

Take a Deep Breath and Thank Your Custodian

Develop a Local Association IAQ Action Plan



This publication is a cooperative effort of the National Education Association's (NEA) Education Support Professional (ESP) Quality Division and the Health Information Network. The NEA is the nation's largest professional employee organization, representing 2.7 million education employees in public schools and institutions of higher education.

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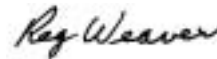
NEA Health Information Network & Carpet and Rug Institute.

Message from the NEA President

As we work to create great public schools for every child, we must assist parents, school staff, and the public in recognizing the impact of the physical environment on both teaching and learning. The National Education Association believes that every child should be able to attend a school that is conducive to good teaching and learning. In part, that means a building with good indoor air quality, one that is smoke-free and safe from environmental and chemical hazards.

School districts across the nation are becoming more aware of the importance of indoor air quality and its effects on student achievement and staff performance as well as everyone's health. Research has linked poor indoor air quality to student inattentiveness and distraction, in addition to a wide range of serious, adverse health conditions such as asthma. Addressing air quality issues is not always a simple or straightforward task. When ignored, this issue can result in school closings, temporary relocations, and even liability.

While the indoor environment of schools is everyone's responsibility, many look to education support professionals — most especially custodial and maintenance staff — as the guardians of the indoor environment. We must insure that these individuals receive the training and the resources necessary to address this important issue. Not to do so could have a negative impact on the health and safety of our children and school staff.



Reg Weaver, NEA president

Introduction

The focus of public school districts and higher education institutions is to develop, set, and implement goals that will create a successful education environment for the students, and more broadly, the communities they serve. The success of the education environment is measured by enhanced student achievement that can only be accomplished through the combined work of every school employee.

A school district's mission and goals could not be accomplished without the work and dedication of education support professionals (ESP). Success of the education environment is intrinsically linked to the daily activity and accomplishments of ESPs in every job category.

Public school custodians are the **guardians of the school building environment**. Maintaining the quality of the indoor environment is a daunting task, and given all of the circumstances that exist within the school building, custodians continuously manage to achieve optimum results for the students, staff, and the community.

Poor indoor air quality (IAQ) affects everyone in the environment: students, staff, and visitors alike. In 1999, the National Center for Education Statistics reported that approximately one in five United States' public schools had unsatisfactory IAQ¹. Exposure to poor IAQ may result in decreased comfort, concentration, performance, and an increase in health problems for all school occupants. The effects of the indoor environment on students are of particular concern. In addition to illness, and decreased performance and concentration, students exposed to poor IAQ miss approximately 14 million days of school each year due to asthma², and score 11 percent lower on standardized tests than those students attending schools in good condition³.

The goal of this guide is to help NEA state and local affiliates create local association IAQ action plans and to provide custodial staff with the tools, tips and resources that will help them improve and maintain a quality indoor environment.



Organizing Around the Issue: Local Association IAQ Action Plans

AN NEA LOCAL ASSOCIATION IAQ ACTION PLAN CAN ASSIST IN CREATING A POSITIVE, PRO-ACTIVE APPROACH TO MAINTAINING GOOD INDOOR AIR QUALITY. At the center of this action plan are local association members, in particular public school custodians. As guardians of the indoor environment, custodians must be well-trained, skilled, and professional in order to create a quality environment, prevent accidents, recognize warning signs, trouble-shoot emergencies, and have complete facility operation awareness.

This section is designed to provide custodians and local associations with guidance on how to create a practical IAQ action plan.

Flip this guide over to get IAQ-friendly tips and tools you can use in your school!

IMPORTANT TIP

NEA has been a co-sponsor of the U.S. Environmental Protection Agency's *IAQ Tools for Schools (TfS)* Program and Kit since its creation in the mid-1990's. This voluntary program provides guidance on how to identify, prevent and solve many school IAQ problems. It contains a wealth of background information as well as step-by-step instructions on how to develop an IAQ management plan to meet your school's needs and objectives. We recommend that you use *IAQ TfS* in conjunction with this guide and as you develop your local association IAQ action plan.

