Features

"WE CAN'T GIVE UP. IT'S TOO IMPORTANT." HEALTH AND SAFETY STORIES FROM CANADIAN AND U.S. SCHOOLS

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ABSTRACT

Schools are supposed to be places where children learn and thrive; not where they, teachers, and other staff get sick. The hazards are many but recognition of those hazards is hard to come by in schools in Canada and the United States. The result can be an uphill fight for school-based organizations and unions. Representatives of four such groups, two each from Canada and the United States, discuss the hazards and their effects. They also have many—often unrecognized—successes and related lessons to share. These include taking comprehensive approaches, looking for broad sweeps and entrees, using building sciences and strategies of solid information, acting with respect and with persistence, including students and parents, going for green cleaners, and using participatory methods. The representatives build on these to discuss what else needs to be done. The ideas are underpinned by the creativity, dedication, and persistence evident in their work to date.

INTRODUCTION

Known endocrine disruptors, mutagens, carcinogens, and neurotoxicants are commonplace product ingredients, often used without attention to preventing harm or exposure. Biological substances, such as molds, contribute to indoor air quality problems. Tuberculosis, influenzas, or other communicable diseases are almost always present. Sick people often are expected to work. Whether a

nuisance or serious issue, these chemical and biological hazards are a frequent source of discomfort and ill-health in schools.

Growing use of computers and electronic procedures brings ergonomic problems and raises questions about electromagnetic radiation. Stressors are ubiquitous, ranging from physical and verbal violence, bullying and harassment, to a lot of responsibilities with little or no control. Workload and expectations are high but respect often is missing.

The hazards are many but the dead bodies are few and far between. Most of those affected "just" get sick or hurt. They are part of a largely female workforce that frequently puts others' needs ahead of its own. Is this what we expect in schools? Is this the environment where we expect our children to flourish and learn and the staff to be healthy, helpful, and dedicated?

There is a growing movement to recognize and deal with school-based occupational and environmental health and safety hazards: That is the message from representatives of four organizations in Canada and the United States. Driven by concerns for the health of children and school-based staff, they are bringing these issues into the public light using a variety of goals and strategies. Their work offers examples of practical experiences, innovative strategies, and often-unrecognized successes.

The interviews with these representatives focused on these questions: What are school-based hazards, and why do they matter? How do school-based hazards compare with those in other workplaces? What solutions and strategies have been used to prevent or reduce harm from the hazards? What are the lessons for researchers and activists? What else needs to be done? The interviewees were: Darryl Alexander, Health and Safety Program Director for the American Federation of Teachers (AFT) in Washington, DC; Mae Burrows, Executive Director of Toxics Free Canada (TFC), formerly the Labour Environmental Alliance Society or LEAS in Vancouver, BC; Karen Robinson, President of Canadians for A Safe Learning Environment (CASLE) in Halifax, NS; and Tolle Graham, the Healthy Schools Co-ordinator with the Massachusetts Coalition for Occupational Safety and Health (MassCOSH), in Boston.

WHAT ARE THE HEALTH AND SAFETY ISSUES?

Many schools have the full gamut of hazards named above. "They are very complex industries with all sorts of hazards that are related to the work people do," says Alexander. The AFT's 1.4 million-plus members include teachers and paraprofessionals—bus drivers, teaching assistants/aides, security personnel, and administrative staff. "By and large, the hazards are not recognized. It was the same for health care and hospitals in the 1970s," Alexander says. Recognized or not, she has more than enough work on her plate these days. It includes H1N1 flu and tuberculosis (schools are the number one setting for community outbreaks

in the United States), many indoor air issues, "green" cleaning products, high rates of work-related asthma, 1 ergonomics and stress.

Toxic Free Canada's Mae Burrows has her own list of school-based hazards. The Vancouver-based alliance of environmental and labor groups concentrates on chemical hazards and preventing cancer in workplace and community settings. In schools, this includes preventing exposures to asbestos in the buildings; mercury in thermometers; pesticides and cleaning products; and chemicals found in labs, auto shops, and art rooms.² Their inspections also include "hot spots of dirty electricity"—how computer labs are configured and what protections are in place. Back-to-back arrangements create a really "hot" room while computers set along the walls reduce exposure to EMF (electromagnetic frequency radiation), says Burrows.

