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# ENVIRONMENTAL ACTION GUIDE FOR NEW YORK STATE SCHOOLS

HELP FOR PARENTS AND OTHERS IN THE ABSENCE OF STANDARDS JUST FOR CHILDREN



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#### **DISCLAIMER**

The Healthy Schools Network, Inc., (HSN) does not provide client legal services. This Environmental Action Guide for New York State Schools is designed to be a user-friendly guide to selected common issues and concerns in the school environment, coupled with guidance in understanding current regulations and public health standards affecting school health and safety. Readers needing legal advice or rulings on information cited in this Guide should seek advice from an attorney.

#### For Our Out of State Readers

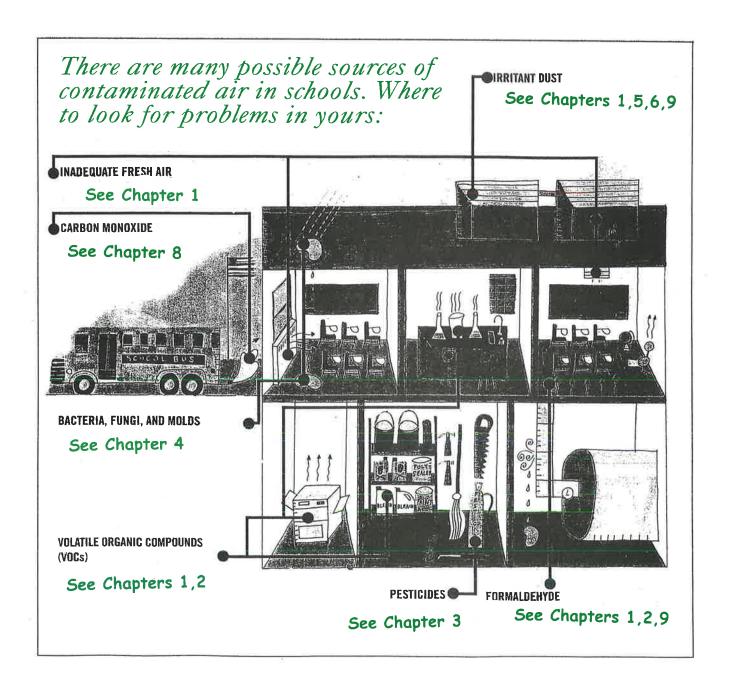
Healthy Schools Network, Inc. is a New York State-based not for profit with a national presence on the environmental health of children in schools. While this Guide is for schools in New York State, it is based in part on adult Occupational Health and Safety Act (OSHA) regulations that may apply in at least 22 other states. Moreover, we have found through years of practical experience that 'schools are schools and kids are kids'. In other words, the grassroots concerns and the lack of protection for children (and sometimes adults) are common to many school districts nationally. To solve a problem in your school, refer to federal laws cited herein, or look to your own state's building codes, occupational and environmental health laws, school facility requirements, regulations on toxic materials, and related topics. You can often solve a building-level problem right now. To create systemic change, such as addressing the lack of parent or employee right to know about hazards or creating enforceable protections for occupants of schools under renovation, you will need new state legislation or regulations.

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		Page
History and A	cknowledgments	5
Preface		6
		7
Schools Are 'C	Our Children's Workplaces'	10
Chapter 1.	Indoor Air Quality	13
Chapter 2.	Toxic and Hazardous Chemicals	17
Chapter 3.	Pests and Pesticides	21
Chapter 4.	Mold, Mildew, Fungus, Bacteria	25
Chapter 5.	Asbestos	
Chapter 6.	Lead	29
Chapter 7.	Radon	<b>32</b>
Chapter 8.	Exhaust Fumes from Idling Vehicles	34
Chapter 9.	Renovation and Construction	36
Chapter 10.	Structurally Sound Buildings	38
Chapter 11.	Heat	
Chapter 12.	Appropriate Classrooms	
14	(Size, Lighting, Ergonomics, Noise)	42
Chapter 13.	Fire Hazards	45
Chapter 14.	Usable and Sanitary Restrooms	47
Chapter 15.	Safe Playgrounds	48
Chapter 16.	Emergency Management	<b>50</b>
Appendix A:	Resources	
Appendix B:	Healthy Schools/Healthy Kids Information and	
11	Referral Clearinghouse	59
Appendix: C:	Ventilation for Acceptable Air Quality and Examples of Toxic or	
1.1	Hazardous Products Used in NY Schools	60
Appendix D:	Your Right to Information	63
Appendix E:	Your Access to Meetings	64
Appendix F:	School Health and Safety Committees	66
Appendix G:	School Facility Report Cards	67
Appendix H:	Sample Complaint Letters	68
Appendix I:	NY State Board of Regents/Legislators	<b>70</b>
Appendix J:	NYS Department of Environmental Conservation	
	Regional Offices	72
Appendix K:	NYS Occupational Health Resources	73
Footnotes		77

#### HISTORY AND ACKNOWLEDGMENTS

**ENVIRONMENTAL ACTION GUIDE FOR NEW YORK STATE SCHOOLS** is a Guide to common issues affecting child health and learning and adult occupational health at school.

It was researched by the Cornell University Workplace Health and Safety Program-ILR/Buffalo to include federal and New York State public health, environmental laws and regulations; with special emphasis on occupational health and safety provisions. Work was conducted by Nellie J. Brown, M.S., C.I.H., Director of Workplace Health and Safety Program, Lead Programs Manager, Cornell University School of Industrial and Labor Relations, Buffalo, with research, review, materials, and assistance of Nancy Lampen, M.A., Director of Management and Human Resources Programs, Cornell University – ILR/Rochester, Scott Balfour, Licensed Master Lead Inspector, and Martin Crisp, Intern, and additional research by Marian Wise, Research and Development Director, Healthy Schools Network, Inc (HSN). It was edited by Claire Barnett, Executive Director, HSN.

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#### PREFACE

Children are our most precious resource. They are the ones who will control the destiny of the world tomorrow, and will determine whether the world lives in peace and prosperity, or war and suffering. The education of our children is critical to their future, and anything that interferes with their physical and emotional health and their ability to learn poses a distinct threat to the future of the next generation, and ultimately to our very civilization.

The quality of teaching is obviously critical to the intellectual growth of students. But there are many factors independent of teaching that can interfere with the ability of a student to learn, to be challenged and motivated to expand their minds, and to learn the problem-solving skills necessary for a productive and satisfying life. The overall goal of the Healthy Schools Network is to do all in it's power to reduce those environmental factors which undermine health and learning, and which pose physical and psychological barriers to allowing children to achieve all that they can through education.

Children are not little adults, although unfortunately it has been the general rule in the US and in most other countries to apply the same guidelines for health and safety to children as are applied to working white males. On the basis of body weight, children drink more fluids, eat more food and breathe more air than do adults. Therefore their exposure to pesticides and other contaminants in food, water or air pollutants, pound for pound, is greater than that of adults. Children are less well able than adults to detoxify most pesticides and other organic contaminants. Children's developing organ systems - especially the brain, immune system, lungs and endocrine systems, including reproductive organs - are highly vulnerable to metals and organic substances. Exposure to several different toxic substances are known to result in a shortened attention span, leading to a reduced ability to learn and a reduced IQ. Many of the damaging actions of such substances on these organs do not occur when an adult is comparably exposed, and the alterations induced appear irreversible. Children have more years of life ahead of them, resulting in the fact that disabilities initiated during the periods of development result in more years of productive life lost or impaired. Exposures to chemicals and physical injury during development allow more time in which to develop chronic diseases that may last through the rest of a person's life. Injuries and hearing loss occurring during school years often pose disabilities that last a lifetime.

Our schools are not always healthful places for children or for adults. This manual details some of the more serious hazards which are common in the schools, and provides information on how students, parents, school administrators, and other concerned individuals can help make schools safer and more supportive of health and learning. But this information is useful only if it is used by everyone who is concerned to help build a better learning environment within our schools.

David O. Carpenter, M.D. Director, Institute for Health and Environment The State University of New York at Albany

#### INTRODUCTION

A schildren go off to school, parents hope they will learn, play, and have good experiences with other students and their teachers. Yet, they also worry-- about gangs, violence, and drugs or alcohol. But what about the environmental threats that face children, teachers, and others who work in schools every day? What about walls covered with peeling lead-based paint or mold; stopped up sinks and over-flowing toilets; indoor air contaminated with asbestos, dust, or chemical fumes from cleaning agents or construction materials; hazardous art, science, and vocational education supplies; pest infestations temporarily checked with toxic pesticide applications to buildings and grounds; playgrounds that invite children to swing, climb and slide, but with lead- and pesticide-contaminated dirt and no cushioned surfaces for the youngest learners. In addition to exposure to construction hazards, noise and diesel exhaust during the regular school year, children in school during the summer may have a magnified exposure risk to environmental hazards since schools typically schedule heavy cleaning and renovations for the summer – supposedly during a time when the building is unoccupied.

#### About Children's Environmental Health

Research demonstrates that young children are uniquely vulnerable to environmental health hazards, and that some health and learning problems are linked to pollutants. Children are particularly at risk from many environmental threats. Ultimately, they are exposed to more hazards because their body organs and systems are still developing, they eat proportionally more food, drink more fluids, and breathe more air per pound of body weight than adults, and they are least able to protect themselves.

Asthma, is on the increase in children and learning and behavior disorders are prevalent—effecting a growing number of school children. <sup>1,2</sup> In the early 1990s, a national network of public health professionals formed to focus on environmental hazards and children. One result of their efforts was a 1997 Presidential Executive Order directing all federal agencies to develop an explicit strategy for including children's health in their evaluations. <sup>3</sup> The National Institute for Environmental Health Sciences and the US Environmental Protection Agency (US EPA) recently partnered in establishing eight new "pediatric environmental health" research centers as part of the national effort to understand health risks in children. <sup>4,5</sup>

Children are particularly susceptible to certain environmental hazards;<sup>6,7</sup> for example, the human lung continues to develop over the first 6 – 8 years of childhood. <sup>1</sup> As more research comes to light, exposures previously thought safe for children have been revised, <sup>4</sup> as a brief review of the discovery of the past 20 years of the health effects of lead illustrates: since 1960, our estimate of an acceptable lead exposure level for children has decreased steadily, dropping from 60 to 10 micrograms per deciliter of blood. Some scientists believe that effects can occur from exposures below 10 ug/dL; work is underway to test this hypothesis.

This means that we must protect our children against environmental hazards in homes, schools, and communities that can threaten or impair their long-term health and their ability to learn. Indeed, our success as a society will be judged on the relative health, independence, and success of the next generation. Since children are unable to protect themselves, adults in charge must do so.

Some illnesses can be caused or exacerbated by environmental exposures. Individuals with health conditions made worse by environmental problems like indoor air pollution should stay in touch with their physician, or consult a pediatrician or other physician with environmental or occupational health expertise. They may also be eligible for federally required accommodations to assure accessible educational services or workplaces.

#### Information About School Environments

In a survey of school building conditions in the US, the National Center for Education Statistics (NCES) of the US Department of Education found that 26% of schools reported ventilation as unsatisfactory; 12% reported unsatisfactory lighting condition; and one-fifth of all schools reported poor heating, indoor air quality, acoustics, noise control and physical security of buildings.<sup>8</sup>

According to a recent state-by-state study conducted by the National Education Association more than one-third of America's public schools need major repairs or total replacement. The study found that funding needed for school modernization nationally is \$307.6 billion. Of that total, \$253.9 billion are needed for school infrastructure, including maintenance and repair. Citing examples of poor indoor air quality making students sick, including classrooms filled with mold and mildew and other examples of unhealthful and unsafe conditions, the study demanded that the states and federal government take immediate and aggressive action to address the national crisis in schools.<sup>8</sup>

The studies cited above updated the 1995 US Government Accounting Office report, which showed that the nation's children faced a virtual epidemic of indoor air pollution at school and other threats due to decayed, neglected infrastructure. US GAO estimated that some 14 million children attended the one-third of schools needing major repairs, including environmental problems that can threaten their health and learning. The five biggest cities in New York State have the oldest school buildings in the nation; the average age of school buildings is 65 years in Buffalo, 56 years in Rochester, 45 years in Syracuse, and 58 years in Yonkers. The current building replacement/complete overhaul cycle is 80 – 100 years; the current major modernization cycle is 50 – 70 years. NYS schools are facing overcrowding and steady enrollment growth and will need seats for 9000 new students over the next five years. In New York City, half of the 1200 schools are more than 55 years old, with parts of roofs and walls dangerously falling apart. Outside of NYC, half of the over 3000 buildings are more than 38 years old and 85 % report a need to upgrade or repair buildings to good condition. The state has also reported that the poorest children have the schools in the worst condition and that environmental problems have adversely impacted learning. Federal studies show the same results.

According to the New York State Education Department, the state's 4,200 schools enroll over three million children. Over one-third of the schools these children attend have polluted indoor air and/or building failures that lead to indoor contamination. Environmental hazards such as leaky roofs, poor ventilation, out-dated boilers, and faulty wiring are threatening children's health and learning.

#### Environmental Action Guide for New York State Schools

The purpose of this Guide is to inform parents, advocates, and other members of the school

community personnel about existing laws and resources available to ensure that every child and every school employee has an environmentally safe and healthy school.

This Guide can help everyone in the school community protect children and staff from environmental hazards found in too many schools. Not all buildings have the same problems. The Guide identifies typical hazards, explains why the hazards are important, and describes how or where to look for them. In addition, the Guide points you towards federal or state laws that your district school might be violating by allowing problems to go uncorrected. Where there are no regulations, best practice recommendations and advisories are presented. Most importantly, we have provided phone numbers of offices and organizations that can help you if you spot any of these problems in your school.

School Officials: always take questions and complaints about environmental health and safety seriously. Compliance with adult occupational health laws or building codes will not assure healthful conditions for all children. Ignoring basic health and safety regulations or building codes undermines the community's investment in the infrastructure, affects local property values, sends a poor message to students, and threatens health of all building users. Nothing will destroy parents' trust in school more than learning that information was denied or withheld about conditions or events affecting their children's health and safety.

Parents: always ask if someone in your school is aware of the problem, or is willing to work with you to solve the problem; never ask school to do more than you already do at home. Good people to talk to at school include the Superintendent of Buildings and Grounds or Head Custodian, School Principal/Superintendent, the local parent association (PTA, PTSA, PTO, PA) as well as members of the school decision making body, School Leadership Team, or the required Health and Safety Committee, or a Board of Education member. If after you have given the person you have spoken to a chance to take action, and you see that nothing is being done, keep going.

School employees: talk to your bargaining unit representative and colleagues. Since employees are in the school daily and have first hand knowledge of conditions, we also urge you to share your information with parents of any affected children. There is nothing that destroys parents' trust in schools more than finding out that school personnel who knew of hazards concealed information.

Write it down. Getting problems fixed usually takes more than one phone call. Short letters from a group of concerned individuals work better than a long-winded complaint from one person. Letters leave a 'paper trail'. To help, we have printed sample letters at the end of this guide - just change the details so the letter fits your situation. Find a group. It is often more effective to work with or to create a well-organized group of informed parents and other members of the community. You have a right to ask questions and to take action. Make sure the school Health & Safety Committee is aware of your concerns. No one should live, go to work, or learn in unsanitary or hazardous conditions.

#### SCHOOLS ARE 'CHILDREN'S WORKPLACES'

Children are compelled to attend school and may spend 40 hours per week or more in school buildings and on school grounds. As a result, schools are "children's workplaces." Children and employees alike may be exposed to environmental health and safety hazards in schools; yet, protection against such exposures is not equally afforded to both. Employees have occupational health and safety laws designed to promote an environmentally safe and healthy workplace. While there may be 10-15 times more students in a school than adult employees and children are particularly vulnerable to environmental hazards, children in schools have little to no legal protection from hazards, and their parents have no system of recourse.

### No 'occupational' health and safety standards have been set to protect children.

The health and safety laws designed to protect school employees can sometimes be used to protect students as well. Parents must understand, however, that this depends on the voluntary actions of school officials and employees to safeguard children. It also may depend on parents' ability to verify hazardous conditions or practices inside the school.

It is also important to remember that federal occupational health and safety standards are negotiated to set exposure limits for healthy adult white males, *not women or children*. Thus, while it is important for schools to comply with regulations for employees, it is imperative that extra precautions be taken when considering the special needs and vulnerability of children, especially those with preexisting health or learning problems.

## What rights do employees have to Occupational Health and Safety?

- □ The U.S. Congress passed the Occupational Safety and Health Act of 1970 (OSHAct) to "assure safe and healthful working conditions for working men and women." Section 5(a) of the Act states that "Each employer:
- shall furnish to each of his employees employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employees;
- shall comply with occupational safety and health standards promulgated under this Act."<sup>11</sup>. The OSHAct applies to *private* workplaces everywhere and is enforced by the Occupational Safety and Health Administration (OSHA).

