 5, 2015
Children Enrolled: N/A

For Enrollment Counts see: http://www.greatschools.org/ or School Website
Nebraska

Moldy Start for DC West School
August 21, 2015
http://www.wowt.com/home/headlines/Moldy-Start-for-DC-West-School-322477582.html
Children Enrolled: 233

Study: Nebraska is failing kids with asthma and allergies
October 20, 2015
Children Enrolled: N/A

Nevada

Burst pipe could result in asbestos woes at Reno school (Pine)
December 29, 2015
Children Enrolled: 923

Flooding causes $400K in school damages
July 15, 2015
Children Enrolled: N/A

For Enrollment Counts see: http://www.greatschools.org/ or School Website - http://www.dcwest.org/vnews/display.v/ART/56dda2ec7042e?in_archive=1
New Hampshire

Chemical Test Unnerves School
January 25, 2015

**Children Enrolled: 502**

Effort Begins to Reduce Children’s Exposure to Lead Paint in Nashua, N.H. Area (US EPA)
April 27, 2015
http://yosemite.epa.gov/opa/admpress.nsf/0/6e4b377b0d92a39f85257e3400621cfa?OpenDocument

**Children Enrolled: N/A**

Work to begin on middle school roof damaged by snow (Sanborn Regional)
July 15, 2015

**Children Enrolled: N/A**

New Jersey

Bed Bug Problem at Deptford High School
October 23, 2015

**Children Enrolled: 1030**

Paterson Eastside High School damaged by flooding over weekend
August 11, 2015

**Children Enrolled: N/A**

Acid spill at Indian Hills High School in Oakland forces evacuation
December 17, 2015

**Children Enrolled: 1139**

Chemical Spill at Bruriah Opens New Security Perspectives
February 19, 2015

**Children Enrolled: 357**

Chemical spill evacuates private school in Elizabeth (Jewish Educational Center)
February 12, 2015
http://www.nj.com/union/index.ssf/2015/02/chemical_spill_evacuates_jewish_educational_center.html

**Children Enrolled: 771**

For Enrollment Counts see: [http://www.greatschools.org/](http://www.greatschools.org/) or School Website
The most dangerous school in America? (Pine Hill)

August 27, 2015
http://krqe.com/2014/11/06/the-most-dangerous-school-in-america/

Children Enrolled: 291

West Babylon High School evacuated after fumes in hallway make dozens sick

December 15, 2015

Children Enrolled: 1333

Drinking water shut off at Ithaca city schools after high lead levels detected

February 26, 2016

Children Enrolled: >5100

See EPA grant results, page 41

Christopher Goeken, Director of Public Policy, New York League of Conservation Voters – “This is a national model for how to deal with this emerging public health crisis. New York is the first to pass legislation to require testing and remediation at the tap for all public schools.”
North Carolina

Health Department: Charlotte school contains lead paint (Tyron Hills)
January 21, 2015
Children Enrolled: 250

Chemical spill forces school to close (Charlotte Central)
December 10, 2015
Children Enrolled: N/A

Mudslide and Flooding Damages Charter School (ArtSpace)
December 30, 2015
Children Enrolled: 376

North Dakota

Fort Totten, North Dakota getting $3.6 million to replace moldy school building
November 10, 2015
http://www.crookstontimes.com/article/20151110/NEWS/151119966
Children Enrolled: 75

For Enrollment Counts see: http://www.greatschools.org/ or School Website
Wing of Oakdale Elementary closed due to mold outbreak
August 12, 2015
*Children Enrolled: 600*

Old Firelands school buildings falling apart
October 30, 2015
http://chronicle.northcoastnow.com/2015/10/30/old-firelands-school-buildings-falling-apart/
*Children Enrolled: 1185*

Lorain’s Lowell Elementary School’s New Beginnings experience issues with water and ice in ceilings
March 10, 2015
*Children Enrolled: 156*

Green County Schools Prepare for Flooding
May 27, 2015
*Children Enrolled: N/A*

Smelly Problem Leads To Closure of Tulsa Area School District (Liberty)
November 17, 2015
*Children Enrolled: 11,800*

Seminole High School moved to temporary location due to building concerns
July 29, 2015
*Children Enrolled: 480*

See Interviews with State Environmental Health Directors, page 49
See EPA grant results, page 41

For Enrollment Counts see: http://www.greatschools.org/ or School Website - http://www.liberty.k12.mo.us/districtinformation
Concerns Arise Over Pesticide Spray Near School (Triangle Lake)

September 17, 2015

Children Enrolled: 202

Portland Public Schools tests air quality in Cleveland High, four other SE Portland schools (Cleveland, Hosford, Winterhaven, Abernethy, & Grout)

February 05, 2016
http://www.oregonlive.com/education/index.ssf/2016/02/portland_public_schools_testing.html

Children Enrolled: 3,123

See Interviews with State Environmental Health Directors, page 49

Carolyn Smith Evans, Co-Founder and Chair, NEA Healthy Schools Caucus – The events in the Portland Oregon Public Schools regarding lead in school water supplies and the untimely disclosure to parents and teachers seem to be reverberating around the State. The positive outcomes of this are the mobilization of Oregon's Governor and the Oregon Legislature to seek ways to address issues of lead and other environmental toxins in Oregon schools. As well, school districts in other parts of the state such as Eugene, Salem-Keizer, and other smaller districts are voluntarily announcing their plans for water testing and disclosure of the results to the public, parents and school employees.