Pro-active vs. Re-active

In too many IAQ cases the timing, amount of attention, and remedies proposed are based on a re-action to a discovered problem.

Too often these problems have existed for extended periods of time. Custodian calls for action have too often fallen on deaf ears, until a major “health situation” explodes — resulting in negative publicity for the school and school district. When IAQ crises result from lack of planning, repairs and remedies are more expensive and more time-consuming than they would otherwise be had on going monitoring and preventative maintenance occurred. Pro-Active Local Association Action Planning, Attention and Commitment is a more comprehensive and effective approach to maintaining good air quality in schools.

Need For Training

Custodial and maintenance professionals have a challenging profession that is becoming increasingly complex. Shifts and changes in community environments expand the scope of responsibilities for the custodial workforce in public schools.

Unfortunately, many school districts continue to ignore the many concerns and problems custodians are faced with on a daily basis. In too many districts, custodians are still orienting and training themselves on the job with little or no assistance from the administration. Knowledge of specific environmental hazards, hazard identification, certification, cost evaluation, emergency plan implementation,

and resource availability are only a few areas of training needed.

Ensuring IAQ Is An Association's Priority

In order to achieve optimum success, the local association IAQ action plan must be developed to ensure that issues are carefully prioritized before they are presented to the administration or school board. Prior to meeting with the administration and school board, the local association must gather, study, and evaluate key information and data.

Getting attention from the “top” is usually easy in a “crisis.” But effective and valuable preventative maintenance requires ongoing attention and resources. While this entails careful assessment and informed action planning, the end result will positively impact the indoor environment for students, staff, and the community.



“Custodians must be well-trained, skilled, and professional in order to create a quality environment, prevent accidents, recognize warning signs, troubleshoot emergencies, and have complete facility operation awareness.”

IMPORTANT TIP

In order to successfully develop and implement a local association IAQ action plan, individual members are always the beginning of the **Circle of Organizing!**

Six Steps to IAQ Full Circle Organizing

IAQ is a component of everyday existence that affects absolutely everyone in the work environment. The particular emphasis by administrations and school boards is appropriately directed at first to student health and safety. However, it is the position of this guide that the health and safety of NEA members is just as important given that students and staff share the same environment.

1. Individual Member Impact

For the individual member, the quality of indoor air in the work environment affects every aspect of his or her health and safety, both short-term and long-term. The individual member is first impacted regarding health benefits, vacation/sick days, salary, disability, workers compensation, job seniority, grievance adjudication, contract enforcement, job security and more. Recognizing individual member impact is crucial because IAQ is one of the few issues that is comprehensively relevant to all terms and conditions of employment.

2. Local Initiative

The next step for the local association is to recognize the impact IAQ has on the **local association position**. How does IAQ relate to the local function of bargaining, (whether a bargaining state or a non-bargaining state) and other local member representation? The association has a long history of addressing member concerns as they relate to issues such as the ones mentioned above, but now associations are beginning to tackle IAQ with the same fervor.



3. Local Association Health & Safety or IAQ Committee

Under the creation and control of the local association, a health and safety or IAQ committee should be formed to develop and then implement the IAQ local association action plan. The local should strive to create a broad-based committee and to include all categories of job membership. It should also be designed to include at least one member from every physical building and work location. The committee will become responsible for communicating to and educating all members and the school district administration about the local association IAQ action plan.

4. Administration Involvement & Action

Any successful IAQ initiative must eventually be a shared agenda between the local association and the administration. Once the local association develops the action plan, the administration should be approached. If successful, both entities would determine who would be the joint IAQ team coordinators and agree on next steps, procedures, and the activities necessary for implementing an ongoing IAQ management plan.