At the opposite end of the country, Canadians for A Safe Learning Environment (CASLE) has tackled school-based health and safety issues by focusing on building science and the products and practices used in schools. Started in 1994 with a small group of Halifax teachers and parents whose children's health was affected by school conditions, they also pay most attention to chemical, biological, and communicable hazards.

The group of volunteers has worked on everything from carpets (there are almost none in Nova Scotia schools now), scent-free policies, and cleaning products to pesticides and low-emission building materials. "We partnered with the Occupational Health & Safety Division of the (provincial) Department of Labour right from the beginning. About ten years ago, we added the Department of Education, and worked side by side on extremely positive things for Nova Scotia schools," says Karen Robinson, "We worked on not only improving the status of the cleaning, maintenance, and classroom products used in existing schools, but also the way renovations are done and the way schools are built." The group also works on acoustic health, playground safety, day lighting, and electromagnetic radiation.³

More than 1000 kilometers to the south, the Massachusetts Committee on Occupational Safety and Health (MassCOSH) has had a Healthy Schools Initiative⁴ (HSI) for about ten years. They work in the Boston area, take on statewide policy initiatives, coordinate the Massachusetts Healthy School Network, and

¹ Schools are one of the top three sectors reporting work-related asthma to the Massachusetts Department of Public Health.

²TFC's activities are described on its current Web site—www.tfc.ca—and its older site, www.leas.ca (from when it was called the Labour and Environmental Alliance Society). The "School Toxins Checklist" is at http://leas.ca/UserFiles/File/Toxic%20Free%20Schools%20 Audit%20Checklist.doc.doc.

³ CASLE's Web site (www.casle.ca) provides a lot of information about its experiences and documents it has produced or with which it is associated.

⁴ The HSI, its activities, and documents are described on MassCOSH's Web site at http://www.masscosh.org/node/118.

are involved in national activities through the Coalition for Healthier Schools and the Childproofing our Communities Campaign with the Center for Health, Environment and Justice in Falls Church, Virginia.

As the HSI coordinator, Tolle Graham describes what she sees and hears about as "layers of hazards." Many are related to design and maintenance of buildings—bad ventilation, materials that give off volatile organic compounds or VOCs, carpeting versus hard surfaces, molds, dirt, pests, and overuse of cleaners. Some are "traditional hazards that plague buildings, such as asbestos, lead in window frames and paints, and PCBs in window caulking. Other hazards are inherited when schools are built on contaminated sites," she says.

WHY ARE SCHOOL HAZARDS IMPORTANT?

All the women interviewed are emphatic that school-based health and safety and environmental hazards are important. Graham's response was typical: "Short term, because we always say teachers can't teach and kids can't learn if they can't breathe. Long-term, it's a workplace, for children and adults, and there are long-term consequences of being exposed to hazards in schools, hazards like asbestos, endocrine disruptor chemicals, off-gasses, building materials."

"It's also important because we do see cancer clusters, for example, in teaching and custodial populations," Burrows said, "We want to prevent cancer and take an approach about the timing of the dose (e.g., for neurotoxins and endocrine disruptors), especially for young children and teenagers, because of their critical developmental times."

WHAT'S DIFFERENT ABOUT SCHOOLS? WHAT'S THE SAME AS OTHER WORKPLACES?

Schools are workplaces, but are they different from other job settings? Yes and no, these women say. For example, location makes a difference. Canada's labor and occupational health and safety (OHS) laws treat school workers like others. Unions represent and bargain for all public school-based employees in the country. Whatever their positions, they have the same health and safety rights to know about workplace hazards, participate in joint health and safety committees (except Alberta, which does not require these committees), and the right to refuse work that is unhealthy or unsafe (the specifics depend on the province's law⁵).

