



## Indoor Air Quality Tools for Schools

Indoor Air Quality (IAQ)

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### NEWS AND EVENTS

- **Apply to be a Green Ribbon School.** Gain recognition through [Green Ribbon Schools](#) for promoting a healthy and environmentally friendly learning environment. To be eligible for this award, your state must participate in the program and your school must register and publish the results of at least one “real world” activity in each of the [4 Cornerstones](#). For more information on how to start and publish activities, please see the [How To Videos](#) on the Help Web page. Please note that each state has designated their own deadline for applications (February – March). Please check the [Green Ribbon Schools website](#) for further details.
- **IAQ Grant Applications Now Available.** EPA has issued a Request for Applications (RFA). Eligible entities are invited to submit applications for projects to conduct demonstration, training, education and/or outreach activities to reduce exposure to indoor air contaminants and yield measurable environmental outcomes, primarily in homes and schools. To read the summary and learn more about the rules and eligibility requirements, visit <http://www.epa.gov/air/grants/rfa-epa-oar-oria-12-04.pdf>. The application deadline is April 12, 2012.
- **Attend the Healthy School Environments Across Texas Conference.** Participants will hear from Texas school district representatives and national experts on how to create healthy indoor environments in schools in order to protect student and staff health. This free training will be held April 23–24, 2012, in Garland, Texas. Space is limited. Please [register today](#).
- **Attend the National Association of School Nurses’ 44th Annual Conference.** This conference will summarize the current research and evidence for school nursing practice, and describe ongoing efforts to promote health and prevent disease and disability in the school community. Participants will also have an opportunity to learn about indoor environmental issues, such as asthma management. The conference will be held June 23–26, 2012, in San Francisco, California. [Register today](#).
- **Provide Comments on Draft School Guidelines.** To help support the sustainability of healthy school environments, EPA – with assistance from its federal partners and feedback from stakeholders – developed the K-12 School Environmental Health Program Guidelines for States, Tribes and Territories. These draft guidelines were developed to assist with establishing and implementing environmental health programs in K-12 schools.

**Should we test our school buildings for radon? How do we keep mold from returning once it has been removed?**

Find answers to these and other questions on the Schools IAQ Connector Email Discussion List. Join today by sending a blank email message to [schools\\_iaq\\_connector-subscribe@lists.epa.gov](mailto:schools_iaq_connector-subscribe@lists.epa.gov). Then check your email inbox for confirmation and membership details.

#### Access Past E-Newsletters Online

Can't find a past *IAQ Tools for Schools* Connector e-newsletter in your email inbox? No problem! Visit the [e-newsletter archive](#) on the *IAQ Tools for Schools* website to access printable versions (PDFs) of all past editions.

The public is encouraged to review the draft guidelines and provide comments by April 13, 2012. Please visit the EPA's Office of Children's Health Protection School's website at [www.epa.gov/schools](http://www.epa.gov/schools) to post comments.

## LEARN THE FACTS — CONNECT IAQ AND STUDENT PERFORMANCE AT YOUR SCHOOL

A healthy indoor environment is essential in promoting the [well-being and productivity](#) of students and staff within schools. Scientific evidence has long demonstrated an association between poor IAQ and respiratory health effects. Maintenance issues such as leaky roofs; problems with heating, ventilation and air conditioning systems (HVAC systems); insufficient cleaning or excessive use of cleaning chemicals; and other conditions can trigger a host of health problems, including [asthma](#) and allergies. These health effects can increase absenteeism and reduce academic performance.

Evidence demonstrating the relationship between IAQ and human [performance and productivity](#) has become increasingly robust. Studies demonstrate that improved IAQ increases productivity and improves performance on mental tasks, such as concentration and memory, in both adults and children.

To learn more about the affects of IAQ on student performance and productivity, visit the [IAQ and Student Performance](#) Web page. You can read about the latest scientific evidence demonstrating the relationship between IAQ and key factors that influence student health and performance. Also, download the resources below to get started on securing buy-in from your community. Get the facts and information you need to make the case for developing a comprehensive [IAQ management program](#) at your school.

**IAQ and Student Performance Key Findings**

**How Does Indoor Air Quality Impact Student Health and Academic Performance?**  
The Case for Comprehensive IAQ Management in Schools

**All Children Deserve a Healthy Learning Environment**  
Children are inherently more vulnerable to environmental hazards because their bodies are still developing. Substandard environmental conditions in schools, such as insufficient cleaning or maintenance, mold, and air quality, can cause various health problems for children. Evidence continues to mount demonstrating that indoor air quality, or IAQ, directly impacts student academic performance and health. "IAQ refers to those characteristics of the air in indoor environments that impact the occupant's health, comfort and ability to perform. Taking steps to improve the IAQ of schools is critical to ensuring student health and academic performance."