Inside Philadelphia’s filthy schools

December 10, 2015

Children Enrolled: N/A

(Updated) Pottsgrove High School evacuated during Keystone exams due to roof tar accident

May 14, 2015
http://www.pottsmcrc.com/article/MP/20150514/NEWS/150519808

Children Enrolled: 1075

Storms tear apart Hamburg school (Blue Mountain Adventist)

July 10, 2015

Children Enrolled: N/A

For Enrollment Counts see: http://www.greatschools.org/ or School Website - http://infoworks.ride.ri.gov/district/providence

**Rhode Island**

**Providence students to R.I. lawmakers: Repair our schools**

April 29, 2015
http://www.providencejournal.com/article/20150429/NEWS/150429130

*Children Enrolled: 23,867*

**Ice Dams Cause Flooding, Closing Orchard Farms School Today**

February 23, 2015
http://patch.com/rhode-island/cranston/ice-dams-cause-flooding-closing-orchard-farms-school-today-0

*Children Enrolled: N/A*

**South Carolina**

**Chemical left on school toilet bowl burns child’s buttocks, says mom (Clearwater)**

January 14, 2015
http://www.wrdw.com/home/headlines/12-OYS-Chemical-left-on-school-toilet-bowl-burns-childrens-buttocks-says-mom-288604831.html

*Children Enrolled: 432*

**Displaced Students Back to School In a Church (Timmerman)**

October 14, 2015

*Children Enrolled: 338*
**South Dakota**

**School board annual meeting Tuesday**

**July 07, 2015**

http://rapidcityjournal.com/news/local/communities/sturgis/school-board-annual-meeting-tuesday/article_43bd7a3-6000-5ac-f72fc7bb17a1.html

*Children Enrolled: N/A*

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**Faulty pipes cause temporary closing for Dakota Valley Schools**

**March 9, 2015**


*Children Enrolled: 869*

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**Tennessee**

**Kingston Elementary reopens after flooding**

**August 19, 2015**

http://wate.com/2015/08/19/kingston-elementary-closed-thursday-due-to-flooding/

*Children Enrolled: 715*

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**Mold reported at Nashville middle school (McMurray)**

**December 4, 2015**

http://www.wbrc.com/story/30662074/mold-reported-at-nashville-middle-school

*Children Enrolled: 798*

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Daniela Kunz, Founder and President, Parents For Students Safety – “There must be requirements and a National Standard for safer, healthier schools especially for students (and also for the health of other occupants). EPA has a congressional authorization to issue guidelines on how pediatric environmental health experts can assist state and local health departments with onsite school investigations. EPA needs to convene a federal advisory work group to help address this gap in services to protect children in US Schools. And finally, parents and their children need to be protected from retaliation when they seek answers and records about school conditions.”
Students Walk Out Of South Oak Cliff High School to Protest Crumbling Building

December 7, 2015
http://keranews.org/post/students-walk-out-south-oak-cliff-high-school-protest-crumbling-building

Children Enrolled: 1319

Lakewood Elementary shut down again Wednesday after carbon monoxide leak

March 4, 2015

Children Enrolled: 841

See Interviews with State Environmental Health Directors, page 49

Jerry Lamping, Member of EPA’s IAQ in Schools Master Class – “Enrollment growth is a key driver for additional school facilities in Texas. Texas’ under-18 populations are expanding 6.5 times faster than the U.S. average. The data show newly built schools (both new campuses in growing districts and replacement facilities) house almost 740,000 students — about 15 percent of Texas public school enrollment. Eleven of the 13 Texas counties that grew fastest (by population) between 2007 and 2012 fall into this bracket. They are home to suburbs around Austin, Houston, Dallas-Fort Worth and San Antonio. With populations ballooning at a whopping 15-22 percent, these counties accounted for 180 new schools. The Texas Comptroller of Public Accounts’ Texas Transparency website has detailed information on 834 new campuses (excluding charter operators) — $15.4 billion in combined adjusted construction costs.”

Utah lawmakers unveil $28 million in air quality proposals

January 29, 2015

Children Enrolled: N/A

Utah schools going after bugs the old-fashioned way to cut down on chemical killers (Salt Lake City)

September 22, 2015

Children Enrolled: 24,360

Vermont

Cleanup underway following storm damage in Vt.
June 10, 2015

Children Enrolled: N/A

Damage bill up to $500,000 at St James Primary School in Vermont
January 7, 2015

Children Enrolled: 333

Virginia

Smell could close Richmond school, eventually cost $1 million (John B. Cary)
April 29, 2015
http://www.nbc12.com/story/28936288/school

Children Enrolled: 199

Elevated levels of radon found in some Franklin County schools (Benjamin Franklin & Boones Mill)
April 1, 2015
http://www.roanoke.com/news/virginia/elevated-levels-of-radon-found-in-some-franklin-county-schools/article_e5f6d2c6-1a3f-5d6b-bc36-ccc0ede06dc.html

Children Enrolled: >340

Asbestos Shuts Down Columbia Pike Preschool
March 26, 2015
http://www.arlnow.com/2015/03/26/asbestos-shuts-down-columbia-pike-preschool/