In the United States, however, school-based workers may not have the right to organize or negotiate collectively. The federal Occupational Safety and Health Act (OSHA) applies only to public sector employees in 26 states; others have very limited OSHA coverage. Most U.S. health and safety laws and regulations do not include a right to refuse unhealthy or unsafe work. Only a few require

⁵ The Canadian Centre for Occupational Health and Safety has links to all the country's OHS laws at http://www.ccohs.ca/oshanswers/information/govt.html.

Another difference between schools and other workplaces is that some of the problems in schools have no geographical or legal boundaries. "The biggest one is that we're dealing with the developing bodies of children," Robinson says. "From a health point of view, it's essential we get this right. It's important they graduate with their diplomas and their health intact. . . . It's the whole fabric of our future."

For Burrows, children's presence also is important in another way. "Kids have a sort of a second-hand exposure. It's the same in hospitals. Those who are second-hand exposed think they do not have a right to participate in how the exposure is eliminated or mediated."

Robinson sees commonalities too:

There are exposures for employees. People that work in those environments have rights to demand substitutions for those exposures. Like those working in other kinds of caring professions, school staff members usually don't think of themselves very much as workers. So, often they don't have the same orientation to asserting their health and safety rights or asserting good health and safety practices. I've been on five joint health and safety committees. On each one, the teacher representatives must be reminded they are there to protect staff. They learn that they can protect children, too, by shielding themselves first and protecting the children second-hand.

There's also little helpful research in the sector, Alexander points out:

Schools are supposed to be the safest places in our community, for our kids. With few exceptions, no one has thought to look at them in a really comprehensive fashion. No one wants to think about the hazards. Like the violence in schools, bus drivers get beat up at a very high rate. Special education teachers—parents beat them up and so do the kids—nobody looks at it as work-related.

Graham's experience with schools also is different from traditional COSH (community-based committees for occupational safety and health) work in the United States. "You can't layer on the labor-management health and safety model, that's not part of the experience in schools." Even the Environmental Protection Agency's useful Tools for Schools Program "is still an uphill battle to fit into the culture of the school." These kinds of differences between schools and other workplaces led HSI to work with community coalitions, health centers, parent-teachers associations and asthma groups, as well as unions. "It definitely broadens who we work with and changes some of the strategies."

⁶The Massachusetts Teachers Association (MTA), part of the National Education Association, does a lot of work with MassCOSH. See their respective Web sites for details.

HOW DO THEY DO IT? WHAT ARE THE LESSONS?

The four organizations from the two countries involve the full range of school staff, from bus drivers and maintenance workers, to special education assistants and teachers. Three include parents in different ways; the AFT recognizes their importance but is not yet working frequently with them. All work in coalitions, with allies and/or in partnerships, and deal with building design and product uses. The union has ergonomics and work-related stressors high on its list of key issues, while the others recognize the importance of these hazards but have different mandates and/or specialties and experiences.

Comprehensive Approaches Work

A good example of HSI's strategies comes from work about pests, such as mice, in Boston schools. In 2000, Massachusetts passed the Children and Family Protection Act. It requires schools to use integrated pest management (IPM) and to file their IPM plan. "There are templates to help, but no real enforcement, other help," Graham explains.

"We found out most Boston schools hadn't filed a plan, and because we're focused on asthma, we knew it was a huge issue." Through the Boston Urban Asthma Coalition (BUAC), the HSI worked with parents of children with asthma who did a lot in their own homes. Dealing with asthma triggers in homes—particularly rodents—can be quite overwhelming for residents, says Graham, especially when costly interventions are required. When she brought BUAC's attention to the presence of mice, cockroaches, and rats in Boston public schools, the two organizations jointly challenged the school department at a public hearing about not obeying the law. "We rustled some feathers," says Graham. Eventually the department agreed to work with HSI on a Healthy Schools Task Force.

"The result was that we met a lot of goals about maintaining schools properly," explains Graham. "Much about IPM is fixing leaky pipes, making sure windows close properly, fixing door sweeps to reduce cracks. We could talk about keeping buildings in good repair while explaining they couldn't use poisons any more to kill the mice. We got schools to develop very good criteria for pest management contractors so everyone's at the same level."