# How are employees in public schools protected?

New York State is one of 23 states that has adopted OSHA for public sector employees by adopting the Public Employees Safety and Health Act (PESHAct) of 1980, amended 1984 (NYS Laws, Chapter 729). The PESH Act was approved by OSHA in 1984 as the New York State Plan for Public Employee Occupational Safety and Health. The New York Department of Labor was designated as the state agency responsible for administering the plan throughout the state. As a result, the Commissioner of Labor has full authority to implement and enforce all laws and regulations protecting the safety and health of public employees.

# What does the New York State Plan for Public Employee Occupational Safety and Health (PESH) do?

- The New York Plan provides for the adoption of all Federal OSHA standards enacted as of July 31, 1983, and for the inclusion of any new OSHA standards. Since these acts were passed, numerous regulations on a wide range of occupational health and safety hazards have been adopted federally or by New York State; some are referenced here.
- OSHA provides funding for technical assistance services for both public and private employers through the NYSDOL. Employees can request workplace visits and evaluations that are conducted at no cost to the employer. Employees in public schools can call their union, the Department of Labor, Occupational Health Clinics, and Councils or Committees for Occupational Safety and Health. Because children are not employees, parents cannot rely on these sources.
- School districts in larger cities often have their own Health and Safety professional staff; smaller districts may share Health and Safety services through the Boards of Cooperative Educational Services (BOCES). Health and Safety expertise may not be the primary job or interest of the BOCES staff. BOCES services are scheduled by the District, and are not on-call to parents or employees.

#### Are there any laws that cover health or safety issues in schools?

Yes. The New York State Commissioner of Education has several basic sources of legal authority to adopt regulations concerning environmental health and safety in schools: Education Law, Sections 408 and 409. The State Education Department does not formally track complaints and is not staffed to conduct random inspections or investigations in the field.

- Under Section 408, the Commissioner approves plans and specifications for the erection, purchase, repair, enlargement, or remodeling of school buildings and additions for school districts (other than New York City). In reviewing these plans, the Commissioner must assure that they "provide for heating, ventilation, sanitation, storm drainage and health, fire and accident protection adequate to maintain healthful, safe and comfortable conditions therein." Section 155.3 of the Commissioner of Education's regulations provide the Commissioner with the power to establish necessary health and safety standards in public school buildings.
- Under Section 409, all school buildings in school districts, other than those in cities with 125,000 inhabitants or more (The Big Five districts: New York City, Yonkers, Syracuse, Rochester, and Buffalo), are required to comply with Commissioner's regulations adopted for the purpose of "insuring the health and safety of pupils in relation to proper heating, lighting, ventilation, sanitation and health, fire and accident protection."
- □ In 1993, the New York State Board of Regents created an Advisory Committee on Environmental Quality in Schools. After public hearings and significant discussion, that Committee issued a consensus report entitled the *Environmental Quality of Schools*<sup>10</sup> which found that current State Education Department Laws were inadequate for protecting children's environmental health and safety in schools.

# New York State Board of Regents adopted the Committee's report starting with the new Guiding Principles for the Environmental Quality of Schools:

- Every child and school employee has a right to an environmentally safe and healthy learning environment which is clean and in good repair;
- Every child, parent, and school employee has a "right to know" about environmental health issues and hazards in their school;
- > School officials and appropriate public agencies should be held accountable for environmentally safe and healthful school facilities;
- > Schools should serve as role models for environmentally responsible behavior;
- Federal, State, local and private sector entities should work together to ensure that resources are used effectively and efficiently to address environmental health and safety conditions.

In addition, the Board of Regents adopted many of the consensus action items to make schools more environmentally sound. These included recommendations for improved indoor air quality, health and safety protection during renovation and construction projects, least toxic integrated pest management, the use of less toxic construction and maintenance supplies, stronger asbestos programs, lead and radon testing, training for local schools, and a designated system to help parents protect children at risk. It is important to remember that the above referenced principles and action steps are only the adopted policy of the Education Department and not necessarily enforceable rules.

# Has legislation been passed to protect child and adult environmental health and safety since the Advisory Committee report?

Yes, but not enough. In addition to improvements in building aid to schools, effective October 1999, the Board of Regents adopted the Comprehensive Public School Building Safety Program (Section 155.3 of the Regulations of the Commissioner of Education), the Uniform Code of Public School Buildings Inspections, Safety Rating and Monitoring (Section 155.4), the Uniform Safety Standards for School Construction and Maintenance Projects (Section 155.5), and School Facility Report Cards (Section 155.6). The new regulations require all schools districts to conduct annual inspections, create five-year capital facilities plans based on building condition surveys, establish safety rating systems, establish Health and Safety Committees, and post "facility report cards" on buildings. One year after the law took effect, the Education Department has not been staffed to set up compliance documents or forms; some districts have engaged private consultants or BOCES to create their own flexible versions of inspections, surveys, and Health & Safety Committees.

#### CHAPTER 1: INDOOR AIR QUALITY

#### Why is INDOOR AIR QUALITY important?

Good or adequate indoor air quality contributes to a favorable learning environment for students, productivity for teachers and staff, and a sense of comfort, health, and well-being. These elements combine to assist a school in its core mission – educating children. Unfortunately, since the quality of the indoor air is the cumulative result of all the things that have gone right or wrong inside the building, there is no single testable standard for adequate air quality.

Despite the fact that children are more vulnerable to toxics, that they breathe more air per pound of body weight than adults, that schools are more densely occupied than commercial offices, there are no indoor air quality standards just for children.

According to the US Environmental Protection Agency (US EPA), poor indoor air quality can cause illness requiring absence from school, and can cause acute health problems that can measurably decrease performance while at school.<sup>12</sup> The bottom line: poor indoor air quality can have a significant affect on learning.

Air-borne pollutants in schools can include dirt, dust, lead, asbestos fibers, chemical fumes, carbon monoxide and other gases, pesticides, bacteria, molds, pest leavings, tar and diesel fumes, and many other contaminants from equipment (such as photocopiers and computers) and people in the building. These pollutants come from surfaces in the building, cleaning products, paints and floor finishes, carpets, other occupants of the building, buses, the outdoor air, and they can be a result of demolition or construction. Not everyone has the same reactions, but children and adults with preexisting health problems including asthma or allergies generally have more problems more quickly. Asthma, in particular, is of enormous concern, as it is the leading cause of school absenteeism due to chronic disease. Nationally, it affects nearly 5 million children below the age of 18. 2,13

Schools need to be heated during the winter. However, heat brings with it some safety risks. It is necessary for schools to be well ventilated, even when they are being heated, otherwise, toxins--from furnishings and processes or from people--build up in the air. School classrooms that are always too hot or too cold can also affect learning (see also Chapter 11 Heat).

### What health or learning problems are associated with polluted indoor air?

Indoor air quality problems are often diagnosed by responding to the health symptoms and illnesses attributed to the indoor environment.<sup>14</sup> The term "building related illness" is used when symptoms of diagnosable illness are identified and can be attributed directly to airborne building contaminants.<sup>15</sup> The most common symptoms reported for poor indoor air quality include (but are not limited to):

- irritations of eyes, nose, throat
- dry mucous membranes and skin
- mental fatigue, headache, sleepiness
- airway infections, cough
- hoarseness, wheezing

- nausea, dizziness
- redness, flushing of the face or skin, rashes
- unspecific hypersensitivity reactions

#### How can parents tell if their child is affected by polluted indoor air at school?

Think about your child. Does your child regularly go to school healthy and return home sick or deeply fatigued? Does your child have more frequent or more severe asthma attacks on school days? What about other health problems, such as rashes, nausea, headaches, joint pain or congestion? Are any of your child's friends coming home with health complaints? Is school under renovation and are you sure? Is school seriously overcrowded? Was school built in a wet area or on contaminated ground? Do the air intakes draw in vehicle exhaust, or emissions from adjacent hazardous facilities?

#### Is your school preventing INDOOR AIR POLLUTION?

To see if your school is preventing indoor pollution, ask if they are using the US EPA's Tools for Schools or similar action-oriented checklist. Tools contains basic information on conducting an indoor air investigation. It is a step by step, self-help guide on preventing indoor air pollution. All BOCES in New York State and most districts have copies of the kit and have been offered free training in how to use it. Tools was recommended to all school executives by the NYS Education Department in 1996 (see Appendix A Resources to order the kit).

#### How can you gather health information from the building occupants?

This can be difficult to do with young children, but it is typical for adults to experience symptoms. Indoor environment investigations are done best using a team approach involving teachers, staff, administration, and parents (see Appendix B Healthy Schools/Healthy Kids Information and Referral Clearinghouse to order the Student Health Checklist; see also Appendix F for Health and Safety Committee discussion).

Encourage the teachers and staff to describe any other observations they might have about the building environment; sometimes the problem is not an indoor air quality issue at all. For example, eye problems may be the result of inappropriate lighting or glare; loud or annoying noises or excessive vibration can also cause difficulty in concentration; aches and fatigue may be the result of ergonomic factors such as improperly designed or sized workstation at a computer, or the result of mold contamination (see Chapter 12 Appropriate Classrooms).

#### What could a parent look for or ask about that could affect INDOOR AIR QUALITY?

Ask for a building tour, or during a school event or classroom visit, a parent might notice:

- Musty, stale odors
- Sewer gas smells
- Visible mold or water damage on ceilings, walls, floors, carpets
- Pest damage or droppings

- Dirty carpets or bathrooms, broken toilets and sinks
- Classroom ventilators covered with papers, plants or other materials
- Chemical fumes from equipment, new furnishings, or fresh paint (See Appendix B Healthy Schools/Healthy Kids Information and Referral Clearinghouse to order 6-page Parent Guide to School Indoor Air Quality).

#### What is "adequate" ventilation for good INDOOR AIR QUALITY?

(See Appendix C Ventilation for Acceptable Air Quality)

#### What school documents or information relate to INDOOR AIR QUALITY?

- Preventive maintenance plan for the heating, ventilating, or air-conditioning system (HVAC)
- Indoor air quality investigations and reports
- Testing for carbon dioxide (levels indicate lack of fresh air)
- DOSH 900 (A log and summary of all workplace injuries and illnesses involving lost time, loss of consciousness, medical treatment, etc.)
- Maintenance records and work orders on the HVAC system
- Material Safety Data Sheets (MSDS) for cleaning products
- Comprehensive maintenance plan
- School Facility Report Card (See Appendix G School Facility Report Cards)
- Health and safety committee reports or complaints and outcomes

(See Appendix D Your Right to Information to learn more about using the New York State Freedom of Information Law).

### Are there laws about INDOOR AIR quality in schools?

- NYS Department of Education regulations (8 NYCRR 155) require that each teaching space be provided with a controlled supply of fresh air and have sufficient air changes to produce healthful conditions and avoid odors or build-up or concentrations of toxic substances or dust particles.
- ☐ In addition, 8 NYCRR 155.4 requires the establishment of a comprehensive maintenance plan for all major building systems to ensure the building is maintained in good repair. The plan must include the establishment of maintenance procedures and guidelines that contribute to acceptable indoor air quality. The comprehensive maintenance plan must be available for public inspection.
- Under 8 NYCRR 155.6, School Facility Report Cards require schools to report whether or not they have taken "measures to assure acceptable indoor air quality" (see Appendix G School Facility Report Cards).
- There are no laws requiring schools to test indoor air quality, nor can any school prove it has acceptable indoor air by producing a test result. Indoor air quality measurements can be expensive and are usually done under actual operating conditions, not on weekends or during vacations with the windows open.

OSHA provides funding for technical assistance services for both public and private employers through the NYSDOL PESH Bureau. Employees can request workplace visits and evaluations that are conducted at no cost to the employer. Employees in public schools can call their union, the Department of Labor, Occupational Health Clinics, and Councils or Committees for Occupational Safety and Health. However, because their children are not employees, *parents cannot request help from these sources*.

Both the Occupational Safety and Health Administration and New York State have issued or enforce occupational exposure limits for several hundred substances in air. These regulations were intended for industrial workplaces and were derived from studies of adults, specifically white males. Consequently, children are not protected by law from learning in a school with poor air quality. Children are more sensitive than adults to chemical exposure, due to smaller body size, smaller body organs (some organs, such as the lungs are still under development), and because their breathing rate is faster. Occupational exposure limits set for adults do not assure protection for children.

- The US Environmental Protection Agency has issued regulations on the outdoor air called the Ambient Air Quality Standards to implement the federal Clean Air Act. These Standards regulate five air contaminants: carbon monoxide, sulfur dioxide, nitrogen dioxide, ozone, and particulates, with both warnings and advisories designed to deal with sensitive members of the population such as children, the elderly, and those with respiratory conditions. The air inside should not be worse than the outside air; but because of the accumulation of fumes and odors, and lack of ventilation and maintenance, indoor air is often more polluted than outdoor air.
- □ The New York City Health Code, section 45.11 says that each school room should be properly ventilated, but not so well-ventilated as to cause drafts.
- Children with severe asthma are now entitled to carry their own inhalers. The board of education or BOCES must allow pupils who have been diagnosed by a physician with a severe asthmatic condition to carry and use their inhaler during the school day, with the written permission of their health care provider, and parental consent. A record of the permission must be maintained in the school office. (NYS Laws, Chapter 16 Education Laws, Title 1 General Provisions, Article 19 Medical and Health Service, Section 916).
- □ New York State Labor Law Section 204 addresses boiler inspection and New York State Labor Law Section 216 addresses the penalty for failure to inspect boilers. New York City Health Code Section 131.03 states that all occupied parts of the building must be heated to at least the minimum prescribed temperature; Section 45.11 says that a temperature between 68 and 72 degrees must be maintained in a building whenever the outside temperature drops below 55 degrees (see Chapter 11 Heat or Appendix A Resources).

#### CHAPTER 2: TOXIC AND HAZARDOUS CHEMICALS

### Why are TOXIC AND HAZARDOUS CHEMICALS a problem?

Acute or chronic exposure to chemicals by inhalation, skin contact, eye contact, or ingestion could cause temporary or permanent adverse health problems in children and adults such as tissue or organ system damage, cancer, or death. Aggravation of existing health conditions such as asthma can also occur. Chemicals also can have physical hazards such as the potential for fire hazard or explosion. Some, like mercury and lead, are associated with brain damage. Both the health hazards and the physical hazards of some chemicals make them poor choices for use by schools.

#### How are CHEMICALS at school a problem for children?

Children are vulnerable and more sensitive than adults to chemical exposure, due to smaller body size, smaller body organs (some organs, such as the lungs are still under development), and their breathing rate is faster. Some instructional supplies may be inappropriate choices for use by children because children have insufficient dexterity or capacity to deal with the hazards or accidents, or because the school lacks the ability to store, ventilate, or manage the risks. Chemicals can also add to indoor air pollution, increase waste disposal costs, and affect adult occupational health costs.

Children can be exposed, for example, to chemicals in cleaning and maintenance products used in schools. Whether a product is freshly applied or mis-applied during class, mixed improperly (some common cleaning products, when mixed together can give off deadly gas) or used in an undiluted state, stored in an unventilated hall closet, or leaves a heavy residue, there are three exposure routes.

First, inhalation: (children breathe more air per pound of body weight than adults) aerosols, vapors, fumes, or dusts can be inhaled causing breathing problems, and/or absorbed into the bloodstream and carried to other body organs; second, skin contact: (children are less able to identify and avoid hazards, and have immature systems that may not detoxify poisons) residues from chemicals can damage skin resulting in dryness, redness, or dermatitis; by burning skin tissue; or absorbed through the skin and carried to body organs; and third, ingestion: (children play on the floor or ground, put their hands in their mouth, and rarely wash their hands before eating lunch or snacks) and can accidentally drink or eat chemicals via hand-to-mouth touch.

# How can you find out if HAZARDOUS CHEMICALS are a problem in your school?

You might suspect a problem if the school is evacuated due to a spill or threat of explosion, or because of chronic health complaints among staff and children. Does your child come home with possible signs and symptoms of chemical exposure; or as an employee do you have symptoms such as those listed below? Are there strong, acrid odors at school?

# SOME SIGNS AND SYMPTOMS OF ACUTE EXPOSURE TO CHEMICALS

STRUCTURE OR FUNCTION AFFECTED

POSSIBLE EFFECTS

Central nervous system (brain)

headache, dizziness,

lightheadedness,

euphoria, drunkenness, slowed response time, lack of coordination

Respiratory system (lungs)

changes in rate or depth of breathing, irritation, difficulty breathing, feeling of "warmth" in

chest

Eyes

tears, irritation,
"burning" feeling,

blurred vision, sensitivity

to light

Heart or circulatory system

heartbeat is rapid,

slowed, or irregular,

change in EKG, change in blood pressure, fainting

Digestive system

vomiting, nausea,

malaise, diarrhea, constipation

Skin

swelling, redness, rashes, irritation, bumps, boils,

increase or decrease in-

pigmentation

See also Chapter 1 Indoor Air Quality for definitions of "sick building syndrome" and "building related illness."