Children Enrolled: N/A

For Enrollment Counts see: http://www.greatschools.org/ or School Website
Unhealthy Air Quality Means Schools Will Limit Outdoor Exposure for Students

August 24, 2015
http://www.nbcrightnow.com/story/29870164/unhealthy-air-quality-means-schools-will-limit-outdoor-

Children Enrolled: N/A

Brown water, rats, suspected mold plague Highline HS

September 30, 2015

Children Enrolled: 1,384

See Interviews with State Environmental Health Directors, page 49

Amid Safety and Health Concerns, Proposed New Johnson School to be Built on Same Grounds

September 22, 2015

Children Enrolled: N/A

Indoor air quality results released for Fayette County Schools

February 14, 2015
http://m.wvva.com/w/news-local/story/126296420/

Children Enrolled: 458

Train derails, explodes in West Virginia; crude oil spills into river

February 17, 2015

Children Enrolled: N/A

For Enrollment Counts see: http://www.greatschools.org/ or School Website
Wisconsin

40 kids taken to hospital after chemical leak at a Mauston middle school (Olson)

October 31, 2014

Children Enrolled: N/A

Flooding closes Menasha High School

December 14, 2015

Children Enrolled: 978

See EPA grant results, page 41

Wyoming

Grass fire threatens South High

March 15, 2015
http://www.wyomingnews.com/articles/2015/03/16/news/01top_03-16-15.txt#.VZ6UafTVHw

Children Enrolled: <3,700

For Enrollment Counts see: http://www.greatschools.org/ or
Special Topics
Towards Healthy Schools

EPA State Grants Report


Background: In 2004, the Coalition for Healthier Schools began urging Congress to find new ways to advance healthy school environments for children, especially those in low-income schools. In 2007, the Healthy High Performance Schools Act was embedded into the Energy Independence and Security Act. The law directed EPA to develop voluntary guidelines, in consultation with other federal agencies, to help states establish and implement environmental health programs in PK-12 schools. Guidelines and grants to states were first issued in 2012. The guidelines cover indoor air quality problems resulting from poor ventilation; mold and other allergens; chemicals and pesticides; unsafe drinking water; safety hazards related to improperly stored or managed chemicals; insufficient natural lighting; and poor acoustics.

While this was a major advance, EPA did not fulfill its congressional authorization: it did not address how pediatric environmental health experts could assist local agencies with onsite school investigations, nor did EPA direct or encourage its state grantees to track outcomes for children.

The agency awarded grants to five states to help advance its new guidelines. Here is a snapshot of what was accomplished.

Connecticut Department of Public Health built on its existing EPA grant-funded state program. It introduced IAQ [Indoor Air Quality] Tools for Schools to urban school districts; provided refresher training for 14 school districts, serving 54 schools; revitalized the state’s School Indoor Environment Research Team website; and organized a comprehensive compendium of its Indoor Environmental Quality/IAQ Tools for Schools materials.

Minnesota Department of Health, also built on a successful state program begun in 1997. It set up a steering committee of 17 state and nongovernmental representatives; created a new web portal covering 22 environmental topics; promoted environmental health through a new newsletter, email listerv, advertising in journals and on websites, and direct mailings; and educated school officials through 25 trainings (731 attendees), 8 outreach events, 12 on-site consultations, and 44 off-site consultations.

New York State Department of Health built a state program plan from scratch. It established a steering committee of more than 50, largely PK-12 constituencies and state agencies; developed a consolidated consensus plan and proposed to measure outcomes for children; and hosted a first-ever statewide multi-agency full-day conference on school environments.

Ohio Department of Health has had a school environmental health program since 1995. It established a School Environmental Health Advisory Panel to develop guidelines for improving school environmental health; completed Creating Healthy School Environments: Voluntary Guidelines for Ohio Schools; kicked off a statewide School Environmental Health Baseline Assessment; held five regional trainings; and recorded eight school environmental health webinars.

Wisconsin Department of Natural Resources added to its environmental health and safety program by teaming up with the Wisconsin Department of Public Instruction. They created the Wisconsin Green and Healthy Schools (GHS) Program, a voluntary, web-based certification program for PK-12 schools. They redesigned the GHS Program to align with EPA's guidelines and other federal programs; established a statewide Green and Healthy Schools Advisory Network; hosted 12 regional workshops and 3 topic-specific workshops; enrolled 220 schools in the program; and hosted a professional development summer institute for nearly 200 participants.

For lessons learned by these five states in terms of recruiting and managing advisory committees, agency and school buy-ins, and other issues, see https://www.epa.gov/schools/eh-guidelines-addendum-recommendations-and-lessons-learned-state-grantees
PCBs and Schools

What are PCBs?

Among the most toxic man-made chemicals on the planet, Poly-chlorinated biphenyls (PCBs) are increasingly linked to the most serious human health issues, including cancer, childhood leukemia, liver disease, heart disease, permanently depressed IQ, autism, diabetes, asthma, and hormonal disturbance. With the passage of the Toxic Substances Control Act in 1977, Congress banned the manufacturing of PCBs and in 1979 banned their use, except in a totally enclosed manner. Developed by Monsanto in 1929, PCBs were widely used in building materials and electrical equipment and are commonly found in buildings constructed and remodeled between 1950 through 1978.