The IPM project also made connections with families around their home and school environments and helped those involved better understand the many layers of roles and responsibilities involved. For example, the "blame game" points at kids' snacks or the clutter in elementary classes as the source of problems with mice, Graham says. "We've looked around and saw leaks under every door in the school and a leak in the sink under Ms. So-and-so's room. So we could talk about needing a more comprehensive look at IPM. We've broadened it to talk about breathing health and improving school maintenance."

Look for Broad Sweeps and Entrées

Looking for the broadest "hit" from a specific situation is a common HSI strategy. CASLE also goes for broad sweeps. Paying attention to building design, the group has had a huge effect in Nova Scotia and, to a lesser extent, across Canada. A 1997 meeting with provincial government departments that had a role in protecting children's health and safety at school was key. "We gave examples about how the system was failing and invited them to discuss how to avoid kids slipping through the cracks. We credit that positive problem-solving approach, with respect, as the main reason that so much good has happened," Robinson says.

That "good" includes CASLE's:

- Healthy Schools Design and Construction (2002) being integrated into the Design Requirements Manual for construction of all new public buildings in the province, including schools, hospitals and prisons;
- recommendations for full ventilation systems (i.e., 100% fresh air delivery) being adopted for all new public schools; and
- role that facilitated replacement of cleaning materials and art supplies containing toxic ingredients with healthier alternatives, as well as reduced use of pesticides in and around schools and less chromated copper arsenate (CCA) pressure-treated wood in playgrounds and new school construction.

Their entrée often is asthma and respiratory illnesses, "because that is something people can identify with quickly, the numbers affected are so great, and we can have a lot of spill-over effects," Robinson says. Despite CASLE's close ties with the Environmental Health Association of Nova Scotia (EHANS), they do not make environmental sensitivities or illness (EI) the main rationale for their arguments. "When we started, it wasn't seen as being real," she explained:

The politics of improving buildings are very difficult. Those people get harmed in their workplace because others don't believe it's real, and employers are afraid of workers' comp issues. But they get the spin-off benefits of changes we recommend. Schools now do a lot to accommodate children with EI, but staff has a harder time. Salary insurance for sick teachers and workers comp cases still are not easy to win.

Use Building Sciences

From their experiences, CASLE developed a "new" approach to school-based hazards. "The old method was to complain, and then prove it. Health officials came in to test air or people and then say there's no proof the building is a problem or that people are sick because of it. They walk away and people are seen as second-class citizens for having complained, being sick." Now the provincial education department and CASLE focus on what is known about building science. They use clues from reported symptoms, health concerns, and building science to diagnose the problem. "When we work to make building better,

the health problems resolve." Functioning joint health and safety committees, sometimes called JOSH committees, also make a difference, Robinson says. "It's key for us to have the JOSH involved."

Solid Information, Respect, and Persistence are Key Strategies

CASLE's successes have refined their strategies. "Our three tools are solid information, respect for all those we work with (even those we perceive are hurting children, no one does that on purpose), and the third is persistence—we work in another way when we run up against walls."

Participatory Action Research Works

Involving members in activities is important for the teachers' union. "I'm very proud of work we did with Robin Gillespie in New Mexico with paraprofessionals who do special ed work with student handling, These paras have all kinds of ergonomic hazards," Alexander says.

She and Gillespie designed a program to give two days of training to about 24 special ed paras. "They went back and essentially became researchers." The AFT members collected surveys from co-workers in more than 15 school locations. Alexander and Gillespie used the results to write a report presented to the school district, with recommendations about next steps to improve ergonomic conditions for these workers.

"It was really powerful, and we plan to build on it in Albuquerque and, hopefully, across the U.S. A Supreme Court decision says districts must provide adequate education for all children. We want to be sure that that 'adequate education' also includes safe, ergonomic environments for staff," says Alexander.