#### What sorts of CHEMICALS could be a problem?

These are some chemicals used in cleaning, buildings and grounds maintenance, and specialized classes:

- science labs supplies, including mercury
- vocational classes
- print shops: inks and cleaning fluids paints, varnishes, glues, and other products which are formulated with solvents
- pesticides, herbicides, due to active ingredients and/or the solvent carriers
- offgassing of formaldehyde or other chemicals from new products such as carpets, floor tiles, wall coverings, furniture, partitions, and generally from plywood, particleboard, strand board, etc.
- custodial products used for cleaning, disinfecting, or polishing of bathrooms, floors, carpets, water fountains, railings, etc.
- ozone and nitrogen oxides from photocopying
- nitrogen oxides, sulfur oxides, formaldehyde, carbon dioxide, and miscellaneous other contaminants from combustion such as cooking, pilot lights, heaters, boilers
- formaldehyde and dusts from carbonless copy paper
- solvents and irritants from mimeographing, laminating
- art supplies
- dry erase markers and dry erase board cleaners

School should take the easiest step to prevent exposures—don't use toxic or hazardous supplies. For example, schools can purchase 'environmentally preferable' products which are least-harmful to human health and the environment. Chemical exposure can also be reduced by making sure the task is done with adequate ventilation or by using products when the school is unoccupied.

(See Appendix B Healthy Schools/Healthy Kids Information and Referral Clearinghouse to order Healthier Cleaning and Maintenance Practices and Products for Schools, and see Appendix C Examples of Toxic and Hazardous Products Used in NY Schools).

## Are there laws about CHEMICAL HAZARDS in schools?

There are some laws, regulations and standards to protect employees, but none to protect children.

- If you are a current or former employee of the school, you have the right to know about the chemicals you work with or are used in your area. This right is in two regulations: the NYS Right-to-Know Law of 1980 and the federal OSHA Hazard Communication Standard (29 CFR 1910.1200). These regulations have almost identical provisions. However, due to requirements of these laws, the employer is required to:
- create and make available on request a Written Hazard Communication Plan describing all actions to comply with these regulations
- make available in the work area on all work shifts current material safety data sheets (MSDSs) on

all hazardous materials to which employees may be exposed

Parents can ask to see:

- the written hazard communication plan
- the material safety data sheets for chemical products used in the school or on its grounds

#### Are science labs covered by the law?

Yes. The OSHA standard specifically aimed at science labs is Occupational Exposure To Hazardous Substances In Laboratories (29 CFR 1910.1450). This standard is similar to Hazard Communication and the NYS Right-to-Know Law in that it also requires the collection of MSDSs, preparation of a written chemical hygiene plan, and employee training.

Parents can ask to see:

- the written chemical hygiene plan for the school's laboratory(ies)
- the material safety data sheets for chemical products used in the labs

If you ask for one of documents noted above and your request is denied, you can make a Freedom of Information Law (FOIL) request (see Appendix D Your Right to Information). Using them, you can evaluate the types of exposures children may have or appropriateness of chemicals or products being used around children or children themselves are using in class.

It is easier to prevent pollution and risk to health at the source by buying and using less hazardous or less toxic products. Prevention was established as national policy with the enactment of the federal Pollution Prevention Act of 1990.

For more help see Appendix A Resources.

#### CHAPTER 3: PESTS AND PESTICIDES

#### Why are PESTS a problem at school?

The most obvious reason why pests are a problem in schools is because schools are densely occupied and often poorly maintained spaces that provide pests access to food, water, and shelter. Pests are nuisances at school since they can carry transmittable diseases and can damage buildings as well. However rodents, insects and other pests can be harmful in other ways as well. Their dander, hair, droppings, and other excreta can cause or worsen asthma and allergies.

#### How can you recognize PEST problems?

Pest problems are usually easy to see and smell. Ask your child if he or she has ever seen a pest in school, or if you are a school employee, look around for yourself and also ask the children and other employees. If rodent(s) or insect(s) or their droppings have been sighted inside of school, the school has a pest problem. If pests are seen near or on school grounds, an inspection should be made to make sure that the school is not infested and caution should be taken to prevent infestation in the future.

#### Why are PESTICIDES a problem?

Pesticides are products designed to kill living organisms. They work temporarily and need to be reapplied. The poisons and inert ingredients found in pesticides may be more harmful than the pests. Pesticides can be absorbed through the skin, inhaled, or swallowed by humans. Children already have proportionately more pesticide exposures than adults and pesticides have been linked to certain cancers, damage to the central nervous system, neurological and behavior problems, as well as acute poisoning. The Association of Poison Control Centers reported between 1993 – 1996 **2,300** pesticide-related exposure incidents involved individuals at schools.<sup>17</sup> No pesticides have been tested specifically for safety around children or in combination with other chemicals.

#### Are there laws about PESTS in schools?

□ NYS Public Health Law Article 15-1500 gives the Board of Health of a municipality the power to take any proper and necessary steps to control insects which may require community action.
□ Section 151.03 of the New York City Health Code says that all buildings must be kept free from conditions that might lead to infestations and that if a building is infested, immediate action by the person in control should be taken to get rid of the pest infestation.

#### Are there laws about PESTICIDE use?

Pesticides are regulated federally and by New York State, but children's cumulative exposures and risks are a relatively new priority for the US Environmental Protection Agency (USEPA).

The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) is enforced by the USEPA. It requires that all pesticides must be registered with USEPA for sale and use, and that containers or other devices used for pesticide application must be labeled with: a list of "active" ingredients,

directions for use, methods for application, a description of where application can or cannot be made, warning or caution statement, precautions and treatment for poisoning, whether or not personal protective equipment is needed for application, ventilation requirements, protections for food, pets, etc., period of time for reentry after application, potential environmental hazards (including prohibitions against contamination of water, non-target vegetation and wildlife), and storage and disposal requirements.

- Desticides must be used in accordance with the label. It is against the law to say that a pesticide is safe. A pesticide is "misbranded" if its labeling contains any "false or misleading" statements such as "safe" or "harmless" or "nontoxic to humans and pets".
- NYS requires that commercial applicators report the amount of pesticides used and where they were used, but has not analyzed these data for schools specifically.<sup>17</sup>
- NYS regulation 6 NYCRR 325.18 specifies that pesticide applicators be licensed by the state and must hold a valid certification card. Schools must follow applicable federal and state laws since schools are considered 'commercial' application sites for pesticides. For example, schools must have a certified applicator 'on site' during an application of pesticides, but not necessarily performing the application; schools must keep copies of the labels of pesticide products used, and places of application must be posted. School employees do not have to post signs unless the grounds on which pesticides have been applied are within a park or within 100 feet of any building.
- Certified and commercial lawn applicators must post signs for applications made to lawns; these
  must remain posted for 24 hours. (NY Environmental Conservation Law Sections 33-09 and 33-10).
- NY Education Law (Section 409-h), beginning July 2001, all schools must establish a pesticide notification procedure to provide information on pesticide applications in buildings and on grounds. At the beginning of the school year, the school must send notification to all staff and parents which includes: a statement that pesticide products may be used throughout the year; a statement that schools are required to maintain a list of staff and parents who wish to receive forty-eight hour prior written notice of pesticide applications and instructions as to how to register with the school to be on the list for notification; the name of a school representative and contact number to obtain further information.
- In addition, within ten days of the end of the schools year and within two days of the end of the winter recess and spring recess, the school must provide written notification to all staff and parents listing the date, location and product used, for each application which required prior notification and each emergency application made during the period of time since the previous notice. (An emergency application can only be made to protect a person from an imminent threat from stinging and biting insects, including venomous spiders, bees, wasps, and hornets. Even then, a "directed' spray must be used rather than a fogger or aerosol product that discharges to a wide area.)
- School must maintain a list of staff and parents who wish to receive forty-eight hour notification, including instructions on how to register with the school. The notification itself must include and how to get any further information about the pesticide being applied. The

- notification itself must include: the specific date and location of the application (indoor or outdoor); the product name and pesticide registration number; a precautionary statement with phone numbers to call for more information about pesticides; the name of the school representative and phone number to call for additional information.
- Applications of certain less-hazardous products such as boric acid and silica gel are exempt from the prior notice requirements.
- Disinfectants: Schools are required to disinfect only those surfaces that come into direct contact with food preparation. School cafeteria and food-service programs are subject to federal and state sanitation rules and regulations. These regulations require all schools to abide by all state and local laws and regulations for proper sanitation and health. (7 CFR Section 210.13(a); and see, 10 NYCRR Subpart 14-1). Otherwise, schools are not required to use disinfectants. Nonetheless, schools often disinfect desks, doorknobs, lavatories, etc. It is important to remember that disinfectants are toxic pesticides designed to kill living organisms. As such, they are dangerous to humans, especially children. In many cases, schools unnecessarily over-use or improperly apply disinfectants. Because they are especially harmful to children's health (a significant contributor to indoor air pollution or a skin irritant), schools should be especially careful about their use. Disinfectants should be used only when and where absolutely necessary. When using disinfectants, first thoroughly clean with an all-purpose cleaner than apply disinfectant to the clean surface. Most disinfectants must be left on the surface for at least ten minutes to be fully effective. Check labels for proper and safe use.

# What is Least-toxic Integrated Pest Management (IPM)?

Least-toxic integrated pest management is a method of pest control that first focuses on buildings and grounds maintenance that seals pests out of buildings or discourages or blocks their access to food, water, and shelter. It promotes natural landscaping. Sticky traps are often used to find the exact kinds of pests in a building. If pests cannot be sealed out or kept under control, then the second step is using the least-poisonous pesticide available. The end results of a "least toxic" program (like that used by the federal government or New York State for federal and state offices) are an elimination of the most poisonous products, and a phase out of the rest. It also results in cost savings due to permanent building improvements, and lower risks to health. The method is called least-toxic integrated pest management (IPM) or non-toxic pest control.<sup>18</sup>

# Are there laws requiring least-toxic pest management in New York State schools?

Almost. The NYS Board of Regents amended Education Law in 1999 such that 8 NYCRR 155.4 requires the establishment of a comprehensive maintenance plan for a school. The plan includes "provisions for a least-toxic approach to integrated pest management." However, despite having to include IPM in the comprehensive plan, the law does not require that an IPM program be implemented. Legislation or a regulation is necessary to require IPM practices by schools. In addition, the School Facility Report Card (required under Section 155.6) must include the status of the IPM program (see Appendix G School Facility Report Cards).

# Can parents find out what pesticides are used at school?

#### Parents can ask for:

- Name of the employee or outside contractor responsible for pest control
- Pesticide applicator's state license
- Pesticide application records
- Material safety data sheets for pesticides used
- Comprehensive Maintenance Plan
- School Facility Report Card

(See Appendix A Resources for information on how to promote and implement voluntary IPM programs in your school; see Appendix B Healthy Schools/Healthy Kids Information and Referral Clearinghouse to order Children, Learning and Poisons Don't Mix: Kick the Toxics Habit, or a free pesticide poster; and see Appendix D Your Right to Information for how to use the Freedom of Information Law).

#### CHAPTER 4: MOLDS, MILDEW, FUNGUS, BACTERIA

#### Why are MOLDS or other microorganisms in a school building a problem?

Many health problems from molds (fungi) and bacteria have arisen from leaks, water damage, flooding, or standing water in the building or its Heating, Ventilation and Air Condition (HVAC) system. Standing water or moist areas help the growth of bacteria and fungi which can be picked up and carried in the air and inhaled. The cases of "humidifier fever," or hypersensitivity pneumonitis, have resulted from organisms growing in the water from a humidifier or condensation from an air conditioner. Leaks and water damage or flooding can lead to mold growth in carpets, upholstery, ceiling tiles, and behind walls.

#### Why are MOLDS or other microorganisms a problem for children?

There is the potential for disease, especially for sensitive groups such as those with reduced immune system function due to infection with HIV/AIDS, or immunosuppressant drugs for treatment of cancer, or to prevent organ transplant rejection, or for those on long-term therapy with corticosteroids. Some molds are deadly and have been linked to infant deaths and serious illnesses in children. There is the potential for allergic reactions such as asthma or dermatitis from exposure to these organisms or their metabolic by-products. Some children who are exposed to molds have persistent upper respiratory tract symptoms such as rhinitis, sneezing, eye irritation, as well as lower respiratory tract symptoms such as coughing and wheezing.<sup>21</sup>

#### Where would you look for MOLD or other microorganisms at school?

Look for signs of leaks, water damage, flooding, or standing water in the building or its HVAC system such as stains on ceilings, window sills, walls, carpets, or floors; buckling of floor tiles; standing water in drip pans of unit ventilators, under ventilation system coils, or under airconditioners. Sometimes rain or snow can be wind-driven into air intakes. When stained building materials or furnishings or other water sources are found, the moisture source, if active, should be identified and corrected. Water-damaged materials should be replaced if not completely dry within 24 hours. Roof leaks, for example are common in schools. If not addressed, the problem can worsen. Often, however, costs may be prohibitive. At a minimum, ceiling tiles should be replaced to ensure the area is completely dry.

In addition to obvious signs of water damage, some other biological sources involve contaminants derived from living organisms, their byproducts, or from parts of dead organisms. Inadequate cleaning and maintenance of the air intakes, filters, and ductwork are significant potential sources of contamination from molds, bacteria, and organic material (including insects and insect debris), all of which are known causes of a variety of symptoms including respiratory infections and eye problems, also allergies and fatigue.

Mold contamination can be prevented by:

- Avoiding standing water in ventilation system components and taking care of contaminated items;
- Promptly fixing all leaks;

- Preventing rain and snow from entering air intakes;
- Continuously draining cooling coils or other areas of condensation;
- Disinfecting moist areas;
- Using dedicated steam systems rather than water for humidifying;
- Monitoring the use of biocides in cooling tower water for effectiveness.

Air or surface testing is for bioaerosols is typically recommended only after medical or clinical information indicates that building occupants are ill.

### Are there laws about MOLD or other microorganisms in schools?

No. Currently there are neither general regulations nor adult occupational exposure limits set for airborne biologicals. Neither adults nor children are protected by laws or standards.

Recommendations from the American Conference of Governmental Industrial Hygienists (1999) are as follows:

- Presence of visible fungal growth confirmed by source sampling in occupied indoor environments is strong evidence that exposure may occur.
- Presence of moldy odors in occupied indoor environments is strong evidence that fungal growth is occurring.
- Persistent presence of water in indoor environments (except in places designed for carriage or storage of water) is likely to lead to fungal growth.
- Presence of accumulations of organic debris, especially bird or animal droppings, is presumptive evidence of fungal contamination.

For more help, see Appendix A Resources.

#### Why is ASBESTOS a health concern?

For decades asbestos was used in construction to strengthen products, to provide heat insulation, and to provide fire resistance. Asbestos fibers can have serious effects on the health of everyone who breathes them in. When breathed in, asbestos lodges itself in the lungs or in the intestines. Studies of the occupational exposure of people who are regularly exposed to asbestos have indicated that they may later develop asbestosis, lung cancer, or mesotheliomas of the chest cavity or abdominal cavity; which can be fatal. Whether asbestos is a concern in the school setting depends upon whether the asbestos is in an airborne form – fibers in the air which can be inhaled. For this to occur, asbestos must be "friable," that is, the fibers must be loose due to the asbestoscontaining material (ACM) having been exposed or damaged. 22-26

Asbestos-containing materials (ACM) can be managed safely in a school that is in good repair and kept clean. Asbestos is often found around pipes in insulation, and in floor and ceiling tiles. Not all asbestos needs to be removed, but it must be controlled. In schools, construction and demolition projects can release asbestos. A poorly engineered asbestos removal project may cause greater harm than simply managing asbestos in place. The US Environmental Protection Agency recommends managing asbestos in place.

#### How can you recognize ASBESTOS problems?

Every school, public and private, is required to test for and notify the public of loose asbestos. Remodeling or other types of construction can disturb asbestos fibers that are already in the building and cause them to be released into the air where they can be inhaled. Unfortunately, asbestos is not easily recognizable. It comes in different shapes, sizes, exterior coverings and colors. Only proper testing can determine if what you see is truly asbestos. Asbestos is often found as insulation around pipes and boilers or as reinforcement in floor tiles. If you see insulation that is in poor condition (ripped, peeling, etc), or floor tiles being removed for construction, you should ask school officials to tell you what health protections are in place or what actions will be taken. Specifically you should ask if the school contains asbestos and ask to see the asbestos management plan for the school (AHERA).

#### Are there laws about ASBESTOS?

Yes, but no exposure standards have been set for children.

There are federal, state and local laws that act to reduce the risk of asbestos exposure in schools. The Asbestos Hazard Emergency Response Act (AHERA) is a federal law administered by the USEPA (40 CFR Part 763). These regulations specifically discuss the management of ACM in schools. Asbestos does not have to be removed but must be managed in a safe manner. Every New York State school must have an AHERA report.