IMPORTANT TIP

Importance of coalition building — involve parents and the community when seeking action from the school district. Communicate with them, to them, and through them whenever possible.

5. Community Involvement & Action

The school district community should also be approached and involved in the activities and progression of the IAQ action plan because it is grounded in more than just the health and welfare of students. It also has sway over taxes, budgeting, funding, resources, level of interest, bargaining and contract enforcement, election of friends of education to local school boards, and impetus for an ongoing, funded and viable IAQ program.

6. Individual Member Impact

We have closed the circle of activity, completing one full cycle of **Full Circle Organizing!**

Seven Steps to Create an NEA Local Association IAQ Action Plan

- Educate members of the governance body and other interested individuals on relevant training materials available from local and state affiliates, UniServ staff, and NEA.
- Create, appoint or elect a local association health and safety committee.
- Establish timelines and a calendar of meetings to begin the data gathering process, formulate member meetings, appoint and charge sub-committees, and to approach the administration and community.
- Plan and implement activities as they relate to individual committee member jobs, sub-committee tasks, and the administration and community approach.
- Formulate an association message that is focused and consistent.
- Approach the administration and school board with the action plan and message.
- Reach out to the community.

FACT: The health and welfare of students and members should never be compromised.

Citations

1. EPA. *Indoor Air Quality Tools for Schools Program: Benefits of Improving Air Quality in the School Environment*. 02/03 pg. 1
2. EPA. *Managing Asthma in the School Environment: the Asthma Epidemic*. 2003. www.epa.gov/iaq/schools/asthma/asthma_epidemic.htm
3. U.S. Department of Education National Center for Education Statistics. 2002. *The Forum Voice*, 5 (1). www.nces.ed.gov/forum/voice.asp#1

Resources

NEA — www.nea.org or (202) 833-4000

NEA ESP Quality

- www.nea.org/esphome/ or (202) 822-7131
- Custodians: Building a Quality Workforce www.nea.org/esp/jobs/custqual_intro.htm
- An Action Guide to Help You in Your Professional Development www.nea.org/esphome/issues/espaction.html

NEA Health Information Network

www.neahin.org or (202) 822-7570

U.S. EPA

- IAQ Tools for Schools Program www.epa.gov/iaq/schools
- IAQ Tools for Schools Technical Assistance Hotline, (866) 837-3721 or email at tfs_help@epa.gov
- IAQ Tools for Schools Communications Guide, www.epa.gov/iaq/schools/images/communication_guide.pdf

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Tips and Tools for Improving IAQ in Schools



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Message from an IAQ Expert

Maintaining a healthy school environment is a necessary and essential educational investment. Studies over the past years have shown a clear link between the environmental quality of schools and educational performance. Unfortunately, many school facilities throughout the United States have environmental problems caused by water intrusion, broken heating, ventilation, and air conditioning systems, and ineffective or non-existent cleaning programs.

For school environments to be healthy there must be a serious, if not passionate desire, accompanied with positive action, to keep the environment healthy or restore priority schools to a constant healthy state.

Custodial and maintenance staff and facility managers play a critical role in this process so they must have access to the necessary information, tools, techniques, and management systems to achieve healthy conditions.

The best available cleaning technology, supplies, and professional development should be provided to school custodians. With effective cleaning equipment and an organized cleaning program that emphasizes the correct use of equipment as well as the importance of extraction, exposure to particles, biopollutants, and volatile organic compounds can be greatly reduced.

A school cleaning program that emphasizes "clean and dry" will provide for healthy indoor air quality, but more importantly, it will provide for an environment where all members of the school community can perform at their best.

Michael A. Berry, PhD

Michael Berry is a research professor at the University of North Carolina at Chapel Hill where he teaches environmental science and management. His research is currently focused on school and health care environments. Dr. Berry retired from the U.S. Environmental Protection Agency, where, among other assignments, he directed indoor air research.

