

Citizens for A Safe Learning Environment
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The following presentation is included to give perspective. It was one of the first given to Nova Scotia government departments by CASLE. The minutes of this meeting were circulated on Department of Labour letterhead. This meeting marked a key turning point in recognition of the school health and safety situation, cooperation between departments to address needed changes, and the beginning of real improvements. We are pleased to report that much that was in need of attention at the time of this meeting has greatly improved. We wish to express our gratitude to those in decision-making positions who have made the difference. There is still more to accomplish.

January, 1997

Presentation to The Nova Scotia Indoor Air Quality Committee, and Provincial Directors of Facilities Planning, Health Inspection, Occupational Health and Safety, Procurement, and Environment:

Citizens for A Safe Learning Environment (CASLE) was formed because members' children were harmed by conditions or incidents in schools. We have been examining the status of Environmental and Occupational Health and safety conditions in our schools and are attempting to raise awareness of the need for significant improvements. CASLE includes a network of parents from all across the Province, but we will focus here on the Halifax area as an example. This paper will outline examples of recent harmful or potentially harmful events in Halifax, list some of the progress we have seen, and provide some suggestions for change. Situations vary from region to region, but in general tend to be very similar to the example area. For a more detailed examination of how the school's Health and Safety system is failing our school children, see Report on Schools enclosed with this paper.

Recently, a Labour expert commenting at the Inquiry into the Westray Mining Disaster pointed out that workplace hazards do not exist only in places like coal mines, but that libraries have workplace hazards too. **CASLE is trying to point out that schools also have workplace hazards**, and that children's bodies are known to be more vulnerable to hazards. (see enclosed sheet on the World Health Organization and Dr. W. Rae) **That there are too many inadequacies in the present protection system, including a significant lack of knowledge, causing school children to be frequently put at risk.**

We believe that improving the situation will require adjustments within, and cooperation between several Government Departments, specifically Education, Labour, Health and Environment. We have had extensive communications with officials from these departments. Awareness is growing about serious deficiencies that put our province's children and school staff at risk, and some departments are making efforts to address them. However, more coordinated and deliberate action is needed to address the issues soon to thereby protect our school children from workplace hazards.

Some of the statements from officials have been:

"Do you have any idea how angry we are with the ----- school system?" (Oct. 5, 1995, Department of Environment)

"----- knows what he can get away with. It is possible to exceed regulations with the general public." (Dec. 4, 1995, Department of Labour)

"I honestly don't know who is protecting the children." (Jan. 1996, Health Official)

Some examples of their efforts are:

In 1995 the Department of Labour activated Joint Occupational Health and Safety Committees in Halifax schools. Although these committees had been required by law, many schools either did not have them or very little was known about the rights, functions, and responsibilities of such committees. The Department is providing means for parental input on these primarily staff committees. The Department of Health is proposing to have the regional Medical Officers of Health work closely with the regional school boards, and is reactivating the Department of Education's Indoor Air Quality Committee. This could provide a forum to coordinate interdepartmental action. Officials from the Departments of Health, Environment, and Labour have also taken direct action to protect school children from hazards in the recent past - hazards which were reported by either staff members or parents.

Recent Examples of Hazardous Incidents in Halifax Schools:

Many of these hazards were specifically identified as such in the June, 1994 Bulletin written by the Department of Education's Indoor Air Quality Committee. This Bulletin (copy enclosed) was supposed to go to all principals in the Province. Unless otherwise stated, the incident examples below have occurred since September of 1994.

1. Mould consultants advised that a mouldy gymnasium ceiling should be replaced, but school board employees decided it would be acceptable to install a false ceiling below it instead. Parents alerted officials and had it stopped. (Cornwallis)
2. A storage room was converted into a classroom while industrial strength floor stripper and other cleaning materials were still being stored behind a partition, and when the air delivery system was not functioning properly. A parent alerted officials, and minimum improvements were done. The previously healthy teacher was using a puffer after a few months, and was unable to teach the following year. (Rockingham, 1993)
3. One side of a classroom floor was repaired with glue while the class was being conducted in the other half of the room. Several maintenance people went home ill, but the children stayed. One child stayed home for two weeks after being made ill by this exposure. (Fairview Heights, 1991) In spite of repeated warnings of possible harm, and requests for less toxic new tiles and isolation of rooms until glues and chemicals have gassed off, Property Services continues to lay new floors with the usual vinyl tiles, apply fresh wax and open the rooms for use immediately, once the wax is dry. Classrooms with little ventilation have marked chemical odours for weeks, and children and teachers breathing these fumes have been harmed. (verified by physicians)
4. A school yard was paved while children were in the school and on the playground, thereby exposing children to breathable harmful fumes. (Tupper)
5. Roofs are tarred while school is in session. (St. Agnes, Fairview Heights) This is a common problem.
6. Asbestos was removed from schools over the summer and without the stringent cleanup required by the Department of Labour. In one school it was reported that workers wearing

protective suits worked while children sat unprotected in nearby classrooms. (several schools, over several years)