The union also has developed a unique six-session workshop about work-related stress that is being refined after two pilots. Union members are trained to deliver the sessions; they work with local leaders to identify six to ten people in their school who might be interested in the topic. They use a learner-based popular education approach that integrates the participants' experiences with a framework of OHS principles, information about the hazard, and examples of how others have dealt with it. The result includes drawings of stress-free schools (Figure 1), body and workplace maps to make visible the symptoms and hazards, and recommendations to local union leaders about one or two priority stressors to tackle and strategies to go with them.⁷

⁷ The five-step framework, mapping instructions, and "solutions chart" are similar to materials the author published in a project for the Manitoba Workers' Compensation Board. Seeing the Workplace with New Eyes: A Self-Help Guide for Workplace Safety and Health Committees and Workplace Safety and Health Representatives can be found at http://www.wigmorising.ca or http://safemanitoba.com/seeing_the_workplace_with_new_eyes_guide.aspx.



Figure 1. This was drawn by an AFT member at a pilot of the union's workshop, "Beyond Stress Management." Participants were asked to answer: How does stress affect your life? The list is typical of stressors that affect school-based workers.

Like the ergonomics project, it has taught Alexander a number of things:

I learned that it's good working cooperatively with workers as partners for research and making plans for redesign of a workplace. You can't make a lot of assumptions that you know what's best for workers going into a situation where they live the exposures every day. I love participatory research; it's a powerful tool. It works very well hand-in-hand with basic training.⁸

Use Right-To-Know Laws

Cleaning products are becoming a common target for school OHS activities. For example, TFC staff worked with custodial staff and joint health and safety committees in several Vancouver-area school districts, encouraging them to look more critically at product material safety data sheets (MSDSs), required under the 1988 right-to-know law called the Workplace Hazardous Materials Information System (WHMIS). "Even with really good committees and really good districts, that wasn't being done in 2000," Burrows says. Using work with the provincial building authority, their CancerSmart Consumer Guide⁹ and Cleaners, Toxins and the Ecosystem Project, ¹⁰ TFC developed a list of chemicals that should and can be replaced, particularly in cleaning products. They use it with joint health and safety committees, parents' groups, students, and school boards.

"At the beginning, it was custodians taking the booklet (about cleaners) to their joint committee and asking them to go through products for these chemicals, saying 'We don't want to use them.' We learned that people didn't know what their exposures were," Burrows says. "They are very focused and committed to getting substitutions when they realised what their exposures were. They exert their rights under the law and force a substitution or elimination of something.

"We also learned that cost comparative and efficient alternatives are available," Burrows adds. "In the districts, people would bring substances to the meetings, then purchasing would meet suppliers and say they had to find alternatives or lose the contract. We also taught people how to read the sheets and research the chemical so they could look for themselves."

⁸ For other examples of participatory action research, see the special issue of *New Solutions Journal* 15:1 (2005) on the topic.

⁹ The third edition of the 52-page booklet, featured on the CBC TV documentary "Chasing the Cancer Answer" is available on-line at http://leas.ca/CancerSmart-3-The-Consumer-Guide.htm.

 $^{^{10}}$ For information about the project, a copy of the *Cleaners and Toxins Guide* and other presentation materials, see http://leas.ca/Cleaners-and-Toxins.htm.

Figure Out How to Include Students

But students often don't have a right to know. ¹¹ That "birthed" TFC's students' environmental bill of rights. Following work with students and parents groups, the alliance also got a supportive resolution in 2006 from the British Columbia Confederation of Parent Advisory Councils, calling on school districts to look at all their chemical products for carcinogens, reproductive toxins and endocrine disruptors and to replace them with non-toxic and "environmentally safe" products. The alliance developed a learning resource for teachers that has six modules designed to fit the B.C. Ministry of Education curriculum for several courses in grades 8 to 12. ¹²

Push for "Green" Cleaners

While U.S. school employees may not have the same legal rights as Canadian workers, MassCOSH, the AFT, and others working in the field take a similar approach to push for certified "green" cleaners that do not contain asthmagens or other ingredients causing respiratory reactions. The "Cleaning for Healthy Schools Toolkit" is one example of their efforts. MassCOSH is leading campaigns for a "Safer Cleaning Program" in schools, hospitals, and state buildings, along with requirements that new schools and renovations use the healthiest building materials.