Introduction

There's mold growing on ceiling tiles in a classroom. It looks nasty and has a musty odor. You locate the problem — it's a leaky pipe. You fix the leak and replace the tiles. But more important, you remove a potential health threat. As mold grows, it releases thousands of microscopic spores into the air. When inhaled, these spores can cause some people to suffer allergic reactions or others to become sensitized to the spores, and, according to the U.S. Environmental Protection Agency (EPA), they can aggravate asthma and cause other adverse health effects.

Healthy indoor air in a public school building is the business of everyone. But custodians are the front line guardians and managers of the school environment. This section provides the tools, tips, and resources to help you protect and improve the indoor environment in your school. You can share this information with fellow co-workers, teachers, and school administrators.



Clean for Health First, Then for Appearance

MOLD, DUST AND GASEOUS CHEMICAL COMPOUNDS OFTEN CALLED VOLATILE ORGANIC COMPOUNDS (VOCs) ARE SOME OF THE THINGS THAT CONTRIBUTE TO POOR AIR QUALITY. Also, they potentially can adversely affect the health and well being of the students and staff in your school. By focusing on ways to keep these pollutants out of the air, you will contribute to a healthier and cleaner school environment and enhance the teaching and learning process. Here are some simple, but important, tips on how you can help keep your school clean and healthy.

Flip this guide over to learn how your local association can develop an IAQ action plan!

IMPORTANT TIP

Serious mold and fungal contamination may require clean up by those professionally trained and experienced in mold remediation. Professional remediators should follow guidelines outlined by government environmental protection or health agencies, or the American Council for Governmental Industrial Hygienists (ACGIH). To determine the extent of mold contamination and to determine if you need the help of an outside mold expert, check the EPA's guide to mold remediation,* as well as the Minnesota Department of Health's Website.*

*See Resources on page 15 for both Website listings.

“Clean and Dry” is the Key to Preventing Mold

Mold spores can be found almost anywhere and can grow on almost any wet substance containing an organic nutrient. For mold to grow, it needs water, oxygen, a warm temperature and something that contains carbon to feed on, such as dirt, wood, or paper. Left unresolved, leaks and spills, heavy condensation, and localized flooding — especially when followed by prolonged high humidity — can lead to extensive mold growth. Now, imagine yourself as a moisture detective. You can do a great deal to spot and control water damage or intrusion before mold problems occur.

Signs of Excess Moisture

- **Discolored or stained walls, ceilings, or floors.** This may indicate a leak, water intrusion, or a prolonged moisture problem in the roof, flooring, or side of the building. Report these to your facility manager or school administrator as soon as possible and make sure there is an effective follow-up.
- **Standing water in refrigerator or air conditioner drip pans, or under plumbing.** This often indicates faulty equipment, lack of maintenance, or a plumbing leak, which provides an unhealthy reservoir for microorganisms. Empty and clean drip pans regularly and make sure the drain lines are clear and flowing properly. Repair plumbing leaks promptly.



- **Water droplets or signs of uncontrolled moisture on duct interiors near humidifiers, cooling coils, and outdoor air intakes.** This could be the result of faulty ventilation system design, or ineffective operation or maintenance programs. Find the cause of moisture and make necessary repairs.
- **Condensation forming around windows, pipes, or indoor surfaces of exterior walls.** This is a sign that the moisture levels of the space are too high or that surface temperatures are too cold. Notify your facility manager or administrator that these areas may need better ventilation, additional insulation, or improved dehumidification.
- **High humidity in locker rooms, bathrooms, kitchens, and boiler rooms.** This could indicate inadequate ventilation. Add exhaust fans or increase the fans' operating schedule to ensure that these high moisture areas are well ventilated.

IMPORTANT TIP

Check for mold odors. A pungent, musty, mildew-like odor is often the first indication that growing mold (visible or hidden) is present.

FACT: High humidity can support the growth of mold once it has begun. Keep indoor humidity under 60 percent, and ideally for human comfort, between 30 and 50 percent.