Fighting PCBs in NYC Public Schools

Beginning in 2009, parents and advocacy groups in New York City, which has the largest public school system in the United States, with more than one million students, began campaigning to rid their schools of PCB-contaminated caulking materials and PCB-contaminated lighting fixtures that were actively leaking PCBs into classrooms.

The NYC PCB Free Schools campaign started when a concerned Bronx parent teamed up with New York Lawyers for the Public Interest (NYLPI) to sue the New York City Department of Education (DOE) over PCB-contaminated caulk at her daughter’s school. In October 2009, the DOE settled the case by entering into an agreement with the Environmental Protection Agency (EPA) to launch a five-school–pilot program to study caulk remediation options and devise a plan to address PCB-contaminated caulk throughout the City’s school system. Air tests in the course of the pilot study showed PCB contamination well beyond what was expected for contamination associated with caulking. Further investigation showed that there was another PCB-contaminator in the classroom: T12 fluorescent lights with lighting ballasts containing PCBs.

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

In the summer of 2010, grassroots organization New York Communities for Change (NYCC) and NYLPI led a coalition of parents, students, schools staff, unions, and elected officials in a campaign to pressure the DOE to shorten its 10-year time frame for replacing the PCB lighting. In July 2011, NYCC and NYLPI sued the DOE and the School Construction Authority (SCA), seeking a court order to force the City to replace PCB-containing T12 light fixtures within a much shorter time frame. Thanks to the NYC PCB Free Schools campaign, in May 2013, the City of New York cut in half its ten-year timeline for removing light fixtures containing PCBs from New York City’s public schools as part of the terms of a legal settlement. The City of New York is currently on track to have all PCB-contaminated light fixtures removed by the end of 2016.
What can you do about PCBs in your school?

1. **Determine the year in which your school building was constructed:** PCBs are most prevalent in buildings constructed between 1950 and 1977.

2. **Ask about the type of light fixtures used in your school:** T12 and HID light fixtures may contain PCBs in the electrical ballasts.

3. **Request air testing in your school:** Air tests will determine the presence and concentration of airborne toxins in your school.

4. **Request a test of the caulk in your school:** This can be either a wipe test on various surfaces such as floors and desks, or a test of the actual caulk.

5. **Organize!** Connect with other organizations, schools, and programs looking to improve their schools’ environmental health.

Explored or damaged light ballast containing PCBs. Photo by EPA.
Climate Change: Children and Schools

Introduction to Climate Change

Climate change primarily refers to the rise in average surface temperatures on Earth. The bad news is that these rises in temperature have lasting adverse effects on our health. According to the U.K.-based Met Office Hadley Centre for Climate Science and Services, global mean surface temperatures will soon reach 1°C (1.8°F) above preindustrial levels. Worryingly, this is halfway to the 2°C warming point that many scientists view as dangerous for human and environmental health.

Why Children Are Most Vulnerable

Children are highly vulnerable to all kinds of environmental threats and climate change is no exception. In fact, the American Academy of Pediatrics has gone on record saying that children are “uniquely vulnerable to these threats.” Children eat, drink, and breathe more per pound of body weight than adults do. Children are less able to identify and avoid hazards. Children’s bodily systems are still developing, which makes them more susceptible to harmful effects from toxins and pollutants. Arguably, we are already suffering the consequences of climate change, as 2014 was widely reported to be the warmest year on record. Executive Order 13045 recognizes the unique health risks that children face and requires the EPA to evaluate the effect of regulation on children. Moreover, no federal, state, or city agencies issue public health advisories for children pre- or post-disaster.

Adverse Events Due to Climate Change

There are countless ways in which climate change adversely impacts the environment and a child’s way of life. Climate change can alter the resources available in the community such as food and water supplies. Changes in climate will diversify the ideal living conditions for ticks and mosquitoes, thus increasing vector-borne disease like malaria and dengue fever (ACEI). Extreme weather events such as flooding and hurricanes will become more frequent and intense as climate change advances. A recent report by the American Meteorological Society claims that 14 extreme weather events in 2014 were at least partly caused by climate change. Also, climate change significantly (and negatively) impacts indoor and out-
door air quality. These events can seriously damage buildings and lead to such things as mold, water damage, lead and chemical contamination, as well as contamination of water with sewage.

**Why We Should Worry About Extreme Heat**

Climate change has previously, and will continue to, contribute to more intense and more frequent heat waves. NOAA recently confirmed that the summer of 2015 was the hottest summer ever recorded. Children and infants are extremely susceptible to heat-related illness and mortality. The effects of heatwaves include worsening air pollution, an increased rate of heart attacks, and more kids with asthma (NWF). Currently, 6.8 million children in the United States have asthma, but that number could soon be much higher (CDC). This is a major issue as asthma is the leading cause of school absenteeism in the US. Heat-related illness are most likely to occur when children play outside during heat waves and cannot stay hydrated (EPA). Another risk of extreme heat is loss of school productivity (lower test scores and attendance). A child’s ability to learn is measured by test scores, and there is evidence that higher temperatures yield lower test scores. Even in early September this year, schools across Connecticut without sufficient air conditioning units let out early amid record-breaking heat (NBC Connecticut). Conditions are not any better in warmer climates during late spring and early summer final testing periods.