"Green cleaning seems to be a very good and effective approach to reducing chemical exposures for kids and custodial maintenance workers," Alexander says. "A lot of our members are proposing policy changes to their school districts for green cleaning and looking at it as a collective bargaining issue." It's part of the union's growing involvement in things "green." It joined the Blue-Green Alliance in July, 2009, shortly after publishing *Building Minds, Minding Buildings*. ¹³

WHAT ELSE NEEDS TO BE DONE?

The successes are impressive but there still is much to do in both countries. Good policies and practices can be lost if they aren't integrated into the law and/or union contracts. The "players" need training about the hazards and building science. Differences between "green" and "healthy" must be reconciled. "To me, it's just such a huge topic—one that deserves a lot more research, a

¹¹ Section 13 of the Nova Scotia's health and safety law says that non-workers must receive "reasonable protection." The government Department of Occupational Health and Safety has interpreted this to include students. Manitoba's *Workplace Safety and Health Act* has similar provisions.

¹² For all these school-related documents, see http://leas.ca/Toxic-Free-Schools.htm.

¹³ See the document at http://archive.aft.org/topics/building-conditions/.

lot more intervention research and better policies and regulations. I've done it for almost 20 years now, and I feel like I've just scratched the surface," Alexander says.

"We need national comprehensive standards about where schools are sited, how you build the school, and how you operate and maintain a school for health, safety, and security," she says.

Robinson agrees. "People have learned and changed how they do things, but there is no regulation to force it on the school and departmental level. All we've gained in the last 15 years can be put at risk." Standards about healthy buildings "also need to include ergonomics, stress reduction, lighting, etc. . . . We developed IAQ regs for Nova Scotia's public buildings ten years ago. They got watered down and watered down by government and industry and never passed. Maybe now's the time to try again."

"I think we need to really work to figure out how to carve out that place for environmental health and safety as something that all schools have a system for managing. We talk about a health and safety management plan for industrial settings, but not in schools," says Graham. "We also need more support from the federal government. Citing guidelines would be great, as would strengthening green building standards, tying funds coming to states to green building standards. Otherwise, it's likely that if school boards are given money to renovate schools, they may do it the old crappy, unhealthy way. We want to make sure those standards are really in place."

But there is confusion between "green" and "healthy" buildings. "One of our challenges is meshing 'green' with 'healthy'," says CASLE's Robinson. "We're having a lot of success in Nova Scotia in educating green building folks about what's healthy. . . . We talk about the need to use the precautionary principle." Alexander also links "greenwashing" and standards. "Things can be 'green' because they're energy-efficient. . . . I definitely want energy-efficient buildings but I want them tied to a standard about healthy buildings."

Whether or not there are official standards or good practices, school staff need training. Administrators should be educated about the built environment "so that they can be good informed custodians of school buildings and buses and equipment," says Alexander. TFC wants more real-life, experienced-based training with MSDSs and inventories of toxic exposures in schools, so that there can be work about substitutes.

In the United States, taking school-related hazards seriously also means extending OSHA coverage to school-based workers. Alexander is not optimistic this will happen. "Some of my colleagues are patronizing, because we don't have dead bodies to show; we just have hurt bodies. I don't have big expectations of those running OSHA or those in Congress that these workers deserve OSHA coverage."

All these activities have a price, Robinson reflected. "It's been hard, hard work. Change takes hard work, and we were a part of that. It takes commitment. It takes networking and building credibility, being persistent and stubborn. Whatever we've contributed is added to what others have done that's happening, that's good now. Everyone who's worked on making schools healthy places has sacrificed a lot, but it's worthwhile. We can't give up; it's too important." ¹⁴

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¹⁴This echoes the words of a song by Seattle-based Joe Jencks. "Rise as One" chronicles a successful school workers' strike by AFT members. The words are on-line at http://www.joejencks.com/index.php?page=songs.