In Cases of Excess Moisture

- Identify moisture source and make necessary repairs.
- Clean up any spills or pools of water as soon as possible.
- Clean and dry out wet building materials and furnishings within 24-48 hours. If completely soaked, materials such as ceiling tiles, wallboard, or insulation often need to be thrown away.
- Make sure areas are well ventilated after restorative cleaning of carpets or damp mopping of floors by opening windows, doors, and using exhaust fans. Be careful not to over wet or soak carpet with liquid cleaning or rinse solutions so that the carpet can quickly dry and be back in service in just a few hours.

Effective Methods for Cleaning Up Mold

Training materials for safe removal of mold are available from federal or state environmental protection and health agencies. Depending on the extent of mold growth and where indicated by guidelines, you may need to establish mold spore containment areas. When investigating or cleaning up mold — wear protective equipment, including gloves, goggles, and a mask or respirator. Clean up mold on hard surfaces with detergent and water and dry completely. Remove and discard any porous materials that have been significantly damaged by mold. It is very difficult to remove mold from wood, sheetrock, ceiling tiles, and paper products.

Clearing the Air — Reduce Dust and Allergens

Besides mold, there are many other sources of indoor air pollution, including dust and allergens such as pollen, cockroaches, and animal dander. Two good practices for cleaner air are reducing the amount of dust, dirt, and pollutants that enter the school and reducing the amount of dust that leaves vacuum bags and dust mops. An EPA-sponsored study found that an organized and effective cleaning program can reduce air pollutants by as much as 50 percent or more ^(1,2). The following are recommended methods for dust control.

- **Entryway tiles, carpet or mat systems at all school entrances** are an effective way to ensure that dirt and moisture from footsteps are removed before the school interior is reached. The entryway system should be at least 15 feet long and as wide as the entry doors. On average 80 percent of dirt on shoe soles is removed after the first five to six steps on a walk-off product. Two types of products may be needed depending on conditions: those designed to remove and trap gritty soil and those intended to absorb water during wet weather. Entryway products should be vacuumed daily, using a beater brush or beater bar vacuum and strong suction, and should be vacuumed in both directions.
- **Vacuuming carpet or damp-mopping resilient floor coverings** removes much more dust than sweeping. Recommended vacuum cleaners have microfiltration bags that can

FACT: The International Sanitary Supply Association reports that most of the dirt within a building is tracked in on people's shoes, and that 80 percent of this can be removed if entry mats are properly designed and maintained ⁽³⁾.

IMPORTANT TIP

For cleaning up stains, avoid spot cleaners with high levels of VOCs.



remove and capture dust and particles down to the one-to-three micron range, such as those that have the Carpet and Rug Institute (CRI) “green label.” Traditional cloth bags without paper inserts allow large amounts of dust to pass through the vacuum and back into the air.

- **Dusting with a damp, folded cloth or cloth-covered feather duster** keeps more dust from being swept back into the air. Also, a wiping motion, rather than a flicking motion, helps dust stay on the cloth. The cleaning objective is to contain the dust and remove it from the building envelope, not to simply displace it indoors. Cloths should be changed often.
- **Areas surrounding heating, cooling, and ventilation air returns and supply grills should be vacuumed frequently.** It’s also important to keep ceiling and wall surfaces adjacent to grills free from dust and debris.

IMPORTANT TIP

Damp cloths are an effective and simple way to collect chalk dust.

Carpet in Schools

Schools choose carpet because it helps cut down on noise, reduces light glare, cushions slips and falls, and extends the learning environment past the traditional tables, chairs, and desks. Other resilient floor coverings such as vinyl composite tile and linoleum are also used in schools, often in high traffic areas where noise is not a factor.

Carpet can act as a trap for dirt, dust, and other particles that fall to the ground. With proper and frequent vacuuming, these pollutants are then removed from the indoor environment before they become airborne or are tracked to other regions of the building. However, when carpets and other floorings are not cleaned and maintained properly, pollutants build up and get recirculated back into the air.