- AHERA requires that parents, guardians, and staff be notified annually about the existence of the asbestos management plan and its availability for inspection during normal business hours. This annual notification must also include a brief explanation of the school's asbestos activities. (For more information, see Appendix A for the New York State Elementary Schools Asbestos Guidebook for Schools and the Community).
- □ New York State regulations 12 NYCRR Part 56 and 10 NYCRR Part 73 address the removal or disturbance of asbestos from public places and the appropriate training required for people working with asbestos generally. OSHA has a regulation on asbestos (29 CFR 1910.1001) which protects employees from asbestos overexposure.
- The Asbestos Control Bureau enforces the New York State Labor Law Industrial Code Rule 56 (12 NYCRR 56). Any work that disturbs asbestos during renovation, construction or demolition of buildings is covered by Code Rule 56. Even removal of asbestos insulation from pipes to fix a leak would be something the Control Bureau could investigate. A major purpose of Code Rule 56 is protecting people in buildings. The Asbestos Code Rule 56 requires the licensing of contractors, certification of all persons working on asbestos projects, proper procedures for asbestos removal, filling of notifications of large asbestos projects and pre-demolition survey of buildings to identify any asbestos which may be in a building to make sure asbestos is handled safely.
- □ New York State regulations 8 NYCRR 155.5 require that all asbestos abatement projects comply with all applicable federal and state laws, including, but not limited to the New York State Department of Labor Industrial Code (12 NYCRR 56) (see above) and AHERA. The part 155.5 regulation also states that large and small asbestos projects as defined by 12 NYCRR 56 must not be performed which the building is occupied. Minor asbestos projects, however, involving the removal, disturbance, repair, enclosure or handling of 10 square feet or less of asbestos may be performed in unoccupied areas of an occupied building in accordance with all regulations.
- □ New York State regulations 8 NYCRR 155.6 require that School Facility Report Cards contain information on the status of the AHERA plan (see Appendix G School Facility Report Cards).

#### Could a parent find out if asbestos is an issue in the school?

Ask to see the school's AHERA report. For starters, questions about the report should be addressed to the school's asbestos designee. If your are refused the report, see Appendix D Your Right to Information for guidance on how to use the Freedom of Information Law (FOIL).

For more help see Appendix A Resources.

# Where is LEAD in school? How could LEAD exposure occur?

There are three main ways lead gets into the school environment. <sup>27-30</sup> Old lead-based paint can be under coats of newer, non-leaded paint, soil; drinking water can be contaminated; and lead can be present in instructional supplies.

Paint containing lead at a concentration greater than 0.06% by weight was banned for residential use in New York City in 1960 and throughout the rest of NYS and the U.S. in 1978, but some schools used old paint well after that date. If your school was built before 1978, it could very well have lead paint underneath newer paint. Even if your school has been painted since 1978, if the previous paint layers have not been properly removed, lead paint may be exposed through the chipping or peeling of the newer layers. Lead paint was used in New York City schools until the early 1980's. 31

Lead paint becomes dangerous when it begins to flake off and turn to dust. Paint in poor condition – chipping or peeling from damaged walls—poses the greatest health hazard. Any surfaces covered with lead-based paint that are subject to friction (floors, windows, cabinets) are likely to generate lead dust. Lead-based paint on interior and exterior windows is of particular concern because the repeated opening and closing of windows creates lead dust. Lead-based paint was used on both interior and exterior surfaces; so, in addition to exposure to chipping, flaking, or peeling paint and its resulting dust inside the school, deteriorating paint on the outside of the building can contaminate the soil along outside walls near air intakes and in play areas. Even paints used for rust-protection on metal such as railings may contain lead chromate. This is why occupant health protection during school repairs and renovations are so important, and why building maintenance is critical to health protection.

Lead can occur in **drinking water** from corrosion of lead solder and brass faucets and fixtures, as well as corrosion of lead service lines (estimated at 20% of public water systems). Tests may be required on water samples. Ask your school if regular water quality tests are conducted on school water supply lines and at the tap. If so, ask to see the results.

Lead could be in **school supplies** for projects such as jewelry-making, ceramic glazes, printing inks and type, and crayons. Also consider exposures in vocational education, such as lead solder in automobile radiators and lead acetate used in hair coloring in cosmetology.

# Why is LEAD harmful, especially for children?

Lead is harmful because it is a poison that can be absorbed by the body either through the lungs when it is breathed, or through the digestive system when it is swallowed and is carried to all organs of the body.  $^{27-30}$  When we inhale or eat lead dust or drink contaminated water, the lead is absorbed by our bodies. For lead that enters the digestive tract, an adult can absorb 10 - 15% of the lead, but a child can absorb 40 - 50%. Some people are more sensitive to lead exposure such as those with poor nutrition or iron or zinc deficiency. Lead serves no known purpose in the body and is therefore always considered as a contaminant.

Elevated blood lead levels have been associated with problems in virtually every body organ system, including neurological disorders. At high exposures, these effects can be permanent. These disorders in children include attention deficit, hyperactivity, aggressive and impulsive behavior, delinquency, reduced IQ, and mental retardation. Younger children are especially vulnerable to the harmful effects of lead.

#### Are there laws about LEAD?

Federal laws don't require schools specifically to test for lead in paint, soil, or dust.

- There are federal laws about lead in school drinking water. 42 United States Code (U.S.C.) 300j-24 and 42 U.S.C. 300j-25 are set up specifically to help schools identify lead problems in their water. Under 42 U.S.C. 300f, The Safe Drinking Water Act regulations contain the maximum contaminant level for lead is zero mg/L with an action level of 0.015 mg/L. Also, the Safe Drinking Water Act Amendments of 1986 prohibit the use of pipe, solder, or flux in public water systems that is not "lead-free"; solder may not contain more than 0.2 % lead; pipes and pipe fittings may not contain more than 8.0% lead. Further public education and supplemental monitoring on lead in drinking water are required under 10 NYCRR 5-1.44.
- The NYS Dept. of Education in 8 NYCRR 155.5 requires that any construction or maintenance operations in a school which will disturb lead-based paint will require abatement of those areas. Abatement must be done based upon protocols detailed in the "Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing" (US HUD, 1995). All areas scheduled for construction as well as areas of flaking and peeling paint must be tested for the presence of lead and abated or encapsulated in accordance with the US HUD Guidelines. 8 NYCRR 155.6 requires that the status of any required lead testing be included in the School Facility Report Cards (see Appendix G School Facility Report Cards).
- Otherwise, it is unusual for a school to be investigated for lead. It is important to know that since April 1993, NYS has mandatory blood lead testing of students under age 7 prior to enrollment in school. While this testing presumes the source of lead exposure is at home, as we have seen exposure can occur in school. The local health department inspector or risk assessor follows up on sources of lead for lead-poisoned children.
- The NYS Commissioner of Health has power to enforce the correction of paint conditions that could lead to lead poisoning (New York State Public Health Law Sec.1373). If the lead concentration on painted surfaces exceeds one milligram of lead per square centimeter of wall area (1 mg/cm²) and the inspection produces the conclusion that lead-painted surfaces must be abated, the students must be relocated or otherwise excluded from exposure and the abatement must be done by a licensed lead abatement contractor (licensed by USEPA).
- Also, there are regulations specific to **child care facilities** which are licensed by the State Department of Social Services to offer or provide day care services or child care and any public or private schools attended by children 6 years of age or younger (Part 67-2 Lead Poisoning Prevention and Control, Subchapter G of Chapter 88 of Title 10 (Health) of NYCRR). These regulations require environmental lead investigation and abatement of lead paint conditions.

## Could a parent find out if the school has a LEAD problem?

A parent can ask to see:

- Results of testing for lead in drinking water
- Results of any lead investigation done prior to the construction or remodeling work
- Results of any lead hazard assessment or inspection (if performed)
- School Facility Report Card

(See Appendix D Your Right to Information for guidance on using the Freedom of Information Law).

#### Is RADON dangerous?

Radon is a radioactive gas that can cause lung cancer. 32-35 The US EPA ranks indoor radon among the most serious environmental health problems facing us today. After smoking, it is the second leading cause of lung cancer in the United States. Over the course of your lifetime. Information on radon exposure has come principally from studies of underground miners; it is important to recognize that radon exposures in some homes have been as great as those in certain mines. An individual's risk of getting lung cancer from radon depends mostly on three factors: level of radon, duration of exposure, and his/her smoking habits.

It is important to note that no studies have examined whether or not a child has a child risk of developing lung cancer in adulthood after exposure to radon. It has yet to be determined whether the risks of lung cancer derived from studies of men who were occupationally exposed to radon in the underground mines could be applied to children. However, it is plausible that exposure to radon occurring before age 20 years might have greater effects than exposure at later ages, as this has been seen for radiation exposure in Japanese atomic bomb survivors. Children may be more sensitive than adults to radon exposure, since their lung cells are rapidly dividing, their lungs are smaller, and their breathing rate is faster.

#### Where would you look for RADON in a school?

Radon is a colorless, odorless, naturally occurring gas that seeps into buildings from the surrounding soil. It may be found in the ground or below ground level spaces of buildings. In some cases, well water may be a source of radon with exposure happening when the gas is released into the air when water is either aerated, running, or heated. Municipal water supplies are normally aerated, which releases radon gas from the water before it enters the building of the user.

Radon has been detected, at varying levels, in every county in New York with the exception of Richmond county (Staten Island).<sup>36</sup> The NYS Department of Health administers a continuous study of statewide radon levels classified by county and city (available below). The counties with the highest average basement radon concentrations are: Allegany, Chemung, Chenango, Cortland, Onondaga, Otsego, Steuben, Tioga, and Wyoming. However, even in an area with high average radon levels, a building may not necessarily have a radon problem due to its construction and ventilation which affect the ability of radon gas to accumulate.

Having your school tested for radon is simple and inexpensive. The USEPA has published guidance that is available free to schools throughout the country (See Appendix A Resources). There are several radon testing devices on the market:

Activated charcoal canister: least expensive and quickest method currently available; consists of a
filtered plastic container filled with charcoal. Radon in the air is captured on the charcoal and
can later be measured in the laboratory. Available from NYS Department of Health (See
Appendix A Resources). This is an inaccurate result because radon levels may vary daily and
seasonally, but can quickly indicate the presence of extremely high levels.

- Alpha-track-etch detector
- Continuous Working Level Monitor
- Radon Progeny Sampling Unit

Testing should be done by individuals registered with the National Environmental Health Association which lists mitigation contractors who are trained, and must agree to follow standards developed to ensure effective radon reduction. Radon exposure can be reduced by increasing ventilation and by reducing the seepage of radon to the building by:

- Sealing off cracks through which radon can enter foundations
- Creating negative pressure under the basement floor
- Prohibiting the use of building materials containing excessive radium

#### Are there laws about RADON in school buildings?

There are no laws, regulations or standards to protect adult or child health.

- □ No federal or state standards define the amount of radon that is safe. The US Congress has set a long-term goal that indoor radon levels be no more than outdoor levels; about 0.4 pCi/L of radon is normally found in the outside air. The US EPA recommends that all schools nationwide be tested for radon.<sup>32</sup> There is currently no state program to do that. To date, approximately 20% of the schools nationwide have done some testing. A nationwide survey of radon levels in schools estimates that nearly one in five has at least one schoolroom with a short-term radon level above the action level of 4 pCi/L (picocuries per liter) the level at which the US EPA recommends that schools take action to reduce the level. This level is based on a yearly average measurement. The USEPA action level figure was calculated for adults. However, this level has been set as guidance only. It is a recommended action level only and is not considered to be a health protection "standard." US EPA estimates that more than 70,000 schoolrooms in use today have high short-term radon levels.
- Under 8 NYCRR 155.5, school districts must take responsibility to be aware of the geological potential for high levels of radon and to test and mitigate as appropriate. The regulation provides schools with a referral to the New York State Department of Health Radon Measurement Database for information on how to meet this responsibility. Section 155.6 requires School Facility Report Cards must to contain the status of any required radon testing (see Appendix G School Facility Report Cards).

#### Could a parent find out if RADON is a problem in the school?

A parent can ask to see:

- Results of radon testing in school building's air
- Results of radon testing in drinking water

## CHAPTER 8: EXHAUST FUMES FROM IDLING VEHICLES

## Why are IDLING VEHICLES a problem?

Inhalation of the exhaust from engines burning either gasoline or diesel fuel involves exposure to some unburned fuel and to a variety of both gases and particles including 38-45:

COMPONENT IN EXHAUST	POTENTIAL ADVERSE HEALTH EFFECTS	
carbon monoxide	reduction in the oxygen-carrying capacity of the blood from carbon monoxide; producing headache flushing of the face, heart palpitations, dizziness, fatigue, breathlessness on moderate exertion	
nitric oxide	Methemoglobin formation and central nervous system effects	
nitrogen dioxide	pulmonary irritation	
sulfur oxides	Irritation of the mucous membranes and eyes	
hydrocarbons (such as ethylene, formaldehyde, methane, benzene, phenols, 1,3-butadiene, acrolein)	Irritation of the mucous membranes and eyes from phenol, formaldehyde, and acrolein	
Soot (particles)	It has been estimated that as many as 18,000 different substances can be adsorbed onto soot including compounds such as polynuclear aromatic hydrocarbons (PNAs) and polycyclic aromatic hydrocarbons (PAHs) known to cause cancer. There is also the increased lung burden from particulates causing impaired pulmonary function, decreased lung capacity, decreased diffusing capacity, decreased expiratory flow, pulmonary inflammation, increased mortality from infection, increased severity of infection	

## Why are IDLING VEHICLES a problem for children?

Due to the very small size of the soot particles in vehicle exhaust, the particles float in the air longer. Also, their large surface area can adsorb other gaseous emissions and carry them into deep regions of the respiratory system. Children are more sensitive than adults to chemical (including carcinogen) exposure, since their lung cells are rapidly dividing, their lungs are smaller, and their breathing rate is faster.

#### Can INDOOR AIR be affected by contaminants coming in from outside?

Good indoor air quality requires good quality incoming air. Diesel fumes and exhaust enter schools when buses and other vehicles idle near entrances, under open windows, or by air intakes. Make sure your school keeps idling time to a minimum and moves vehicle storage and repair, bus loading zones, and idling areas away from the school building.

#### Are there laws about IDLING VEHICLES?

There are no laws, regulations, or standards to protect adults or children.

- Regulations set by NYS Department of Environmental Conservation (Subpart 217-3 of Public Health Law par. 1271, 1276 and Environmental Conservation Law par. 15, 77), forbid the idling of a bus or truck for more than 5 consecutive minutes when the bus or truck is not in motion. Section 24-163 of the New York City Administrative Code specifically states that buses cannot leave their motors running for more than three minutes, and cannot leave them running at all when it is warmer than 40 degrees outside.
- With respect to school employees, the National Institute for Occupational Safety and Health (USDHHS/NIOSH), the research arm of OSHA, is currently recommending that whole diesel exhaust be regarded as a potential occupational carcinogen based upon findings of carcinogenic and tumorigenic responses in rats and mice. NIOSH does recommend that all available preventive efforts (including available engineering controls and work practices) be vigorously implemented to minimize the exposure of workers to diesel exhaust and that exposure be reduced to the lowest feasible concentration. The health effects to be prevented include lung cancer, respiratory system effects, and eye irritation. Clearly, children should not be exposed to diesel exhaust fumes.

#### CHAPTER 9: RENOVATION AND CONSTRUCTION

## Why are RENOVATION AND CONSTRUCTION dangerous?

Renovation and construction projects conducted while school is in session often present unnecessary risks to students and staff. Potential hazards associated with school construction from which construction workers are guaranteed protection but school occupants may not be include: lead contaminated debris, asbestos fibers, dust contaminated with lead/asbestos/molds; fumes from construction (heavy equipment, paints, varnishes or urethanes); fumes from new furnishings and equipment (copiers, carpets, new particle board or plywood); noise (jackhammers, power saws, bulldozers); risk of injury from moving equipment; improperly stored supplies; demolition and construction debris; failure to maintain fire safety barriers; access to the building by non-school workers; and other serious issues. School occupants at higher risk for health problems include all children, pregnant women, the elderly, and those with chronic illnesses or impaired immune systems.

## Are there laws about RENOVATION AND CONSTRUCTION in schools?

Yes. New York adopted new statewide regulations in 1999. Pre-notification of construction activities and other protective measures are also included in an Memorandum of Understanding between United Federation of Teachers and the New York City School Construction Authority.

- Under 8 NYCRR 155.5 "Uniform Safety Standards for School Construction and Maintenance Projects," the Board of Education of each school district and each Board of Cooperative Educational Services (BOCES) are required to ensure that all school building-level construction and maintenance plans, specifications, or other work in occupied facilities is in compliance with health and safety procedures. A brief list of requirements that must be taken is as follows, starting with pre-construction notification of parents, staff, and the community;
- Pre-construction testing and planning; plan for occupant health in bid specifications
- Investigation and response to complaints relating to health and safety
- Established procedures for involvement of the Health and Safety Committee (discussed in Appendix F Health and Safety Committees) in monitoring construction
- The District Emergency Plan must be updated to accommodate the construction process
- Fire drills must be held to familiarize students and staff with temporary and emergency exits
- Safety and security standards, including: safe storage, fences, locked gates, overhead protection, warning signs, separation of construction areas from occupied spaces
- Prevention of the passage of dust and contaminants into occupied parts of the building
- Fire and hazard prevention
- Noise control
- Control of chemical fumes, gases, dust and other contaminants
- Building materials or furnishings which "off-gas" chemical fumes or other contaminants must be aired out
- Asbestos and lead abatement protocols must be in compliance with state and federal law
- Testing and mitigation of radon must be conducted

• Post construction inspections must be conducted and an opportunity for a walk-through inspection by the **Health and Safety Committee** must be provided.