**Why We Should Worry About Indoor and Outdoor Air Quality**

According to research completed by the Intergovernmental Panel on Climate Change and the EPA, air quality is projected to decline due to climate change. Outdoor air quality is already a major concern. For instance, in October, some Boise schools were forced to cancel outdoor activities due to outdoor air quality concerns (KTVB.com). Rising temperatures may decrease air quality by increasing the formation of ground-level ozone, which is the main ingredient for urban smog (EPA). These exposures have several long-lasting health effects on children: shortness of breath, chest pain, wheezing, coughing, and more. As outdoor air quality decreases, children will spend more time indoors.

However, indoor environmental exposures can be 100-1,000 times more intense than outdoor exposures (IOM, 2011).

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*Michigan. Classroom items are placed in the hallways May 28, 2015, at Stephenson Elementary School in Stephenson, Mich. The school was closed because of flooding. Photo by WLUK/Mike Rassch*

*Nebraska. Debra Nelson, a middle school teacher with Omaha Public Schools, stands on the mangled playground equipment while taking a photo of the tornado-damaged middle school in Pilger. Photo by Darin Epperly/Norfolk Daily News*

*North Dakota. The inside of Trinity High School shows heavy damage from a fire. The entire school has visible and extensive smoke and water damage from the blaze in the office area. Photo by Tom Stromme/Bismarck Tribune*
Climate Change: Children and Schools (continued from previous page)

Children already spend much of their time in schools, as they are legally mandated to do so, but they cannot advocate for themselves, and they do not have policies and unions in place to protect them against occupational hazards, such as poor indoor air quality, as adults do.

Health problems that occur because of poor air quality exposure include developmental disabilities, learning disabilities, respiratory diseases, other chronic diseases, and even death. Research shows that adult critical thinking skills suffer a decline at 1,000 ppm CO2 (Spengler, 2012). As we know, children’s bodies are smaller compared to adults, and their brains are developing, so the risk to them is even greater. In classrooms that experience levels of CO2 above 2,000 ppm, children suffer declines in attention, concentration, alertness, prioritization, and the ability to organize tasks (EPA; Blake, Northwest AIR). This leads to loss of productivity at school, which can decrease a child’s college and potential earnings prospects in the future. Not only does air quality directly impact health, but it also indirectly impacts health if buildings are compromised. Increases of ozone outside will lead to an increase in ozone indoors. As a result, chemical changes in the building materials will add to the current indoor pollutants. This, combined with heat, will change the indoor air chemistry, which will lead to mold growth indoors and off-gassing of VOCs (IOM, 2011).

Why We Should Worry About Extreme Weather Events

Climate change is projected to increase the frequency and intensity of extreme weather events, and some scientists believe it already has. First and foremost, children are especially vulnerable in extreme weather events because they rely on adults to make protective decisions for them. Also, their bodies are smaller, which means that they are more at risk of being over come by strong winds and water currents. Floodwaters have many dangers: mold growth, oil and chemical leakage, wildlife lurking in floodwaters, and more. Therefore, it is especially important to protect our children from floodwaters.
Towards Healthy Schools

by keeping them from walking in floodwaters, and from keeping them from attending schools with water damage until the problem is rectified.

Superstorm Sandy (2012) claimed five children’s lives, between the ages of 2 and 13. Two brothers, ages 2 and 4, were swept away by water because their mother was attempting to escape through storm waters. As a result of the storm, more than 80 schools in the New York City Public School District had severe damage. Fifty-six schools in the New York City area could not reopen until 2013. In all, 170 schools in the New York Metro area were in or adjacent to the storm surge. Since many schools were damaged and remained closed for so long, students were displaced, which compromised their learning. Some students missed weeks of school.

New Jersey school districts were also hit hard by Superstorm Sandy, and schools with the most severe damage served 3,444 students. Hurricane Katrina (2005) also severely impacted schools and education. Some schools were so severely damaged that they were closed down for months, and some even years. Years later, a teacher in Louisiana described her students as being extremely far behind academically, adding that some high school students simply never returned to school.

Conclusion

Protecting children and school facilities must be part of the climate dialog. Agencies should be aware of school facility vulnerabilities to severe weather and the designation of local schools as community shelters. Agencies should also disseminate public health advisories pre- and post-disaster, targeted at preventing harm to children in schools or returning to storm-damaged schools.

Citations

US Environmental Protection Agency. Climate Change. Available at: http://www.epa.gov/climatechange/
Association for Childhood Education International: Climate Change and Children. Available at: http://acei.org/global-news/climate-change-and-children

Centers for Disease Control and Prevention. Asthma FastStats. Available at: http://www.cdc.gov/nchs/fastats/asthma.htm
Spengler JD. Climate change, indoor environments, and health. Indoor Air. 2012;22(2):89-95
National Oceanic and Atmospheric Association (NOAA) http://www.ncdc.noaa.gov/sotc/global/201509#temp


Reducing Chemical Risks: Green Cleaning and Healthy Products

Following enactment of New York State’s law and signing of an executive order in 2005 requiring all public and private schools as well as state agencies to use green cleaning products, today 11 states plus the District either require or promote the use of green cleaning products by schools; in addition, more states and more cities are developing green procurement programs as a way to reduce hazards on the job and to reduce agencies’ environmental footprints. For national guidance for PK-12 schools and child care centers, free posters and customizable training tools, as well as state model bill text, see www.cleaningforhealthyschools.org.
Interviews with Environmental Health Directors