The Carpet and Rug Institute suggests the following carpet cleaning schedule:

- **Vacuum after each school day:** heavy traffic areas, including entrances, corridors, student break areas, classrooms, congested areas, and main passageways.
- **Vacuum every other day:** light to medium-traffic areas, including conference rooms, administrative offices, auditoriums, media centers, break areas, limited access areas, and classrooms with limited use.

CRI also recommends scheduled frequent deep cleaning to assist in the removal of residues and trapped soils. Provide for good ventilation as part of the cleaning process. Make sure doors are open and air is circulating for rapid drying. Allow six to eight hours after cleaning to ensure that the carpet is completely dry.

IMPORTANT TIP

After new carpet installation, increase ventilation for 48 to 72 hours to allow the off gassing of VOCs. To ensure low emitting VOCs, select carpet that has been tested by the CRI “green label” program.

Dealing with Other Sources of Air Pollution

Some indoor pollutants are more dangerous than others. Custodians should be especially careful when it comes to lead-based paint and asbestos that are often found in older school buildings. Also posing a threat are hazardous ingredients found in maintenance supplies such as paints, pesticides, cleaning products, and paint strippers.

When dealing with these hazards, custodians need to protect themselves as well as others in the building. Here are some tips on how to safely use and handle these potential pollutants.

Lead Paint

Old lead-based paint is the most significant source of lead exposure in our country today. This paint can be found on window frames, doors, or on the interior or exterior walls of buildings built before 1978. Disturbing or improperly removing lead-based paint can generate lead dust, which when inhaled or ingested poses a serious health risk. Harmful lead exposures are also created when lead-based paint begins to flake or chip off due to old age or water damage.

- Leave lead-based paint undisturbed if it is in good condition.
- Do not sand, scrape, or burn off paint that may contain lead.
- Keep surfaces clean and as dust free as possible to reduce exposure to lead.

For additional information on lead hazards and prevention contact the National Lead Information Center at (800) 424-LEAD.

FACT: Chipping or flaking paint may be a sign of old paint, which may contain lead. Also, painted surfaces that bump or rub together, such as windows, can create lead-contaminated dust.



Asbestos

Asbestos is most commonly found in older buildings, in pipe and furnace insulation materials, asbestos shingles, textured paints and other coating materials, and floor tiles. However, as the EPA emphasizes, the mere presence of fully contained or encapsulated asbestos in a school is not usually a health threat.

The problem arises when materials containing asbestos are disturbed and asbestos fibers break loose into the air and are inhaled deep into the lungs. While there are no immediate symptoms to asbestos exposure, there are long-term health risks.

- Asbestos materials that are intact and are in good condition should be left alone. Prevent asbestos-containing materials from being damaged, disturbed, or touched.
- Do not cut, rip, or sand asbestos-containing materials.
- Removal is not often the best course of action in reducing asbestos exposure.

IMPORTANT TIP

If you suspect or identify asbestos or lead paint in your school, immediately report the problem to your supervisor. Asbestos and lead paint should be removed by certified professionals, under very planned and controlled circumstances.

FACT: EPA only requires removal of asbestos-containing materials in order to prevent significant public exposure during demolition or renovation activities.

Consider the option of having asbestos materials encapsulated instead of having them removed.

For additional information and technical assistance on asbestos in public schools contact EPA's Asbestos Ombudsman Clearinghouse at (800) 368-5888.

Hazardous Chemicals

Custodians, in their daily routine, handle products that contain toxic ingredients and volatile organic compounds (VOCs). Under the Worker Right To Know law, school districts are required to provide custodians' access to the material safety data sheet (MSDS) of all products they may be exposed to when working⁽⁴⁾. The MSDS lists such important information as hazardous ingredients, physical and chemical characteristics, health effects, and instructions on safe handling and proper use. MSDSs should be kept in a central location and referred to each time a product is used. If you have any questions, call the chemical supplier's customer service desk. Here are some other tips on handling potentially hazardous products:

- Be sure that all products are labeled properly and that label instructions are carefully followed. Pay close attention to instructions on proper usage, dilution, and storage. Never store or use a substance in an unmarked container. Always have a MSDS for any liquid or chemical substance used in a school.
- Work with your facility manager, school administrator, and/or local Association to reduce the use of toxic chemical products.