For more help see Appendix A Resources. For in-depth coverage of this issue, see Appendix B Healthy Schools/Healthy Kids Information and Referral Clearinghouse to order School Renovation and Construction: What you Need to Know to Protect Child and Adult Environmental Health.

## CHAPTER 10: CLEAN, STRUCTURALLY SOUND BUILDINGS

## Why are CRACKS in walls, floors, and ceilings dangerous?

Cracks and other weaknesses in buildings are far too common in schools today. The inherent danger in having cracks in walls is obvious: buildings should be solid, and building occupants should not have to worry about the ceiling falling down on them. A more subtle issue is the dust that results from broken walls. Dust and other small particles can make asthma and other breathing problems worse. Further, cracks in buildings provide openings through which pests can enter and find shelter to breed. Cracks may also be indicative of water damage and could serve as an opening for water/moisture to enter.

## Where should you look for STRUCTURAL PROBLEMS?

It is important to look for cracks not only on classroom walls, but on the ceiling and floor as well. Look inside the school building as well as at the exterior of the building. Cracks emerging from the building foundation and climbing up the outside walls can be cause for concern.

#### Are there laws about STRUCTURAL PROBLEMS in school buildings?

The New York State Education Law 409-d directs the Commissioner of Education to establish a school building safety program to determine the needs for repairs and reconstruction to maintain the structural integrity of school buildings. Under 8 NYCRR 155.4 "Uniform Code of Public School Building Inspections, Safety Rating and Monitoring," buildings must be assessed by a building condition survey once every 5 years, an annual fire safety inspection, and an annual visual inspection must be conducted in years in which no building condition survey is conducted. A building condition survey must be conducted for all occupied school buildings on or before November 15, 2000, and at least every 5 years thereafter. The survey must be conducted by a team that includes at least one licensed architect or engineer. The annual visual inspection must be conducted by a team composed of a person certified by the Department of State as a code enforcement official (or in the City of New York by a person certified by the NYC Building Department as a code enforcement official), the district director of facilities, and a member of the Health and Safety committee (see Appendix F Health and Safety Committees).

During the survey, inspection is done for movement, deterioration, structural failure, probable useful life, need for repair and maintenance, and need for replacement. The building elements to be inspected include:

- Site, utilities, paving, playgrounds, and play fields
- Roofing
- Exterior elements such as walls, doors, windows, fire escapes
- Structural elements
- Interiors, finishes doors, hardware
- Electrical systems, including lighting, communications and technology infrastructure and cables
- Plumbing

- Heating and cooling systems and their control systems
- Ventilation systems
- Air conditioning systems and their control systems
- Special construction such as stairs, elevators, escalators, and swimming pools
- Fire protection and security systems
- Environmental features: appearance, cleanliness, acoustics, lighting quality, thermal comfort, humidity, ventilation, and space adequacy

If the visual inspection discloses evidence of possible defects, the school board must retain a licensed architect or professional engineer to submit a written report to the Commissioner. The architect or engineer preparing the 5-year survey prepares a separate form to request building financial aid of the Commissioner of Education. Annual visual inspection reports are available to the public.

Additionally, the Rules of New York City require periodic inspections of public buildings to detect fracturing and splitting in exterior walls, cracking of masonry and brick work in brick-faced buildings, or water entry into the walls. (Building Code, RCNY 32.03(b)(2)(v)).

### Could a parent find out about the school's STRUCTURAL PROBLEMS?

A parent can ask to see the results of the Building Condition Survey and Annual Visual Inspection. If your request is denied, see Appendix D Your Right to Information to use the Freedom of Information Law (FOIL).

### Why is a HOT BUILDING a problem for children?

A significant difference between children and adults is their differing ability to regulate body temperature. Children are at a disadvantage in a hot environment because they are less able to cool themselves. While children do have a large surface area-to-volume ratio which makes it seem like they could keep themselves cooler, they have insufficient blood volume to bring the heat to the skin surface efficiently. Also, children's sweat glands produce less sweat per gland than adults. These factors are of concern in school both during sedentary tasks and exercise. They suggest that a child's performance would be adversely affected more than an adult's under the same hot temperature conditions.

Schools need to be heated during the winter for the obvious reason of keeping children and school employees warm, heat from overheating a building or from hot weather can bring with it some safety risks. School classrooms that are always too hot could also affect learning. Under heat stress conditions, people tend to experience discomfort, increased irritability, sluggish decision-making, increased numbers of errors, and decreased quality of work. 46,47

#### When is a building TOO HOT?

The easiest way to tell in terms of whether or not your school is safely heated is to check the temperature inside of the school or to ask your child. If you are a school employee, the answer will be obvious. If your child tells you she or he is hot or is wearing a short sleeve shirt in the middle of winter, that may be an indication that the school is too hot. Is the temperature appropriate considering the outside temperature?

For evaluating temperature and humidity in a building, the ASHRAE Standard 55-1992 on "Thermal environmental conditions for human occupancy" (with addendum 55a-1995)<sup>48</sup> is recommended. This standard has charts recommending acceptable ranges of temperature and humidity for people in typical summer and winter clothing during light, primarily sedentary activity. The ranges are based upon a 10% dissatisfaction criterion (thus 10% of the occupants may be dissatisfied with it). For infants, certain elderly people, individuals on certain medications, and individuals who are physically disabled, the outer limits of the ranges may need adjustment. The ranges are from 68 - 76 degrees F in winter at a humidity range of 30 - 60%; 73 - 81 degrees F in summer at a humidity range of 20 - 60%. Temperature and humidity usually need to be addressed together since temperature control for the human body involves the evaporation of moisture from the skin.

These ranges are recommended for adults sitting, doing light hand work for 45-60 minutes at a time; similar effort is not recommended when the temperature exceeds 90 degrees F (if acclimated to hot temperatures) and 88 degrees F (if not acclimated).<sup>47</sup> Recommended temperatures would be lower for more vigorous activity than sitting. It may also be appropriate to:

- consider the need for cooling the building to provide an environment conducive to learning or
- consider when the building is too hot for classes to be conducted.

It is also important in a hot environment to make sure that children get sufficient hydration. Drinking 5-7 ounces of liquid every 15-20 minutes may be necessary; just drinking enough to relieve thirst is usually insufficient.

#### Are there laws about hot temperatures in schools?

There are no laws, regulations, or standards to protect children.

- NYS Department of Education regulations (8 NYCRR 155) require that controlled heating and ventilation shall be provided and maintained in all areas to produce conditions suitable for the varying activities that take place in the various areas by systems providing efficient consumption of energy. Each teaching space must be provided with a controlled supply of fresh air and shall have sufficient air changes to produce healthful conditions and avoid odors or build-up or concentrations of toxic substances or dust particles. When teaching spaces cannot be provided with adequate thermal environment by ventilation, provision for cooling may be required.
- □ Under 12 NYCRR parts 4 and 14 the State Department of Labor requires boiler inspections every two years.

## CHAPTER 12: APPROPRIATE CLASSROOMS (Size, Lighting, Ergonomics, Noise)

## Why are APPROPRIATE CLASSROOMS important in terms of health and safety?

vercrowded classrooms, or classes conducted in non-appropriate rooms, such as auditoriums, closets, bathrooms, hallways and basements violate fire safety codes and can affect how well children learn. Substandard environmental conditions can make it difficult to learn.

It can also be dangerous for children to learn in these settings. **Overcrowding** promotes unsanitary, unsafe conditions, and can contribute to polluted indoor air. It is easy for illnesses to spread in tight, enclosed rooms—especially if the room is not well ventilated.

Children often don't have access to proper equipment in non-traditional and overcrowded classrooms. Working at improperly-sized desks and chairs can cause injury to the back and to the neck. Children, like adults should work at proper computer workstations to minimize the risk of injuries. However, it is typical to find children working at desks and keyboards which are too high or chairs of the wrong shape so that their wrists, heads, necks, and backs are at angles which are more likely to cause injury

The issue of **ergonomics** for children has emerged as a result of the realization that use of computers and heavy backpacks can take a toll on children's bodies. Schools are urged to prevent injuries from computer use by providing safe work stations and teaching students good body position.<sup>52</sup>

It is also important for classrooms to have adequate **lighting**. Poor lighting leads to eyestrain that can result in a permanent injury requiring a child to use corrective lenses. Recently, studies on the use of "daylighting" or "full-spectrum lighting" have emerged with impressive results. One such study showed that students in full-spectrum light were healthier and attended school more days per year; libraries with better light resulted in less noise levels; students showed more positive moods; and because of the additional Vitamin D received by full-spectrum light, students had 9 times less dental decay and grew in height more than students in average light.<sup>53</sup>

## How can you tell if your child has an APPROPRIATE CLASSROOM?

This is easy. Ask your child or go look. Is your child taught in a traditional classroom or in a hall closet? How many children are in your child's class? What is the rated capacity of the building and how many people are actually in the building at one time? How big is the room? Are there chairs and desks for every child? Are children required to share desks? Are the desks squeezed into a room too small? Is the room in the basement? Does the room have windows that open and close, unit ventilators, air diffusers or vents of any kind? Are the windows painted or nailed shut? Is there adequate storage?

#### How would I know if the classroom is TOO NOISY?

Is it difficult for your child to hear the teacher (yet your child has no hearing problems of a medical nature)? Does the teacher or the students have to shout to be heard over background noise?

Noise levels can be measured – how then should se interpret the results? There is a difference between how much noise can produce damage, how much can produce stress in teachers and students, and how much can interfere with the learning experience. Noise standards intended for employees attempt to define the maximum permissible noise levels during given periods of time such that, if not exceeded, would result in acceptable small changes in the hearing levels of exposed employees over a working lifetime. For an 8-hour day, OSHA sets a maximum of 90 dB of noise, with louder noises allowed for lesser amounts of time. However, the noise represented by 90 dB is comparable to working while listening to a subway or working in a printing press plant.<sup>54</sup> If a class sounded like it was being conducted under these conditions, it is unlikely that much learning would occur; teachers and students alike might even experience some stress, and perhaps headaches and high blood pressure as well. Some other comparisons:

Overall sound pressure level (dB)	Example
0	Threshold of hearing
20	Studio for sound pictures
30	Soft whisper at 5 feet distant
40	Quiet office
50	Average residence; large office
60	Conversational speech at 3 feet distant
70	Freight train at 100 feet distant
80	Very noisy restaurant

As noted below, the NYS Department of Education regulations at 8 NYCRR 155.5 require that during a construction project, the noise in occupied spaces is to be kept below 60 dB. To encourage a meaningful learning experience, the background noise of a classroom would probably need to be less than 60 dB.

#### Are there laws about APPROPRIATE CLASSROOMS?

- □ NYS Department of Education regulations found in 8 NYCRR 155 require:
- Adequate levels of illumination for the tasks being performed; natural and artificial lighting of balanced brightness and free from objectionable glare
- Teaching areas with windows permitting a view of the exterior
- Teaching spaces properly proportioned as to size and shape of room including ceiling height
- A number of New York City laws address classroom conditions. NYC Health Code Section 49.07 guarantees that there be 15 square feet of floor space per child. NYC Health Code Section 45.11 sets standards for the amount of lighting that is needed in each classroom. Section 45.11 also provides that classes cannot be conducted in the cellars of schools, and that schools cannot be located in factories or other business buildings. Sections 49.09 and 45.13 of the Health Code stress the need for appropriately sized equipment for children.

NYS Department of Education regulations found in 8 NYCRR 155.5 require that during a construction project, the noise in occupied spaces is to be kept below 60 dB.

See Neglected Buildings, Damaged Health: A Snapshot of New York City Public School Environmental Conditions, (Advocates for Children of New York, Inc. and the Healthy Schools Network, Inc.) See Appendix B Healthy Schools/Healthy Kids Information and Referral Clearinghouse for information on how to order this report.

## CHAPTER 13: FIRE HAZARDS

All schools must have interior fire alarms that are tested regularly and are connected to the fire department. If schools are not equipped with working alarms, it takes people longer to become aware of an actual fire and the danger is increased. If the alarms are not connected to the fire department, the department will be unable to respond instantaneously.

Schools must hold regular fire drills. Without fire drills, no one would know what to do if a fire were to break out, risk of a serious injury would be increased. Fire exits must be maintained even during major renovations.

Explosive and flammable supplies in vocational education, art rooms, custodial supply, or chemistry labs (see Chapter 2 Hazardous Chemicals for the OSHA Laboratory Standard) must be stored in a safe manner so as to limit the possibility of an explosion. When flammable items are stored in a poorly ventilated room and in proximity to other items that they may react with, the risk of a fire breaking out is much greater than normal. Paints should be nonflammable or stored in well-ventilated rooms that have fire extinguishers. Eliminating as many flammable and combustible items from school supplies is an environmentally healthy and safe practice.

Computers in schools are an emerging fire safety problem. School wiring may not be adequate; fumes from burning plastic can be highly toxic.

#### Are there laws about FIRE HAZARDS in schools?

Yes, but schools get a Certificate of Occupancy (CO) from the State Education Department based on self-reporting that violations have been corrected. Temporary Certificates of Occupancy (TCO) are given to schools in the worst condition with active plans for remediation. Always ask to see the most current CO or TCO.

- New York State Education Law 807 mandates fire drills in schools. Education Law 807a requires that schools file fire safety reports for initial occupancy of new buildings and additions and temporary quarters and for the annual fire/safety inspection. New York State Education regulations found in 8 NYCRR 155.7 and 155.8 require that fire and building safety inspections be conducted at least annually. A certificate of occupancy is issued for a school pursuant to its conformance to the standards set in these regulations. A temporary certificate of occupancy can be issued if the building is suitable for occupancy and the school's board of education has a schedule for the correction of nonconformances. These regulations specify items such as:
- Two exits from each floor occupied by pupils, including basements
- · Keeping corridors and exitways clear and free of obstructions
- Sizes, designs, and accessibility of emergency egress windows
- Maximum occupancy for places of assembly
- Exits from courtyards
- Hardware for doors to be opened within a space without the use of a key
- Smoke and fire control

- Fire extinguishers
- Fire-resistant floors, walls, doors, ceilings, and roofs
- Exit signs
- Emergency lighting
- Schools now self-report whether or not they pass fire inspections as part of the Annual Fire Safety Inspection required under 8 NYCRR 155.8. There is no independent verification of fire safety. Schools that are significantly overcrowded, say 150% of capacity, are unlikely to pass fire safety inspection since they literally cannot evacuate the building in time.
- □ The Rules of the City of New York provide for the installation of fire alarms in all schools, and also identify flammable materials and the manner in which they should be stored (2 RCNY 8.01, 3 RCNY 34.01, 3 RCNY 22.01 and 3 RCNY 28-02.)

The State Education Department has available, the Manual for Public School Facilities Fire Prevention and Fire Inspections which provides more information on this issue.

#### CHAPTER 14: USABLE and SANITARY BATHROOMS

#### What should a USABLE BATHROOM look like?

Usable, clean bathrooms are basic to public health. When a bathroom has broken toilets or urinals it is unusable. If the faucets don't work and there's no soap, it is unsanitary. Stalls lacking doors, overflowing toilets, and the absence of toilet paper all are indicators of an unusable or unsanitary bathroom. There should be an adequate number of bathrooms in the school given the number of children that attend. Separate boys' and girls' bathrooms should exist as well. Usable and sanitary bathrooms should be adequate in number, well stocked with toilet paper and other necessities, clean, and well maintained. In addition there should be bathrooms that are barrier-free so that children with disabilities are accommodated. Unusable, unsanitary bathrooms are a hidden cause of some school absenteeism.

In order to find out if your child's school has usable and sanitary bathrooms, either ask your child what the bathroom is like or go to the school and see for yourself. If you're a school employee, you should know from personal experience whether or not the school's bathrooms are usable and sanitary.

#### Are there laws about USABLE and SANITARY Bathrooms?

There is State Education law on toilets and restroom facilities for children. State regulation 8 NYCRR 155.1 says that bathrooms should have an adequate number of fixtures and that sanitary sewers shall be connected to a municipal sewage system or an approved on site disposal system. State regulation 8 NYCRR 155.7 requires toilet rooms for boys and girls with flush toilets and wash sinks which are connected to an adequate water supply under pressure.