Conducted by Healthy Schools Network Graduate Intern Alison Baxter, Spring 2015

Initial outreach to the environmental health (EH) division of the Association of State and Territorial Health Officials (ASTHO) and the National Association of County and City Health Officials (NACCHO) found that neither national organization had information on if or how its members were addressing environmental health issues in PK-12 schools affecting children. As a result of the phone calls, the Network was invited to speak at the bimonthly phone conference for ASTHO’s state environmental health directors in February 2015. The Network described its interests, then recruited EH Directors online to be interviewed for up to 30 minutes. Over a period of six weeks in the spring of 2015, the Network conducted thirteen phone interviews with twelve states and one major county (see map). About half of the conversations were with state environmental health directors, and half were with bureau chiefs within environmental health departments.

General Findings

Some states reported teachers calling the health agency with complaints, but it was assumed that most teachers will complain first to either their union or occupational health agencies. Based on previous research by the Network, it is speculated that many teachers may fear speaking out about environmental health issues at schools due to fear of job retaliation. For these reasons, and because our primary concerns are about children, the Network focused on complaints to the state and local health agencies coming from concerned parents.

The first interview question asked was “Does your agency receive complaints from parents about suspected environmental exposures at PK-12 schools?” Across the board the answer was yes, but similarities in answers disappeared after this point. Whether or not the calls are logged, diverted to another organization, or bureau, or followed up with an inspection, all depend on the nature of the problem and the state involved. The ad hoc patchwork process is not a system and appears “reactive,” not proactive and preventive. A few interviewees report entering call information into a state database; the other states do not, and do not collect information from other agencies or even local health departments. Most state health agencies could offer an estimate of how many calls are received, but did not know if complaints had also been reported to sister state agencies with responsibilities for issues such as chemical uses, pesticides, energy, or education, or even successfully resolved; nor did they estimate how many children would be at risk.

If the state health agency isn’t monitoring which schools have environmental health problems, and the education agency does not, is anyone? Many states said that parents call the state agencies as a last resort: they have already reached out to a combination of the local school district, the local health department, or other agencies.

In some states, different environmental health issues are housed in separate state agencies. For example, in Oregon calls about radon go to the health department, calls about asbestos go to the department for environmental quality, and calls about pesticides go to the department of agriculture.

The interviewees stated that to the best of their ability they try to coordinate in situations with multiple environmental health issues, including getting local health departments involved if they have adequate resources. In a workshop hosted by the Institute of Medicine on behavioral health, it was determined that “potential harm is amplified when different agencies lack standardized, comparable outcome measures,” saying further that “silos of expertise” should be broken down with interagency information-sharing policies.

The same can be said for environmental health in schools: the monitoring of environmental impacts of schools has fallen between the cracks of the myriad local, state, and federal agencies. In a paper presented in summer 2015, the International Society of Indoor Air Quality (ISIAQ) Healthy Buildings America conference in Colorado, the Network’s executive Claire Barnett argued that a “coordinated federal-state strategy is needed to provide and track public health services to children with suspected exposures and to examine, track, and address environmental risks in schools.”

Three EH Directors interviewed were from states receiving the EPA Office of Children’s Health Protection’s (OCHP) 2012 Green and Healthy Schools Initiative Voluntary State Grants. A 2013 report commissioned by Healthy Schools Network evaluated states’ progress on the EPA grants; two states have no-cost extensions.
The report found that in general states receiving the grants were not discussing how to track children’s risks and exposures, nor were children’s advocates present in any significant number. The grant coordinators also noted that it was challenging to attain school buy-in because in general funding was not provided to individual districts.³

Conclusions
The high rate of volunteer participation from the state health agencies was completely unexpected and is a real expression of concern about these issues. The large variety in the responses demonstrates differences across the states in their ability to address suspected environmental hazards in schools. However, it appears there is an immediate need to pilot statewide interagency tracking of health complaints arising from child care facilities and PK-12 schools, as well as pilots to demonstrate the effectiveness of on-site inspections by qualified experts in tandem with pediatric environmental health experts, as required in EPA’s congressional authorization (EISA 2007). A common theme from respondents was that the state health agencies don’t know how environmental risks are being monitored because each school handles issues differently. Children would benefit if states developed hazard prevention programs that could be systematically implemented from the top down. These programs can use federal guidelines as templates, such as EPA’s IAQ Tools for Schools. States should customize the guidelines by incorporating various stakeholders within the states, such as local health departments, teachers unions, the state board of education, and other state agencies such as the department of agriculture and environment. For environmental hazards at schools to be resolved, however, the state health agencies need additional funding. Without adequate funding, school environmental health policies are unenforced, the problems are not addressed, and our children are at risk.