FACT: In addition to providing access to MSDSs, school districts are required to ensure that all cleaning and maintenance products are properly labeled, that special training for all employees who might be exposed to hazardous products is provided, and that a hazardous response plan is in place for dealing with chemical spills and accidents.

Certain cleaning agents can be replaced with "environmentally preferable" water-based solutions.

- To prevent chemical off-gassing, be sure that product lids are tightly secured when not in use. Chemicals should be stored in a safe, secure location equipped with an appropriate or separate ventilation system.
- Increase ventilation when using hazardous materials. Try to apply when the school is unoccupied. Be sure to wear the recommended protective equipment such as goggles, respirators, and aprons.

FACT: The Asbestos Hazard Emergency Act (AHERA) requires that all schools with asbestos materials have a management plan. Parents, guardians, and all school personnel must be notified of the plan once a year.

What You Should Know about Disinfectants

Disinfectants, which are used in schools to kill harmful microbes such as bacteria, viruses, or fungi, often contain toxic chemicals. By law, all disinfectants are registered with EPA. Usage instructions are a part of the registration label and should be followed precisely to ensure safe use of the product.

Safe use practices include the following:

- Clean the area before disinfecting. Most disinfectants require surfaces be pre-cleaned until they are free of dirt, grease, oil, and organic substances such as blood.
- As specified by their registration, use only those cleaning products that are designed and tested to sanitize desktops, tables, lunch counters, lavatories, water fountains, light switches, keyboards, and phones daily. Change mop heads and sponges daily.
- Dilute products according to manufacturer recommendations and registration label instructions. Using disinfectants at full strength is often unnecessary and is sometimes in violation of product use and registration requirements.

Citations

1. Berry, Michael. *Educational Performance, Environmental Management, and Cleaning Effectiveness in School Environments*. www.carpet-rug.org (in the “Studies” section).
2. Franke, Deborah L., et. al. 1977. *Cleaning for Improved Indoor Air Quality: An Initial Assessment of Effectiveness, Indoor Air*; The International Society of Indoor Air Quality and Climate.
3. International Sanitary Supply Association: *Mats, Mats and More Mats*. www.issa.com
4. Occupational Safety and Health Administration (OSHA) *Hazard Communication Standard*, 29 CFR 1910.1200. www.osha.gov/SLTC/hazardcommunications/index.html

Resources

NEA Health Information Network
www.neahin.org or (800) 718-8387

NEA — www.nea.org or (202) 833-4000

NEA ESP Quality

- www.nea.org/esphome/ or (202) 822-7131

U.S. EPA

- IAQ Info Clearinghouse
(800) 438-4318 or e-mail at iaqinfo@aol.com
- Mold Remediation in Schools and Commercial Buildings
www.epa.gov/iaq/molds/mold_remediation.html
- IAQ Design Tools for Schools
www.epa.gov/iaq/schooldesign
- IAQ Tools for Schools Program
www.epa.gov/iaq/schools
- IAQ Tools for Schools Technical Assistance Hotline, (866) 837-3721 or email at tfs_help@epa.gov
- IAQ Tools for Schools Communications Guide,
www.epa.gov/iaq/schools/images/communication_guide.pdf

MDH Recommended Best Practices for Mold Investigation in Minnesota Schools. St. Paul, Minnesota, Minnesota Department of Health.
www.health.state.mn.us/divs/eh/indoorair/schools/

American Lung Association
www.lungusa.org/air/

Carpet and Rug Institute
www.carpet-schools.org