There are several sections of the New York City Health Code that set standards for bathrooms in schools. Section 49.07 says that all schools should have at least two wash basins (sinks), and that schools with more than 300 children should have at least six wash basins, and an additional basin for every 100 additional children. Section 45.11 says that there should be separate bathrooms for boys and girls over six years of age and that toilets in these bathrooms must be separated by a partition that is at least five feet six inches high. Section 45.11 also says that wash basins should have both hot and cold water. For new schools, section 45.11 provides that there should be separate bathrooms for school employees. Section 45.13 states that all bathrooms should be supplied with soap and either paper towels or hand dryers. According to 45.13, these items should be near the sinks. Bathroom stalls are not required to have doors.

#### CHAPTER 15: SAFE PLAYGROUNDS

#### Why is PLAYGROUND safety important?

Each year, in this country alone, over 200,000 children are injured on playgrounds.<sup>55</sup> It is important to monitor playgrounds so that the number of injuries can be decreased. If playgrounds are not surveyed for various hazards, the number and severity of playground related injuries can increase.

#### How can you recognize a dangerous PLAYGROUND?

There are a number of issues to consider when measuring how safe a playground is.

- First, it is important that the playground equipment is <u>age appropriate</u>. Consider the size and difficulty of certain playground equipment. Young children have different physical abilities than older children and should not be playing on equipment that is meant for older children (such as horizontal ladders).
- Second, look at the <u>surfacing</u> in the playground. The surface should break falls. Loose-fill or synthetic material such as wood chips or rubber matting is preferred. Cement is not acceptable because it does not have any give when a person falls on it. Dirt can be a problem because it can freeze in the winter.
- <u>Chemical hazards</u> may be an issue on playgrounds from pesticides sprayed on directly on the grass or grounds or from pesticides sprayed around buildings that can leach onto the playground. Also, if the play structures are constructed with pressure treated wood, there may be arsenic contamination on the playground.
- Third, playgrounds should always be <u>supervised</u>. Children should not be permitted to play on the equipment without an adult there to monitor their activities. You should ask at the school to make sure that a school employee is with the children at all times when they go out to the playground. If you are a school employee this should be easy to monitor.
- Last, take a visual survey of the playground and look at how <u>well maintained</u> it is. Look to see if there is any broken equipment, how close the playground is to traffic, and if there is any trash on the premises.
- Playground areas and ball fields should be separated and fenced to prevent children from wandering into roads, ditches, etc.

## Are there laws pertaining to PLAYGROUNDS and PLAYGROUND SAFETY?

- Yes. State Regulation 8 NYCRR 155.1 sets the minimum size of a school site for situation of the building and development of the grounds for outdoor educational program and related activities. It sets a minimum of three acres plus one acre for each 100 pupils or fraction thereof for an elementary school's outside recreation area and ten acres plus one acre for each 100 pupils or fraction thereof for a high school's. State regulation 9 NYCRR 3.83 requires that playgrounds be available and utilizable by all children, able-bodied and disabled. The Americans with Disabilities Act (ADA) requires playgrounds to be accessible to nonambulatory individuals.
- New York State Education Law 409-d directs the Commissioner of Education to establish a

school building safety program to determine the needs for repairs and reconstruction to maintain the structural integrity of school buildings. In 8 NYCRR 155.4 "Uniform Code of Public School Building Inspections, Safety Rating and Monitoring," buildings must be assessed by a building condition survey once every 5 years and an annual visual inspection to be conducted in years in which no building condition survey is conducted. During the survey, inspection is done for movement, deterioration, structural failure, probable useful life, need for repair and maintenance, and need for replacement. The building elements to be inspected include playgrounds and play fields.

Children in school should have access to a playground; this is a right protected by New York City Health Code, which states that children cannot be kept in school for more than five hours without being given a recreation period during which the outdoor play space should be used whenever the weather permits. New York State Education Law Section 2556(5) mandates that no school can be constructed in New York City without being attached to an open-air playground. For the City of New York, 24 RCNY 45.11 and 45.13 outline the need for outdoor play areas and the type of equipment to which children should have access. New York City Health Code Section 49.13 says that children cannot be kept at school for more than five hours without being given a recreation period during which the outdoor play space should be used whenever the weather permits. New York City Health Code Section 45.11 says that that outdoor play area should be, "safe, clean, easily accessible adequate in size and suitable for the needs of the children." It also says that a shady area should be available during the summer months. Section 45.13 of the Health Code says that sufficient play equipment should be provided and that the provided equipment should be appropriate to the stage of development of the children. It also says that the equipment should be clean, readily washable, in good repair, and free from hazards.

#### CHAPTER 16: EMERGENCY MANAGEMENT

#### How does your school handle an EMERGENCY or crisis?

Schools are required to have a written response plan to handle at least the basic types of crises which are most typical of a school setting, in addition to fire safety, incidents such as:

- Chemical spills or related accidents
- Industrial or environmental chemical releases to the air, water, or soil of or near the school
- Bomb threats or other school violence
- Natural disasters (flood, wind, tornado, hurricane, earthquake)
- Building structural failure or equipment failure (including gas leaks or sewer backups)
- Health concerns such as outbreaks of disease or food-borne illness
- Acts of violence including verbal threats and assaults

There are a number of publications on crisis intervention strategies. 56-62

#### Are there laws about EMERGENCY MANAGEMENT PLANS in schools?

□ New York State Education Law in 8 NYCRR Section 155.17 requires the preparation of school emergency management plans. The plan must consider disasters such as chemical accident, air contamination, and water contamination (as well as fire, flood, earthquake, hurricane, tornado, high water, landslide, mudslide, windstorm, wave action, epidemic, drought, explosion, war or civil disturbance). The plan is to be coordinated with similar emergency planning at the municipal, county and state levels.

Each district superintendent, during a local or State emergency, shall act as the chief communication liaison for all educational agencies within the supervisory district territorial limits. The superintendent of schools in the cities of Buffalo, Rochester, Syracuse and Yonkers, during a local or State emergency, shall act as the chief communication liaison for all educational agencies located within the city district.

A drill must be conducted at least once every school year to test its emergency plan, including the usefulness of the communications and transportation system during emergencies. Drills are to be conducted where possible in cooperation with local county emergency preparedness plan officials. Parents must be notified at least one week prior to the drill.

School emergency management plans must be update annually by October 1st of each succeeding school year.

On July 25, 2000, Governor Pataki signed the "Safe Schools Against Violence In Education" Act (S.B. 8236) which takes effect on November 1, 2000. This Act: requires schools to adopt codes of conduct and file them with the NYS Department of Education; report violent incidents to the NYS Commissioner of Education; work with local law enforcement agencies on emergency response plans; allows teacher to remove violent or disruptive students from the classroom; makes it a felony to injure a teacher or other school employee; requires fingerprinting and background checks on new

teachers and other school employees; defines a "violent pupil" as one who commits an act of violence upon a teacher, administrator, or other school employee (but not another student) or who possesses, while on school district property, a gun, knife, explosive or incendiary bomb, or other dangerous instrument capable of causing physical injury or death.

#### Does your school have an EMERGENCY RESPONSE PLAN to deal with crises?

Developing a crisis response plan begins with the formation of a crisis response team. To ensure a wide range of points of view, team members should include: representatives from upper levels of administration and the teacher and employee unions, human resources, security, health and safety, and legal. The team then evaluates your school's vulnerability to a variety of crises and develops a crisis response strategy.

#### What should an EMERGENCY MANAGEMENT PLAN contain?

Examples of the kinds of things the plan should deal with are: who is in charge if a crisis occurs, how can this person be accessed; what will be the school's internal and external communication plan; what training should occur; how to learn from a crisis and evaluate emergency response procedures; and more.

#### Can a parent see the school's EMERGENCY MANAGEMENT PLAN?

New York State Education Law in 8 NYCRR Section 155.17 requires that a copy of the school's emergency management plan be available in each school district for inspection by the public. If your district's plan is not available or they refuse to give it to you, see Appendix D Your Right to Information on how to use the Freedom of Information Law. Bomb threat information in the emergency plan is exempt from the law and therefore confidential.

#### APPENDIX A: RESOURCES

The following listings are for government agencies, organizations, unions and other sources anyone can call for help with an environmental problem at school.

#### GENERAL REFERENCES: PARENTS AND OTHERS

Your school's Principal and or Superintendent, Director of Buildings and Grounds, or Head  Custodian:
Your local school district Health & Safety Committee representative:
New York State Education Department/Office of Facilities Management 518-474-3906
New York State Department of Health/Environmental Health Infoline: 1-800-458-1158 x 2-7810
NYC Department of Health, Bureau of Environmental Investigation: 212-442-3372 (will investigate situation)
NYS Department of Environmental Conservation (See Appendix J NY State Department of Environmental Conservation Regional Offices).

NY City Board of Education, Office of Environmental Health and Safety 718-391-6475 (Call the school's Head Custodian or Principal, or Superintendent of Buildings and Grounds before calling this office so that you can be sure that the problem is not one he or she can handle. If you are having an air quality problem at your school, ask someone to call this office and they will investigate.)

NY City Board of Education, Office of School Facilities, Chief Executives Office 718-391-6466

#### ENVIRONMENTAL HEALTH INFORMATION FOR PEDIATRICIANS

<u>Pediatricians</u> who are members of the *American Academy of Pediatrics (AAP)* may call *AAP* and request a free consultation from environmental health clinicians on cases where exposures to lead, mold, pesticides, asbestos, and other hazards are suspected of causing health problems.

<u>Primary health care providers</u> may call the federally-designated Pediatric Environmental Health Specialty Units for a referral or help with a site-specific concern.

The Academy of Pediatrics' Committee on Environmental Health published "The Green Guide" to Pediatric Environmental Health, 1999. Available by calling: 847-228-5005.

For more information, call the Healthy Schools Network at 518-462-0632. Also, ask for our Sample Letter for Physicians to request educational access/accommodation at school for chronically ill or disabled children.

## GENERAL REFERENCES FOR SCHOOL PERSONNEL

Your union health and safety officer or President:
New York State Department of Labor, Division of Safety & Health, Public Employee Safety and Health (PESH) Bureau (consult phone directory for nearest office)
New York State private school employees can call the local office of the Occupational Safety and Health Administration (OSHA)
New York City Board of Education, Office of Occupational Health and Safety 718-935-2319
New York State Occupational Health Clinic Network (consult phone directory for nearest office)

#### REFERENCES BY TOPIC

#### INDOOR AIR QUALITY

US EPA Indoor Air Quality Information Clearinghouse (LAQ INFO): 1-800-438-4318, P.O. Box 37133, Washington D.C. 20013-7133, fax: 301-588-3408. The "Tools for Schools" Action Kit or the "Building Air Quality" manual, write the Superintendent of Documents, P.O. Box 371954, Pittsburgh, PA 15250-7954; phone orders at 202-512-1800, fax order at 202-512-2250. Kits are item #055-000-00503-6.

#### HAZARDOUS CHEMICALS

Your County Health Department\_\_\_\_\_

New York State Department of Health, Toxiciology Assessment Section, 518-402-7800.

New York State Department of Environmental Conservation, see Appendix J for regional office phone numbers).

#### PESTS AND PESTICIDES

New York State Department of Environmental Conservation, Pesticide Management Bureau, 50 Wolf Road, Albany NY 12233, 518-457-7842. (Certifies pesticide applicators and regulates pesticides used in New York State).

New York State Department of Health, Toxiciology Assessment Section, 518-402-7800.

New York State Pesticide Poisoning Registry, 1-800-322-6850- all human pesticide poisonings must be reported to this registry.

New York Coalition for Alternatives to Pesticides 518-426-8246

USEPA. Office of Pesticide Programs. "Pest control in the school environment: adopting integrated pest management." Publication No. 735-F-93-012. 202-260-7751. http://www.epa.gov

USEPA Pesticide Publications Hotline 703-305-5805

National Pesticides Telecommunications Network 1-800-858-PEST for 24-hour information.

Beyond Pesticides/National Coalition Against Misuse of Pesticides, 202-543-5450, www.beyondpesticides.org

#### MOLD

Your County Health Department		
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NY State Department of Health, 518-402-7800.

US Environmental Protection Agency (See <a href="http://www.epa.gov/iaq">http://www.epa.gov/iaq</a> for information about mold guidelines for school building managers).

#### **ASBESTOS**

#### If no AHERA report is available call:

New York State Education Department/Office Of Facilities Management 518-474-3906 (collects AHERA for all schools in the state). See also New York State Elementary Schools Asbestos Guidebook for Schools and the Community.

NYS Department of Environmental Conservation (for disposal of hazardous waste) see Appendix J for regional office phone numbers.

NYC Department of Health, Bureau of Environmental Investigation: 212-442-3372 (will investigate).

US Environmental Protection Agency (enforces AHERA nationally) Oversees federal asbestos regulation for public and private elementary and secondary schools. Provides general asbestos information and notification of asbestos disturbance during building renovation or demolition.

National Emission Standard for Hazardous Air Pollutants Program US EPA Region II
Air Compliance Branch
290 Broadway
New York, NY 10007
Tel: 212-637-4042
Asbestos Hotline 202-554-1404

ASBESTOS CONTROL BUREAU DISTRICT OFFICES New York State Department of Labor DOSH-Asbestos Control Bureau Room 405 65 Court Street Buffalo, NY 14202 (716) 847-7601

New York State Department of Labor DOSH-Asbestos Control Bureau Room 401 450 South Salina Street Syracuse, NY 13202 (315) 479-3215

New York State Department of Labor DOSH-Asbestos Control Bureau & Program Manager Room 157 -Building #12, State Campus Albany, NY 12240 (518) 457-2072

New York State Department of Labor DOSH-Asbestos Control Bureau P.O. Box 683, Mail Stop #75 New York, NY 10014-0683 (212) 352-6109

#### LEAD

NYS Department of Health, Bureau of Toxic Substances 1-800-458-1158

US Environmental Protection Agency (enforces lead abatement regulations; also maintains and updates lists of licensed trainers, laboratories, and abatement firms):

Toxic Substances Program
Environmental Protection Agency
Mail Code MS 500. Building 5
2890 Woodbridge Avenue
Edison, NJ 08837
732-321-6671

Drinking Water Hotline (can help locate a lab to test water), 1-800-426-4791

National Lead Information Center 800-424-LEAD

National Lead Information Center hotline 1-800-LEAD FYI

(The National Lead Information Center is operated by the National Safety Council with funding

from the US EPA, US Centers for Disease Control, and US Housing and Urban Development)

US HUD/Office of Lead Hazard Control. Washington, D. C. 20410-0000. 202-755-1785 Ext. 104. Order from them the manual on "Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing." This manual provides guidance on lead abatement methods and protection of building occupants during abatement.

Mount Sinai-Irving J. Selikoff Occupational Health Chinical Center, Lead in Construction Program, P.O. Box 1058, 1 Gustave L. Levy Place, NY NY 10029, 212-241-2903.

Regional Lead Poisoning Prevention Resource Center, Montefiore Medical Center, 111 East 210<sup>th</sup> Street, Moses 401, Bronz, NY 718-920-5016.

New York City Department of Health, Environmental and Occupational Epidemiology Unit, 125 Worth Street, NY, NY 10013, 212-788-4290.

Lead Poisoning Prevention Program, Box 500, 5 Worth Street, NY, NY 10013, 212-334-7709 (for children.)

#### RADON

New York State Department of Health/Radon Hotline

US Environmental Protection Agency: general information on radon available at http://www.epa.gov/iaq/radon/

This website will provide a list of state contacts on radon. The contact can provide a list of contractors in the "proficiency program" which are eligible for conducting radon measurement and mitigation. Also, to obtain a copy of the study of statewide radon levels classified by county and city, ask for the "Gazetteer" code report. For information on charcoal canisters, alpha-track-etch detectors, or a list of radon-in-water testing contractors. (While testers are available at a small charge for NYS homeowners, they are not available for schools unless under a special federal grant.)

National Environmental Health Association 1-800-269-4174 (lists certified individuals to do measurement, mitigation, and testing laboratories) at <a href="http://www.NEHA.org">http://www.NEHA.org</a>

National Radon Information Hotline 1-800-SOS-RADON (1-800-767-7236)

USEPA Drinking Water Hotline 1-800-426-4791 or at http://www.epa.gov/safewater/

#### EXHAUST FUMES FROM IDLING VEHICLES

New York State Department of Health/Environmental Health Infoline: 1-800-458-1158 x 2-7810

NYS Department of Environmental Conservation 518-485-8913

NYC Department of Environmental Protection (DEP) air quality unit: 718-337-4357

NYC Board of Education, Office of Transportation Services: 718-392-8855 (for idling buses causing air problems)

#### RENOVATION AND CONSTRUCTION

Your local school district Health and Safety Committee Representative:

New York State Department of Education/Office of Facilities Planning 518-474-3906

NYC Board of Education, Office of Environmental Health and Safety: 718-391-6475 (They will investigate and take air quality samples if you are concerned about dust.)

NYC School Construction Authority, Facilities Inspection Division: 718-472-8319 (if the school is currently under construction or renovation) or the School Construction Authority General Complaints number: 718-472-8052

#### STRUCTURALLY SOUND BUILDINGS

NYC Board of Education, Office of Environmental Health and Safety: 718-391-6475 (Contact your custodian before contacting this office so that you can be sure that the problem is not one the custodian can handle. They will investigate and take air quality samples if you are concerned about dust.)