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3 Lubin, Judy. “An assessment of state capacity building to improve conditions of schools and children’s environmental health,” 2003, key informant survey commissioned by Healthy Schools Network.
### Appendices

- EPA Healthy Schools, Healthy Kids Resources
- Healthy People 2020
- CDC Whole School, Whole Community, Whole Child Resources
- CDC Children’s Health and the Built Environment
- US Department of Education Green Ribbon Schools Award
- National Education Access Network
**Healthy People 2020 (HP 2020)** Environmental Health measures support the general findings of this report of worsening conditions for children in PK-12 schools. As this report has documented, there are more public schools today, more children in schools, more children in poverty, and more with special education needs, yet fewer dollars and fewer staff for our schools. Consistent with that, and possibly resulting from the deep cuts to CDC’s and EPA’s budgets supporting voluntary programs for children’s environmental health and for healthy school physical environments, HP 2020 found a decline in the percent of schools meeting HP 2020 objectives.

The data below provide trend lines, but not necessarily hard facts on school. See note below. The apparent downward trend among schools in meeting key objectives could be due to more fiscal pressures on local schools or to the deep cuts in US EPA programs addressing healthy learning environment (lead, water, asbestos, chemical management, Indoor Air, and IPM). A sample of HP 2020 EH for Schools:

**School Indoor Air Quality**
Objective EH-16.1 *Increase the proportion of the Nation’s elementary, middle, and high schools that have an indoor air quality management program to promote a healthy and safe physical school environment*, with a goal to increase from 51% to 56% (2010 to 2020), instead fell to 46% in 2014.

**School Hazardous Materials Management**
Objective EH-16.3 *Increase the proportion of the Nation’s elementary, middle, and high schools that have a plan for how to use, label, store, and dispose of hazardous materials to promote a healthy and safe physical school environment*, with a goal to increase from 86% to 93% (2010 to 2020), instead fell to 84% in 2014.

**School IPM Practices**
Objective EH-16.4 *Increase the proportion of the Nation’s elementary, middle, and high schools that promote a healthy and safe physical school environment by using spot treatments and baiting rather than widespread application of pesticide*, with a goal to increase from 56% to 64% (2010 to 2020), instead fell to 54% in 2014.

**Schools Inspecting Water Outlets for Lead**
Objective EH-16.7 *Increase the proportion of the Nation’s elementary, middle, and high schools that promote a healthy and safe physical school environment by inspecting drinking water outlets for lead*, with a goal to increase from 56% to 61% (2010 to 2020), instead fell to 46% in 2014. NB. In CDC’s SHPPS 2006 state survey, it reported that 26 states plus the District required local schools to test at the tap for lead. This is inaccurate and an example of how self-reporting may not yield valid results.

To see all HP 2020 Goals and Objectives for Environmental Health, and the data and the methodology for the findings, visit [https://www.healthypeople.gov/2020/topics-objectives/topic/environmental-health/objectives](https://www.healthypeople.gov/2020/topics-objectives/topic/environmental-health/objectives).

Data sources for 2010 and 2014: CDC’s School Health Policies and Practices Surveys (SHPPS) of key informants at the state and local levels. NB: SHPPS key informants may not be well-versed in or charged with the physical environment of schools.
From: http://www.cdc.gov/healthyyouth/wscc/
Children’s Health & the Built Environment

Healthy community design can benefit children in many important ways. At a time when obesity and diabetes are rising among children, when asthma continues to be highly prevalent, and when conditions such as attention deficit disorder may be on the rise, it is crucial to seek, understand, and implement environmental design solutions that might help with these health challenges.

School siting and design are examples of how the built environment can influence children’s health. When new schools are built a long distance from where families live, then children need to be driven to school, depriving them of an opportunity for physical activity, and contributing to air pollution and risk for automobile crashes. On the other hand, if schools are located within walking or biking distance of where people live, and if safe routes to school are provided, then children can make walking or biking a part of their daily lives, establishing healthy habits that can last a lifetime.

Much is now known about designing and building (or renovating) schools in ways that promote children’s health and school performance. Healthy schools provide plenty of light and fresh air, and use building materials that do not pose hazards to children.

Parks and green spaces are another example of the built environment that contributes to the health of children. Research increasingly suggests that children benefit from the opportunity to play outdoors, where they can explore and enjoy natural environments. Planning parks near residential areas — and making sure that the parks include attractive landscaping, well-designed amenities such as playgrounds and sports facilities, and safe routes leading to and from them – is an invaluable strategy of community design that is healthy and nurturing for children.

Selected resources on children’s health and the built environment, suggested by CDC:

The Children’s Environmental Health Network
The Children’s Environmental Health Network is a national multi-disciplinary organization whose missions are to protect the fetus and the child from environmental health hazards and promote a healthy environment.

Healthy Child Healthy World
Healthy Child Healthy World is dedicated to protecting the health and well being of children from harmful environmental exposures. Resources include checklists for healthy indoor air quality and articles on home building materials.

Healthy Schools Network, Inc.
Healthy Schools Network, Inc. is a national not-for-profit organization, centered on children’s environmental health, and dedicated to assuring every child and school employee an environmentally safe and healthy school through research, information and referral, advocacy, and coalition-building.

National Clearinghouse for Educational Facilities (NCEF)
Professional association focusing on school facilities planning. Web site includes information on healthy school design.

U.S Environmental Protection Agency

- EPA - Best Practices for Reducing Near-Road Air Pollution Exposures at Schools
  The report summarizes several strategies that can be used by schools including ventilation, filtration, voluntary building occupant actions, school transportation policies, school siting and site layout decisions, and the use of sound walls and vegetative barriers.