**Supporting Evidence from Scientific Literature**  
Managing Your School Environment Can Improve Academic Performance. "A national demonstration program is a combination of academic performance and IAQ. We're going to begin to test health and achievement rates under the maintenance budget as well as an expense that we can see without affecting our academic program much. However, the findings demonstrate effectively, with actual data, that the health, comfort and academic performance improves with decreased moldiness." "Improvements in schools with better IAQ conditions show improved academic performance while schools with more polluted and poor IAQ and higher maintenance budgets show poorer academic performance."

**Building the Case**  
**The Evidence Exists**  
Scientific evidence has long demonstrated an association between poor IAQ and respiratory health effects, including asthma. Asthma rates in schools, such as insufficient cleaning or excessive use of cleaning chemicals, have been linked to higher asthma and allergies. According to the Centers for Disease Control and Prevention, or CDC, asthma is one of the leading causes of school absenteeism. "Multiple studies have found that children's overall performance decreases with increases in asthma from school."

**The Evidence is Mounting**  
Evidence demonstrating the relationship between IAQ and student performance and productivity has become more robust. Studies demonstrate that improved IAQ increases productivity and improves the performance of mental tasks, such as improved concentration and recall in both adults and children.

*(For action steps, continue onto the next page.)*

Indoor Air Quality (IAQ)

**Presentation: How Does Indoor Air Quality Impact Student Health and Academic Performance?**

**How Does Indoor Air Quality Impact Student Health and Academic Performance?**

**Building the Case for Comprehensive IAQ Management in Schools**

Indoor Air Quality (IAQ)

## IMPROVING STUDENT PERFORMANCE — RESULTS FROM SUCCESSFUL SCHOOL DISTRICTS

Adverse health symptoms and discomfort caused by poor indoor environments can lead to an increase in absenteeism among students and staff, translating into lower performances in the classroom. Given this impact, there is good news: you can play a role in promoting student success!

Ensuring student success starts from the ground up. Whether you are a [teacher](#), [maintenance and facilities staff member](#), [school official](#), [nurse](#), or [parent](#), you can take action to promote a safe and healthy learning environment for your students.

You can be part of the solution. Join in the efforts at your school by assisting with implementing a comprehensive IAQ management program. You can help create a school environment that helps students reach their full potential. Read firsthand success stories from school districts that have taken action to improve IAQ in their schools!

*“In 2005, we created a new strategic plan for our district. Every year since then, the academic performance of our students has steadily increased, thanks in part to our commitment to creating and maintaining exceptional learning environments for student success. Great IAQ was absolutely essential to that improved performance.”*

— **Dave Hill, AICP, REFP, Executive Director of Facilities and Operations, Blue Valley School District, Kansas**

*“IAQ management was never a question, it was an answer. It supports the health of our students, so they can attend school and meet their full potential. It also supports the health of our staff, without whom educating students is impossible.”*

— **Richard Middleton, Retired Superintendent, North East Independent School District, Texas**

Learn more about how successful school districts from across the country have overcome barriers such as location, size, budget and facility conditions to launch and develop accomplished programs. Visit the [Case Studies](#) Web page to read snapshots of school districts that have successfully implemented the *IAQ Tools for Schools* guidance.

## GET ANSWERS TO YOUR QUESTIONS

Is there a topic you want to see covered in an *IAQ Tools for Schools* Connector e-newsletter? Do you have suggestions for a webinar or e-newsletter feature, or do you have a questions about a specific IAQ topic? If so, send us an email at [IAQTfSConnector@cadmusgroup.com](mailto:IAQTfSConnector@cadmusgroup.com).

**Share YOUR news and events!** Send us information to share with the school IAQ community. It could be featured in the next Connector e-newsletter. Email your news to [IAQTfSConnector@cadmusgroup.com](mailto:IAQTfSConnector@cadmusgroup.com).

The *IAQ Tools for Schools* guidance is a comprehensive resource designed to help schools maintain a healthy environment in school buildings by identifying, correcting and preventing IAQ problems. Learn more about the *IAQ Tools for Schools* guidance at [www.epa.gov/iaq/schools](http://www.epa.gov/iaq/schools).