NYC School Construction Authority, Facilities Inspection Division: 718-472-8319 (if the school is currently under construction or renovation) or the School Construction Authority General Complaints number. 718-472-8052 (for construction/renovation issues)

#### HEAT

ASHRAE standards are available from American Society of Heating, Refrigerating, and Air-Conditioning Engineers, Inc., 1791 Tullie Circle, NE., Atlanta, GA 30329. 404-321-5478 (fax)

APPROPRIATE CLASSROOMS (Size, Noise, Lighting, Ergonomics)

See general reference numbers above.

#### FIRE HAZARDS/INSPECTIONS

Your local fire department	

New York State Education Department/Office of Facilities Planning 518-474-3906. Ask about the Manual for Public School Facilities Fire Prevention and Fire Inspections.

New York City Fire Department Inspection Unit (empowered to conduct safety inspections of buildings to determine whether any conditions are present which violate the City Fire Code or create a fire safety hazard; can order correction of any such violation)

New York City Fire Department Inspection Unit 250 Livingston Street Brooklyn, NY 11201

NYC Department of Buildings (can inspect construction work, machinery and equipment; can order a dangerous condition that is "detrimental to life or health" to be fixed, or can cause the building to be vacated. Detrimental conditions include "the overcrowding of persons therein, defects in the construction, or deficiencies in fire alarm, or fire extinguishing equipment or fire escape equipment." NYC Admin Code 26-127, 26-216, 26-217, 26-219) write at:

City Department of Buildings

60 Hudson Street

New York, NY 10013

Tel: 212-312-8000

Complaint Lines:

Bronx

718-579-6906

Brooklyn

718-802-3681

Manhattan

212-312-8529

Queens

718-520-3402

Staten Island 718-816-2211

#### USABLE AND SANITARY BATHROOMS

Your local city or county Department of Health

NYC Department of Health/General Complaints Hotline: 212-442-9666.

#### SAFE PLAYGROUNDS

New York State Education Department/Office of Facilities Planning "School Site Standards" 518-474-3906

NYC Office of School Facilities, Chief Executives Office: 718-391-6466

Some playgrounds are maintained jointly between the Board of Education and the New York City Parks Department. If your playground is one of these, than you should contact the Parks Department in addition to contacting the Office of School Facilities.

The US Consumer Product Safety Commission has guidelines for playground safety. See www.cpsc.gov

#### EMERGENCY MANAGEMENT

New York State Education Department/Office Of Facilities Management 518-474-3906

## APPENDIX B: HEALTHY SCHOOLS- HEALTHY KIDS INFORMATION AND REFERRAL CLEARINGHOUSE



## HEALTHY SCHOOLS NETWORK, INC.

773 Madison Avenue \* Albany, NY 12210 \* www.healthyschools.org
Tel: 518-462-0632 \* Fax: 518-462-0433

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Please send payment to Healthy Schools Network at the above address

# APPENDIX C: ACCEPTABLE INDOOR AIR QUALITY and EXAMPLES OF TOXIC & HAZARDOUS PRODUCTS USED IN NY SCHOOLS

#### Acceptable Indoor Air Quality

The standards recommended by ASHRAE, the American Society of Heating, Refrigerating, and Air Conditioning Engineers, are set by industry without the input of public health professionals. These recommended professional standards are typically used by architects and engineers to design buildings and are incorporated into building codes by state agencies. The ASHRAE Standard 62-1999, Ventilation for Acceptable Indoor Air Quality recommends ventilation needs in terms of the amount of the cubic feet per minute per person (cfm/person) of fresh air for rooms and buildings depending upon their occupancy and usage. This standard recommends ventilation needs for classrooms, libraries, and music rooms at 15 cfm/person of fresh outside air and laboratories at 20 cfm/person of fresh outside air (assuming that local exhaust ventilation such as a lab hood is used to exhaust specific contaminant sources. Fresh air can be supplied by open windows or by mechanical ventilation systems. Recommended commercial office ventilation rates are 20 cfm.

See ASHRAE. 1999, Standard 62-1999, Ventilation for Acceptable Indoor Air Quality. American Society of Heating, Refrigerating, and Air Conditioning Engineers, Inc., 1791 Tullie Circle NE, Atlanta, GA 30329.

Examples of Toxic and Hazardous Products Used in Schools

SEE CHART ON NEXT TWO PAGES.

PRODUCT TYPE Fn1	COMMON CHEMICAL INGREDIENTS Fn2	ADVERSE HEALTH EFFECTS
All-Purpose Cleaner: (Concentrate) Classroom, Kitchen & Restroom Surfaces, Floors	Ethanolamine, Monoethanolamine, dipropylene glocol monomethyl ether, ethanol, ammonium salt of sulfated nonlphenoxy ethanol, triethanolamine, propylene glycol monomethyl ether EDTA, trace fragrant & colorant.	Mist in concentrated form can cause irritation of mucous membrane, nose, eye and throat. Can cause painful stinging or burning of eyes & lids, watering of eye, conjunctivitis, and in concentrated undiluted form may cause opaqueness of cornea, possibly leading to loss of sight. May cause dermatitis or irritation to skin.
All Purpose Cleaner: (Non-concentrate)	2-Butoxyethanol, Isobutane, Ethanolamine, Propane, Ethoxylated secondary alcohols	Vapors may cause respiratory system irritation and temporary nervous system impairment. Symptoms may include coughing, headaches, nausea, vomiting, dizziness, and discomfort to the nose, throat, and chest. Eye irritation: symptoms may include transient conjunctival irritation and corneal opacity. Skin irritation: 2-Butoxyethanol may be absorbed through the skin and cause blood changes. Combustible.
Disinfectant	Alkyldimethylbenzyl ammonium chlorides	Exposure to concentrate can cause irritation of mouth, throat, & airways, especially for sensitive individuals. Skin & eyes: Can cause severe irritation, possible chemical burns.  Reactive.
Degreaser	Sodium metasilicate, Ethanolamine	Damages airways & lungs, depending upon amount & duration of exposure. Varies from slight irritation to bronchitis or pneumonia. People with asthma or other lung problems may be more affected. Skin & Eyes: Causes severe chemical burns. Eye contact may cause blindness.
Toilet Cleaner	Phosphoric acid, Butyl carbitol	Exposure to vapors causes irritation, including a burning taste, sneezing, coughing and difficulty breathing. People with asthma or other lung problems may be more affected. Eyes & Skin: Can cause severe irritation, possible chemical burns.
Shower Room/Tile Cleaners	Phosphoric Acid, 2-Butoxethanol, Sulfarnic Acid, Hydroxyacetic Acid	Exposure may cause nausea or dizziness may result from breathing vapors or adsorption through skin. Inhalation of mist may cause damage to tissue of respiratory tract. Causes burns to eyes & skin. Flammable. Carbon monoxide & other unidentified organic gases may occur during incomplete combustion.

Window/Glass Cleaner	Butoxyethanol, 2-Propanol (Isopropl alcohol)  Ammonium Hydroxide (Ammonia)	Irritating to airways & lungs, depending upon amount and duration of exposure. People with asthma and other lung problems may be more susceptible. Eye and skin irritant. Emits irritating fumes & liquid can cause burns.
Carpet Cleaner: shampoo, extractor	Isopropyl Alcohol, Propylene glycol, Monomethyl Ether, Propylene Glycol N- Propyl Ether, Alkyloxylated Alkylphenol	Eye Irritant. May cause skin, nose, and throat irritation. Combustible liquid or vapor.
Floor Wax	Mineral Spirits	Prolonged exposure may cause headache, dizziness and nausea. Vapors may irritate eyes, skin & respiratory tract. Contact may cause skin irritation or allergic skin reaction. Flammable.
Gym Floor Finish	Petroleum distillare (Stoddard solvent), Aliphatic hydorcarbon petroleum naptha, Epoxy resin, Isobutyl isobutyrate	Prolonged exposures cause eye & skin irritation. Causes nose & throat irritation. Reports have associated repeated & prolonged exposure to solvent with permanent brain & nervous system damage. Individuals with chronic respiratory disorders such as asthma, bronchitis, emphysema, etc. may be adversely affected by exposure. Flammable.
Floor Stripper	2-butoxyethenol, Ethanolamine, Propane, Butane	Medical conditions aggravated by exposure: Asthma and other pulmonary diseases. Inhalation may cause respiratory tract irritation. May cause nervous system depression. Can cause eye irritation.
Interior Paint (Enamel)	Propylene gylcol, Diethylene glocol, Clay, Titanium dioxide, Vinyl acetate, Butyl acrylate-vinyl acetate polymer, Texanol, Acrylic polymer, Distillates (petroleum) solvent-refined heavy paraffinic, Sodium aluminosilicate	Irritation of respiratory tract. Prolonged inhalation may lead to dizziness and/or lightheadedness, headache, nausea. Irritation of skin. Prolonged or repeated contact can cause dermatitis, defatting. Irritation of eyes. Flammable.

Fn1. Product types most commonly associated with health and other IAQ complaints from school occupants

(Source: Healthy Schools/Healthy Kids Information and Referral Clearinghouse)

Fn2. Common ingredients: derived from Material Safety Data Sheets (MSDSs) supplied to us by members of the NY Superintendents of Buildings and Grounds Association (SBGA) from surveyed school districts in upstate NY. Fn3. Health Effects, from MSDSs.

#### APPENDIX D: YOUR RIGHT TO INFORMATION

Throughout New York State, schools have denied parents, school personnel, and media the right to know or to review information about environmental issues or hazards: air quality problems, pesticide applications, lead or radon testing, fire hazards, inspections, plans, etc.

You have a right to information about your school buildings and grounds. Records and reports about the conditions of the buildings, copies of Certificates of Occupancy, Fire Safety Inspections, Emergency Management Plans, AHERA reports, Five-year Building Condition Surveys, Annual Visual Inspections, complaints to Health and Safety Committees, Facility Report Cards, Integrated Pest Management plans, and much more must be made available to the public upon request.

#### Is there a law on RIGHT TO KNOW ABOUT INFORMATION in schools?

- Yes. The New York State Freedom of Information Law (FOIL) (Chapter 51 of the Public Officers Law, Article 6, Sections 84-90) assures the public right-to-know about the operation of virtually all entities within state government. FOIL applies to government "Agencies," including, public schools, school districts and the programs they operate, or other public school-related bodies, such as local school boards, regional schools (BOCES), the State Education Department, and the Board of Regents are considered "agencies" covered by FOIL.
- Use FOIL if your school denies a known document exists or refuses to let you see it. Some records are legally exempt. Only existing records are subject to disclosure. An agency is not required to prepare a new record to respond to a request.

#### Whom can you call about FOIL?

Read Your Local Boa	rd of Education	Policy Manual	to find or	it the name	and procedu	ires for acce	ss to
information in you	district:						

The New York State Committee on Open Government can issue advisory opinions regarding compliance with FOIL. Write or call: New York State Committee on Open Government, NYS Department of State, 41 State Street, Albany, NY 12231, (518) 474-2518, Robert J. Freeman, Executive Director, Website: <a href="http://dos.state.ny.us/coog/coog">http://dos.state.ny.us/coog/coog</a>

Healthy Schools Network, Inc.: 518-462-0632 for a copy of our FOIL fact sheet which includes sample letters.

#### APPENDIX E: YOUR ACCESS TO MEETINGS

Under the New York Open Meetings Law, public school-related meetings must be open and accessible to parents, school personnel and any other members of the public. Examples of such meetings include:

- Board of Regents' (or a Board committee or task force discussion\*) of new regulations covering school construction;
- School district meeting to discuss the siting of a proposed facility;
- School Health and safety committee meeting to review the handling of complaints;
- School board discussion on the implementation of least-toxic integrated pest management to replace the use of highly toxic pesticides in schools.
- \* Committees or "task forces" are sometimes used by public bodies to study an issue or to provide an advisory opinion. Meetings of these committees or task forces are not subject to the requirements NYOML unless the law requires them to be created or if they are comprised of Board members only. For example, if a committee or task force that is not required by law is created and school staff, parents, members of the community are appointed to serve, the meetings are not subject to NYOML. This is true even if one or two Board members also serve on the committee or task force.
- The New York Open Meetings Law (NYOML), (Chapter 51 of the Public Officers Law, Article 7, Sections 100-111) assures public access to meetings held by any public bodies which are conducting public business and are performing a governmental function for the state or for any agency or department of the state; or for a public corporation. This includes school-related meetings.

#### What is public notice?

"Public notice" must be given if a meeting is scheduled a week or more in advance. Public notice must include the time and place of the meeting, and must be posted in one or more designated public locations at least seventy-two hours before the meeting. All reasonable efforts must be made to ensure meetings are held in facilities that are handicap accessible.

#### What is an executive session?

Executive sessions can only be called during a public meeting. A member of the public body must make a motion made identifying the area or areas or subjects to be considered. There are specific limits on the reasons why an Executive Session can be called. A majority vote of the total membership is necessary.

# Do I have a right to speak at the meeting?

No. You have a right to attend meetings, take notes, to get copies of the minutes, but not to speak. The public body can ban speaking by attendees, or it can open part of the meeting to solicit comment, take questions, allow open discussion, etc.

# If I cannot attend, how can I find out what happened in a meeting?

Minutes must be taken at all open meetings of a public body and must consist of a record or summary of all motions, proposals, resolutions and any other matter that was formally voted upon. They must also include a description of the vote. Minutes must also be taken during executive sessions. Minutes are not, however, required to include any matter which is not required to be made public by the NY Freedom of Information Law (FOIL). (For more information on how to use FOIL, see Appendix D: Your Right to Information). Minutes of meetings of public bodies must be publicly available.

# What if I am denied access to a meeting?

If the group meeting falls within NYOML, the meeting cannot be closed unless the public body enters into executive session (see above).

#### Who can I call for more information about using the NYOML?

The New York State Committee on Open Government is a branch of the New York Department of State. The Committee has expertise regarding compliance with NYOML. New York State Committee on Open Government, NYS Department of State, 41 State Street, Albany, NY, 12231, (518) 474-2518, Robert J. Freeman, Executive Director. Website: <a href="http://dos.state.ny.us/coog/coog">http://dos.state.ny.us/coog/coog</a>.

Healthy Schools Network, Inc. 518-462-0632 for a copy of our Access to Decision-Making Factsheet on New York's Open Meetings Law.

# APPENDIX F: HEALTH AND SAFETY COMMITTEES

Parents and school personnel have new rights to participate in securing health and safety improvements at school. Effective October 1999, all public and charter schools districts in New York State, including Pre-K and BOCES (Board of Cooperative Education Services) programs, must establish a Health and Safety Committee comprised of parents, representatives of bargaining units, and administrators.

Existing Health and Safety Committees do not need to be abolished. While private schools are not required to follow the law, many voluntarily form "facilities committees" to consider major construction or repair projects, or to promote school improvement projects, such as recycling, nontoxic pest control, or energy efficiency.

HEALTHY SCHOOLS NETWORK, INC. 518-462-0632 for a copy of our 6 page Guide to School Health and Safety Committees: How to Promote Child and Adult Environmental Health Protection.

(See also Appendix G School Facility Report Cards)

#### APPENDIX G: SCHOOL FACILITY REPORT CARDS

Effective October 1999, and commencing January 1, 2001 and each year thereafter, every school district and board of cooperative educational services (BOCES) must prepare a school facility report card for each school building (Part 155.6 of the Regulations of the Commissioner of Education). The school facility report card must be reviewed annually by the board of education or BOCES. Each of them must report, in a public meeting (in New York City, public meetings held in each community school district) on the status of each item in the report card (see below).

The report cards must contain the following information:

- Building size
- Building age
- Enrollment by building
- Rated capacity of the building
- List of program spaces
- Probable useful life of the building
- Five-year building condition survey results
- Annual building visual inspection results
- School building safety rating
- Certificate of Occupancy status and expiration date
- Five-year capital facilities plan status
- Estimated costs to restore the school buildings to a state of good repair
- Projected operations and maintenance spending for the current school year
- Need for routine maintenance, repairs, rehabilitation, reconstruction, construction and other improvements
- Estimated energy costs for the current school year
- A description of Health and Safety Committee activities; and
- The following environmental information:
  - -Status of the federal Asbestos Hazard Emergency Response (AHERA) Plan
  - -Status of measures taken to assure acceptable indoor air quality
  - -Status of any required lead testing
  - -Status of any required radon testing
  - -Status of the district's integrated pest management program
  - -Name of the Right-to-Know designee for the building

For more information, call **HEALTHY SCHOOLS NETWORK**, **INC**. 518-462-0632.

The New York State Education Department has not yet developed a standard format for Facility Report Cards (as of November 2000).

# APPENDIX H: SAMPLE COMPLAINT LETTERS

The following are samples of what letters to one of the agencies could look like. Feel free to copy it word for word, filling in the blanks so that it applies to your specific situation. It is important to include information such as when, where, and what you saw, whatever it was that made you concerned. The more information you provide, the easier it will be to fix the problem. However, just because you don't know or don't remember every detail, doesn't mean that you shouldn't report it or that it won't be fixed.