- EPA - Healthy School Environments
  EPAs Healthy School Environments Web pages are a gateway to online resources to help facility managers, school administrators, architects, design engineers, school nurses, parents, teachers, and staff address environmental health issues in schools.

- EPA - Indoor Air Quality (IAQ) Tools for Schools
  EPAs Indoor Air Quality (IAQ) Tools for Schools Web site provides specific information on air quality in schools, including tools and techniques for protecting children’s health.

- EPA - IAQ Design Tools for Schools (DTfS)
  The information available here is presented as a tool to help school districts and facility planners design the next generation of learning environments so that the school facility will help - rather than hinder - schools in achieving their core mission of educating children.

- EPA’s Office of Children’s Health Protection
  EPA’s Office of Children’s Health Protection addresses a variety of children’s health issues, including issues related to healthy community design.

- Safe Routes to School National Partnership
  The Safe Routes to School National Partnership is a network of more than 500 nonprofit organizations, government agencies, schools, and professionals working together to advance the Safe Routes to School (SRTS) movement in the United States. SRTS can provide a variety of important benefits to children and their communities, including increasing physical activity, reducing traffic congestion, improving air quality, and enhancing neighborhood safety.

The aim of U.S. Department of Education Green Ribbon Schools (ED-GRS) is to inspire schools, districts and Institutions of Higher Education (IHEs) to strive for 21st century excellence, by highlighting promising practices and resources that all can employ. To that end, the award recognizes schools, districts, and IHEs that:

1. Reduce environmental impact and costs;
2. Improve the health and wellness of schools, students, and staff; and
3. Provide environmental education, which teaches many disciplines, and is especially good at effectively incorporating STEM, civic skills, and green career pathways.” (US Department of Education)

From: http://www2.ed.gov/programs/green-ribbon-schools/index.html
School Equity Funding Lawsuits in the States:
National Education Access Network, Teachers College, Columbia University

Recognizing that the poorest children often have the poorest schools, many campaigns in the states are challenging state financing of PK-12 education to ensure a more equitable distribution of resources. An equitable distribution of resources is necessary to ensure safe and adequate school facilities for all children. The map and its web link provide a snapshot of the current (2015) status of these court challenges.

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

From the National Education Access Network, Teachers College, Columbia University. © 2015. For more information, see map detail at: http://schoolfunding.info/
Jennie Rodriguez, Carlos Pajaro, Steven Rege, Malea Jefferson and David Dunich, part of a rally at the State House on Wednesday. Some 50 students called on lawmakers to lift the freeze on school construction. The Providence Journal/Kathy Drennan
About Healthy Schools Network

Founded in 1995, the Network is an award-winning 501(c)3 organization that addresses the environmental conditions of our nation’s schools and seeks policy and practice reforms to reduce risks to children’s environmental health. Widely recognized as the leading national voice for children’s environmental health at school, it promotes collaborative research, education, and training opportunities and coordinates activities of the national Coalition for Healthier Schools. As an EPA and CDC partner, its expertise is recognized by Congress, NGOs, university centers, and the media. It has won key federal and state reforms addressing 1-environmental public health services for children at risk or with suspected exposures at school; 2-child-safe policies for housekeeping and purchasing (targeting indoor air pollutants, mercury, pesticides and other toxics, and the use of green and healthy/safer products); and 3-child-safe standards for school siting, design, and construction.

Since its founding, it has worked across agencies and across constituencies to identify and close policy gaps. Its campaigns have resulted in:

**$1.2 billion** in federal funds for school repairs; **$125 million** in a New York State Bond Act that replaced coal-fired boilers in New York City schools.

**National Healthy Schools Day**, an annual event to build public awareness of and support for improving school facilities.

**New federal authorizations for US EPA and the Department of Education** to address school environments and children’s health with new federal guidelines and grants to states; Education issued a first-ever review of the science on how school environments affect children; EPA developed new guidelines and funded five states to implement them in 2012.

The **nation’s first information and referral service for parents** of children at risk or with suspected exposures at school, empowering and encouraging parents and personnel to take constructive actions.

The **National Collaborative on Green Cleaning and Chemical Policy Reform in Schools**; today, **11 states plus the District** require or promote the use of third party certified green cleaning products in schools.

New York State’s **green procurement** initiative, generating savings of $200M.

A local law requiring **all public schools in New York City**, the nation’s single largest PK-12 system, to use green, high performance school design standards for all new construction and major renovations.

The Network serves on multiple federal, state, and NGO advisory groups, including the Childhood Leadership Asthma Coalition, the National Coordinating Committee on School Health and Safety, the New York State Clean, Green and Healthy Schools Initiative, the Collaborative for High Performance Schools, and US EPA’s school indoor environments leadership team. Its work has been recognized by US EPA regionally and federally, CHPS, Green Seal, and the PEHSU’s. See [http://www.healthyschools.org/who_we_are.html](http://www.healthyschools.org/who_we_are.html)

About the Coalition for Healthier Schools

First convened in 2001 and coordinated by the Network, the unincorporated Coalition engages over 150 organizations representing millions of school users and personnel as well as national environment, health, and education groups and state and local advocates. Its collaboratively developed Policy Statement and more information can be found at [http://www.healthyschools.org/coalition.html](http://www.healthyschools.org/coalition.html)