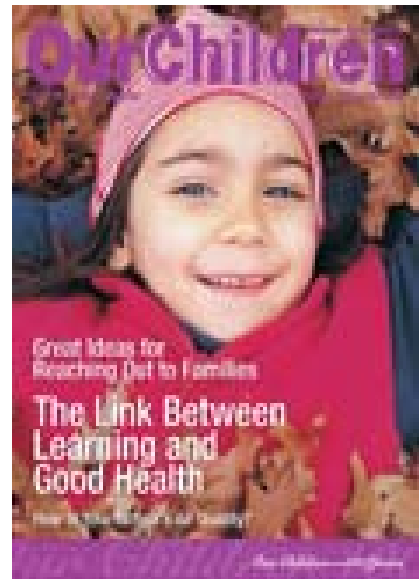


Our Children is 100 Years Old!

Clearing the Air in Schools

By Ellie Goldberg



Ten years ago in Howard County, Maryland, environmental problems at an elementary school were making children sick. Built in 1976, during the energy crisis, the school was windowless. The ventilation equipment brought in minimal fresh air. As in many schools, workers routinely performed maintenance and renovation work, and also applied pesticides indoors and out, exposing students to odors, gases, fumes, chemical vapors, and residues.

Then, previously healthy children began missing a lot of school. Children developed asthma, headaches, stomachaches, bloody noses, dizziness, difficulty concentrating, rashes, frequent urination, and breathing difficulties. Some children even required hospitalization. One family found that many of these symptoms cleared up on weekends and during vacations, but returned when the children were back in school. Ultimately, the family's physician ordered that the children be removed from their school for their own protection.

In an effort to figure out how best to correct the unhealthy school building conditions and facility management practices, the family worked with other families, the school, the PTA council, and the state PTA to create a districtwide facility audit and management plan, and to develop a statewide school pest and pesticide control law, one of the first such laws in the country.

To the relief of many parents, in January of 2005, the Howard County Public School System decided to build a new \$26.7 million school. It was more cost-effective to build a new building than to correct the multiple problems in the existing building.

The effects of poor indoor air quality

Government reports have documented that millions of students attend schools that have inadequate ventilation systems, poor indoor air quality, and extensive safety code violations. School air quality problems can range from the mildly irritating to the seriously debilitating. A typical situation involves a leaky roof, wet carpeting, lack of fresh air, and poor humidity control, which together produce molds that can cause asthma and allergy symptoms, as well as headaches, nausea, and other flu-like symptoms. Unfortunately, complaints about stuffiness, foul odors, or extreme temperatures are too often ignored, and symptoms are often dismissed as being caused by stress or "whatever is going around."

While a few sensitive people may be the first to get sick from mold, paint fumes, or strong-smelling cleaning solutions, everyone in the school suffers from health hazards such as solvents, cigarette smoke, and high levels of carbon dioxide. These environmental hazards can cause coughing; sore throats; breathing difficulties; stomachaches; headaches; red, itchy eyes; rashes; chronic ear or sinus infections; fatigue; frequent colds; and even changes in body temperature and heart rate. Poor indoor air quality contributes to absenteeism, learning difficulties, poor performance on tests, staff turnover, and greater liability for school districts.

What parents can do

Keep good records. Experts say that careful reports regarding the time, location, and pattern of symptoms can be more helpful than air quality sampling tests in pinpointing the conditions and contaminants that are causing health problems. Therefore, keep track of your child's vital signs. If your child has asthma, log his or her peak flow rate trends at home and at school (flow rate measures how well air is blown out of the lungs).



Work together. Parents and school officials need to work together to document problem conditions, share expert resources, and educate everyone about the benefits of taking immediate corrective action. In doing so, they can help the school community understand that ignoring maintenance needs and complaints of illness allows conditions to worsen and can lead to lifelong illness and disability. They can also promote awareness that good air quality prevents building deterioration and saves money.

In Howard County, Maryland, the PTA council established a health and environmental issues committee to address parents' concerns about their children's health and safety. The PTA then worked with school officials to develop a school environment team (SET) program based on the Environmental Protection Agency's Indoor Air Quality Tools for Schools Program and recommendations from the Maryland State Department of Education. (Many state departments of education, as well as national organizations and advocacy groups, provide standards and guidelines to assist parents and school officials in evaluating and improving school facilities. Some of those resources are listed in the box to the right.)

Howard County's SET program is a school-based, proactive, voluntary program designed to monitor environmental factors that affect health and safety. It also educates children, teachers, and other school staff about indoor air quality. An essential element of the program is a building walk-through intended to increase awareness of school conditions and promote good communication between those working in and those responsible for maintaining the school buildings.

Parents also need to develop a partnership with the school nurse, whose role it is to document student health needs, plan necessary services, and ensure that necessary precautions and standards are in place.

Speak up. Don't ask your children to tolerate the toxic vapors from solvents that are improperly used or stored, the sickening fumes from roofing work or painting projects, or dust and debris from renovation. Instead, attend school board and town meetings and let administrators and officials know that safe and healthy schools are a high priority.

Encourage your children to tell you, their teachers, and the school nurse when they feel drowsy, have headaches, or experience difficulty breathing. Promptly notify the school

principal or school nurse of health problems so school officials are aware of patterns. Also let your physician know about any symptoms your children exhibit, and keep medical records up-to-date.

Put it in writing. Are fumes from building repair projects, art and science projects, copying equipment, and the auto shop vented properly? Are water leaks promptly repaired? Write letters to the principal, superintendent, school board, and health department to ask for information and to report problems. Your initiative in informing these parties of problems gives them an opportunity to address problems before they become crises.

Get involved. Join a state or national coalition that is working to share expert guidelines and to develop legislation designed to improve school indoor air quality.

As the family in Howard County discovered, protecting the health of children and school staff requires that parents educate themselves and collaborate with other parents, the PTA, and the school staff. When all these groups work together to create healthy schools, everyone performs better and breathes more easily.

Mold Alert

Molds can cause a variety of illnesses, including allergic reactions, asthma, infections in the lungs, and Legionnaires' disease. An extremely toxic mold, *Stachybotrys chartarum*, can cause rashes, cough, congestion, and neurological damage. This type of mold can occur in buildings that have water damage, wet wallboard, standing water, or damp conditions. The potential of exposure to dangerous types of mold is one reason people-especially children-should avoid entering schools, homes, or other buildings that are contaminated by mold, particularly buildings damaged by hurricanes, floods, or other storm-related events. People doing mold remediation and other recovery and rebuilding work in contaminated areas need special training and protective equipment.

Resources on School Environmental Health

- American Lung Association, www.lungusa.org
- Asthma and Allergy Foundation of America, www.aafa.org
- Beyond Pesticides, www.beyondpesticides.org
- Center for Health, Environment, and Justice, www.chej.org
- Environmental Protection Agency (EPA), Healthy School Environments Assessment Tool (HealthySEAT), www.epa.gov/schools/healthyseat
- EPA, Indoor Air Quality Tools for Schools Kit (cosponsored by PTA), www.epa.gov/iaq/schools/toolkit.html
- Healthy Schools Campaign, www.healthyschoolscampaign.org
- Healthy Schools Network, www.healthyschools.org
- National Clearinghouse for Educational Facilities, www.edfacilities.org

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