For	Da		400
HOT	120	<b>TP11</b>	TC

Your Name Your Address Your City, State, Zip Your Phone Number

Name of Person Agency Address of Person Person's City, State, Zip

Today's Date

Dear Person/Organization/Agency that will he	lp me with my problem:
My child is a student at(school)_ I visited my child's school on that my child's health might be at risk in school	in district(name of district) When (write date of incident) I became concerned because I noticed
(Explain what you or you child saw that you think coup paint, something that might be asbestos, a lack of fire ex	ld affect your child's health, for example: mold, pests, peeling stinguishers, etc.). I understand that this violates
Code 45.11, the State Education Law Section 409, etc not happy that my child is being exposed to this	t you saw, list it here, for example: New York City Health  c.). What can be done to remedy this situation? I am  s condition. Please call me  e) between the hours of
	the above address and tell me how and when this
mank you for your time and help.	Sincerely,
	Your Name

# For Employees:

Your Name Your Address Your City, State, Zip Your Phone Number

Name of Person Agency Address of Person Person's City, State, Zip

Today's Date

Dear Person/Organization/Agency that will help me with my problem:
I am a school employee at in district Since (insert date that problem began or you first began to notice problem) I have
(fill in health problem: for example: asthma, sore throats, nausea, runny nose). I'm concerned that there is a condition in school that brought on this problem or is causing the problem to get worse. Specifically, I've noticed
around school. (Explain what you saw that you think could have affected your health, for example: toxic fumes, dust, mold, etc.) and that made me concerned about
(feel free to fill in with one of the categories from the guide, for example: the school's air quality, the possibility of a pest infestation, etc.). I believe that this problem is in violation of  (If a law was mentioned in the guide that addresses what you saw, list it here, for example: New York City Health Code 45.11, the State Education Law Section 409, etc.). What can be done to
remedy this situation? I am not happy that I am being subjected to this condition. Please call me  (write your number here) between the hours of
(write the hours that you are available) or write me at the above address and tell me how and when this problem is going to be resolved.  Thank you for your time and help.
Sincerely,
Your Name

# APPENDIX I: NEW YORK STATE BOARD OF REGENTS/LEGISLATORS

# Regents Terms\* and Area Represented:

2002\* Hayden, Carl T., Chancellor; Judicial District VI -- Broome, Chemung, Chenango, Cortland, Delaware, Madison, Otsego, Schuyler, Tioga and Tompkins 303 William Street, Elmira, NY 14901 Phone: (607) 733-8866

2005\* McGivern, Diane O'Neill; Vice Chancellor; Judicial District II -- Kings and Richmond New York University, 246 Greene Street, New York, NY 10003-6677 Phone: (212) 998-5303

#### 2005\* Sanford, Adelaide L.; At Large

New York State Education Department, 55 Hanson Place, Brooklyn, NY 11217-1580 Phone: (718) 722-2807

#### 2004\* Cohen, Saul B., At Large

82 Taymil Road, New Rochelle, NY 10804 Phone: (914) 633-7889

2005\* Dawson, James C.; Judicial District IV -- Clinton, Essex, Franklin, Fulton, Hamilton, Montgomery, St. Lawrence, Saratoga, Schenectady, Warren and Washington 2 Birchwood Drive, Peru, NY 12972 Phone: (518) 643-9289

2005\* Bennett, Robert M.; Judicial District VIII -- Allegany, Cattaraugus, Chautauqua, Erie, Genesee, Niagara, Orleans and Wyoming 201 Millwood Lane, Tonawanda, NY 14150 Phone: (716) 887-2666

2005\* Johnson, Robert M.; Judicial District X -- Nassau and Suffolk 2 Skunk Hollow Road, Huntington, NY 11743 Phone: (212) 229-7200

2001\* Bottar, Anthony S.; Judicial District V -- Herkimer, Jefferson, Lewis, Oneida, Onondaga, and Oswego

407 South Warren Street, Syracuse, NY 13202 Phone: (315) 422-3466

#### 2001\* Tisch, Merryl H.; At Large

9 East 79th Street, N.Y., N.Y. 10021 Phone: (212) 879-9414

2002\* Farley, Ena L.; Judicial District VII -- Cayuga, Livingston, Monroe, Ontario, Seneca, Steuben, Wayne and Yates 6865 Fourth Section Road, P.O. Box 206, Brockport, NY 14420 Phone: (716) 637-6808

2003\* Chapey, Geraldine; Judicial District XI -- Queens

107-10 Shore Front Parkway, Apt. 9C, Belle Harbor, NY 11694 Phone: (718) 634-8471

2003\* Oquendo, Ricardo E.; Judicial District XII - Bronx

315 East Kingsbridge Road, Bronx, N.Y. 10458 Phone (718) 220-5700

Vacant -- Judicial District III -- Albany, Columbia, Greene, Rensselaer, Schoharie, Sullivan and Ulster

2004\* Gardner, Arnold B.; At Large

120 Delaware Avenue, Buffalo, N.Y. 14202 Phone: (716) 845-6000

2002\* Frank, Charlotte K.; Judicial District I -- New York

1221 Avenue of the Americas, 50th Floor, New York, N.Y. 10020 Phone: (212) 512-6512

2005\* Phillips 3rd, Harry; Judicial District IX -- Dutchess, Orange, Putnam, Rockland and Westchester

71 Hawthorne Way, Hartsdale, NY 10530 Phone: (914) 948-2228

#### NEW YORK STATE LEGISLATORS

To reach your State Senator or Assemblyperson call the switchboard numbers below.

#### **New York State Senate**

Albany, NY 12247 (518) 455-2800 (General) (518) 455-3216 (Public Information)

# **New York State Assembly**

Albany, NY 12248 (518) 455-4100 (General) (518) 455-4218 (Public Information)

<sup>\*</sup> Year When Present Term Ends

# APPENDIX J: NYS DEPARTMENT OF ENVIRONMENTAL CONSERVATION REGIONAL OFFICES

The New York State Department of Environmental Conservation (DEC, or ENCON) has a main role in pesticide regulation and certification of pesticide handlers. DEC also oversees storage and disposal of hazardous wastes, and is the lead agency for the environmental impacts of school siting (State Environmental Quality Review Act). To report environmental or natural resource problems, to reach any DEC program, call the nearest regional office.

to reach any D	Suffolk and Nassau counties (516) 444-0354  Suffolk and Nassau counties (516) 444-0354  Suffolk and Nassau counties (516) 444-0354
Region 1	Suffolk and Nassau counties (516) 444-0354 HAZ MTLS - 631 44 7 0373
Region 2	Manhattan, Bronx, Queens, Brooklyn and Staten Island (718) 482-4900
Region 3	Sullivan, Ulster, Orange, Dutchess, Putnam, Rockland and Westchester counties (914) 256-3000
Region 4	Montgomery, Otsego, Delaware, Schoharie, Schenectady, Albany, Greene, Rensselaer and Columbia counties (518) 357-2234
Region 5	Franklin, Clinton, Essex, Hamilton, Warren, Fulton, Saratoga and Washington counties (518) 897-1200
Region 6	Jefferson, St. Lawrence, Lewis, Öneida and Herkimer counties (315) 785-2239
Region 7	Oswego, Cayuga, Onondaga, Madison, Tompkins, Cortland, Chenango, Tioga and Broome counties (315) 426-7400
Region 8	Orleans, Monroe, Wayne, Genesee, Livingston, Ontario, Yates, Seneca, Steuben, Schuyler and Chemung counties (716)226-2466
Region 9	Niagara, Erie, Wyoming, Chautauqua, Cattaraugus and Allegany counties (716) 851-7000

402. 1501 Jorper 1905

# APPENDIX K: NEW YORK STATE OCCUPATIONAL HEALTH RESOURCES:

OCCUPATIONAL HEALTH CLINICS COSH GROUPS AND RELATED ORGANIZATIONS DEPARTMENT OF LABOR HEALTH & SAFETY DISTRICT OFFICES BOARDS OF COOPERATIVE EXTENSION SERVICES

# FOR EMPLOYEES AND EMPLOYERS ONLY. THESE SERVICES ARE NOT AVAILABLE TO PARENTS.

#### NEW YORK STATE OCCUPATIONAL HEALTH CLINICS

In 1985, a coalition of labor and public health advocates realized the need for a state network of occupational health clinics. Each year thousands of workers in New York were becoming seriously ill and dying from toxic exposures in the workplace, with insufficient resources allocated to the prevention of occupational diseases. As a result of the coalition's efforts, in 1987 the New York State Legislature established the New York State Network of Occupational Health Clinics, coordinated by the New York State Department of Health.

The primary purpose of these clinics is to prevent occupational diseases by providing diagnostic medical screening, treatment and educational services for workers exposed to toxic substances and occupational hazards. According to the New York State Department of Health, the mandate of the clinics is to:

- Provide medically objective diagnoses of suspected work-related medical problems.
- Conduct medical screening for groups of workers who are at increased risk of occupational diseases and illnesses.
- Perform industrial hygiene evaluations of workplace area of concern to assist with diagnoses.
- Make referrals for treatment to other medical specialists.
- Provide educational programs.

To find out more about the services the occupational health centers can provide, contact one of the centers listed below:

# Albany Eastern New York Occupational & Environmental Health Center 155 Washington Avenue Ce Tra Albany, NY 12210 (518)436-5511 518 690 4420 <del>Sin Block</del> X210 J Van Raalte

Bellevue Hospital/NYU Occupational Health and Environmental Medicine Clinic 27th Street and 1St Avenue CD Building, Room 349 N.Y., NY 10016

(212) 562-4574

**New York City** 

Buffalo Union Occupational Health Center 450 Grider Street Buffalo, NY 14215 (716) 894-9366	New York City Long Island College Hospital 340 Hick Street Brooklyn, NY 11201 (718) 780-2805		
Cooperstown New York Center for Agricultural Medicine and Health 1 Atwell Road Cooperstown, NY 13326 (607) 547-6023	New York City Mt. Sinai/US Occupational Health Clinical Center 1391 Madison Avenue New York, NY 10029 (212) 987-6649		
Long Island Long Island Occupational and Environmental Health Center 625 Belle Terre Road, Suite 207 Port Jefferson, NY 11777 (516)476-2719	Rochester Finger Lakes Occupational Health Services 919 Wesfall Road, Building 8, Suite 200 Rochester, NY 14618 (716)256-0853		
Westchester Mt. Sinai - Hudson Valley Center 701 N. Broadway N. Tarrytown, NY 10591 (914) 366-3670	Syracuse Central New York Occupational Health Clinical Center SUNY Health Science Center 6712 Brooklawn Pkwy - Suite 204 Syracuse, NY 17211 (315) 432-8899		

#### **COSH GROUPS**

There are 23 Councils or Committees for Occupational Safety and Health (COSH) across North America dedicated to providing education and training to workers about safety and health on the job. The COSH groups work together to fight for stronger legislation and better enforcement of existing regulations and laws. The COSH groups in New York State are:

- ALCOSH (Allegheny COSH), e-mail: alcosh@netsync.net, 20 West 3rd Street, Jamestown NY 14701, 716-488-0720, Fax: 716-487-0978
- CNYCOSH (Central NY COSH), e-mail: cnycosh~igc.org, 615 West Genesee Street, Syracuse NY 13204, 315-471-6187, Fax: 315-471-6193

- NYCOSH (New York COSH), e-mail: nycosh@compuserve.com, website: www.nycosh.org, 275 7th Avenue, New York, NY 10001, 212-627-3900
- ROCOSH, (Rochester COSH), e-mail: billbenet@aol.com, website: www.ggw.orgIfreenet/r/rocosh, 6 Prince Street, Rochester NY 14607, 716-244-0420, Fax: 716-244-0956
- WNYCOSH (Western NY COSH), e-mail: ce3 85 @freenet.buffalo.edu, 2495 Main Street, Suite 438, Buffalo NY 14214, 716-833-5416, Fax: 833-7507

#### **COSH-RELATED ORGANIZATIONS**

 Midstate Central Labor Coalition, e-mail: <u>chf6@cornell.edu</u>, 109 West State Street, Ithaca NY, 14850, 607-277-5670

# NEW YORK STATE DEPARTMENT OF LABOR HEALTH AND SAFETY DISTRICT OFFICES

On health and safety issues, The New York State Department of Labor (NYSDOL) recommends you call your local Division of Safety and Health office Listed below). The NYSDOL has jurisdiction over places of work for public employees only. A directory of office can be found at <a href="https://www.labor.state.ny.us/html/safety/shdists.htm">www.labor.state.ny.us/html/safety/shdists.htm</a>. Private sector employees may call the Occupational Safety and Health Administration (OSHA). OSHA's website is <a href="http://www.osha.gov">http://www.osha.gov</a>.

#### NYSDOL DIVISION OF SAFETY AND HEALTH – District Offices

Locations	Telephone / Fax	Counties Covered
Albany District State Office Campus Bldg. 12, Rm 158 Albany, NY 12240		Albany, Clinton, Columbia, Dutchess, Essex, Green, Rensselaer, Saratoga, Schenectady, Schoharie, Ulster, Warren, Washington
Binghamton District 44 Hawley Street9th Floor Binghamton, NY 13901	Tel. (607) 721-8211 Fax (607) 721-8207	Allegany, Broome, Chemung, Chenango, Delaware, Otsego, Schuyler, Steuben, Sullivan, Tioga, Tompkins

Buffalo District	Tel. (716) 847-7133	Cattaraugus, Chautauqua, Erie. Niagara
65 Court Street	Fax (716) 847-7108	
Buffalo, NY 14202		
Hempstead	Tel. (516) 485-4409	Nassau, Suffolk
District	Fax (516) 485-0155	
175 Fulton Avenue		
Hempstead, NY		
11550		
New York City	Tel. (212) 352-6132	Bronx, Kings, New York, Queens,
District	Fax (212) 352-6138	
345 Hudson Street		
Mail Stop 7F PO		
Box 683	1 4 1 pg 40	
New York, NY		
10014		
Rochester District	Tel. (716) 258-4573	Genesee, Livingston, Monroe, Ontario,
109 S. Union Street	Fax (716) 258-4593	
Room 402		
Rochester, NY		
14607		
Syracuse District	Tel. (315) 479-3210	Cayuga, Cortland, Jefferson, Onondaga,
450South Salina	Fax (315) 479-3451	Oswego, Seneca
Street		0 1
Syracuse, NY	1	
13201		
Utica District	Tel. (315) 793-2258	Franklin, Fulton, Hamilton, Herkimer,
207 Genesee Street	Fax (315) 793-2303	Lewis, Madison, Montgomery, Oneida,
Utica, NY 13501	ì	St. Lawrence
White Plains	Tel. (914) 997-9509	Orange, Putnam, Rockland, Westchester
District	Fax (914) 997-9528	, , , , , , , , , , , , , , , , , , , ,
30 Glenn Street	, ,	
White Plains, NY		
10603	10	

# **BOARDS OF COOPERATIVE EDUCATIONAL SERVICES**

School districts in larger cities often have their own Health and Safety professional staff; smaller districts may share Health and Safety services through the Boards of Cooperative Educational Services (BOCES). Health and Safety expertise may not be the primary job or interest of the BOCES staff. BOCES services are budgeted and scheduled by local school districts, and are not on-call to parents or employees.

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- Stachybotyrs atra and Other Fungi, Arch Pediatr Adolec Med. 1998; 152:757-762; and see American Academy of Pediatrics, Handbook for Pediatric Environmental Health, 1999.
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- 25. Kominsky, J. R. et al. 1992. Asbestos concentrations two years after abatement in seventeen schools. US EPA. Cincinnati, OH 45268. EPA/600/SR-92/027.
- 26. Climatic heat stress and the exercising child and adolescent. Pediatrics 2000 Jul; 106(1 pt.1): 158.
- 27. US HUD. 1995. Guidelines for the evaluation and control of lead-based paint hazards in housing. US HUD. Office of Lead-Based Paint Abatement and Poisoning Prevention. Room B-133. 451 Seventh St. SW. Washington, DC 20410.
- 28. NYS DOH. 1994. A technical manual on lead: environmental exposure, effects, investigation, and poisoning prevention. Health Liaison Program. 2 University Place Room 240. Albany, NY 12203
- 29. Primi, P. et al. 1996. Look out for lead! N.Y. Attorney General's Office. Environmental Protection Bureau. Albany, NY.
- 30. Stokinger, H. E. 1981. "The metals lead" in: Clayton, G. D. et al. (Eds.) Patty's Industrial hygiene and toxicology. John Wiley and Sons. New York.
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- 48. ASHRAE. Standard 55-1992, *Thermal environmental conditions for human occupancy* (with addendum 55a-1995). American Society of Heating, Refrigerating, and Air-Conditioning Engineers, Inc., 1791 Tullie Circle, NE., Atlanta, GA 30329.
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