7. Asbestos-bearing floor tiles (as defined by Labour Standards) were removed from a classroom in the manner as had been done for 20 or so years in the school system. That is, without protection of children or workers from the dust and debris. A parent alerted officials, but Department of Labour intervention was finally required to correct the situation and ensure the writing of proper Safe Work Practices. (Rockingham) It is unclear whether these are being followed in subsequent work.

8. Stripping and varnishing of a gym floor was done while school was in session. A note went to parents informing them, but parents tend to trust school officials will protect their children if there is any real possible harm. (Oxford St.) In spite of repeated requests for less toxic maintenance (and cleaning) materials, and three to four years of information from inservices on Environmental Health, committees reports, parent's and staffs complaints, provision of alternative information, etc, the gym at Rockingham was refinished days before school opened this September '96, and using highly toxic urethane. A parent convinced officials to close it for a week and have two weekends of a Flush-out procedure done. (Experts recommend at least 8 days and likely 30 days would be needed) Two months later some children still experience asthma, headaches, and other symptoms when in or near the gym.

9. Also in spite of information, inservices, etc., schools are painted indoors and out while school in session, and children breathe the fresh paint fumes. (Many examples, Burton Ettinger, Oxford...) Parents draw attention to the potential harm, but have been unable to have the practice stopped. Fresh Latex paint fumes are toxic. Some principals are now rescheduling this and other hazardous work, but why is Property Services, the professionals, requiring principals to become experts in construction safety?

10. Scraping of old paint which likely contains lead, without testing for lead, and while children are present, and without cleanup required by law. (many examples, Burton Ettinger, Fairview Heights...) Parents have been unable to have this practice stopped even though lead is known to be highly dangerous to children in particular, and it is strictly regulated by government.

11. Outdoor staging unsupervised and with no fencing where children could run underneath or climb. (Fairview Heights, Burton Ettinger) A parent had some success rectifying this at one school.

12. Pesticide treatment outside perimeter of school and indoor crack and crevice treatments. Done after hours, but without other precautions recommended by National Pest Line or IWK Poison Control Dept. At least one child was known to be harmed. (Rockingham) Health changes due to exposure to residues are not easy to associate with pest control because parents don't know that pest treatments have happened. After a parent informed Westmount School officials of the potential dangers they had safer pest control methods used instead.

13. Despite the harmful and expensive oil leak a few years ago at Grosvenor Wentworth Park school, oil leaks are often handled poorly. In that case, officials denied there was a problem for two months while teachers and children complained of ill health. Government intervention was required. Over 1000 litres had spilled, and the school had to be closed for 4 months for cleanup. Teachers and children state having been sensitized or made sicker by the exposure. More than \$500,000 were spent on cleanup and an air system.

Since then it is questionable whether much was learned. Oil leaks have continued to occur in other schools, with further harm being done to more students and staff. Usually denial that there is a problem is the first hurdle. (Flemming Towers, C.A. Beckett, Old Springvale, Fairview Heights. Government Departments were brought in to resolve some cases) In one recent case,

considerable fume levels were making staff and students experience nausea, headaches, and other symptoms for days before location and repair of the leak was done. The school operated as usual, when it should have been closed until declared safe. When residual smells remained after cleanup, there were more denials. The situation was finally resolved after a parent insisted that oily rags used during the cleanup be removed from the floor and area.

14. Schools with children who are known to be Chemically Sensitive deal with this issue differently from site to site.

Chemical Reduced and Scent free policies are hard to establish and to maintain when there is no school board policy to help. In all cases the parents have struggled to convince officials of their child's condition, and have had mixed results. Even when successful, parents must constantly monitor the school environment and continue to remind all involved in order to keep their child in school. One staff member commented to a child, who was on the floor after having been incapacitated by a teacher's perfume, that the staff member doesn't like the smell of tuna, and that the child should just get used to the smell of perfume. (school name withheld) It is often not recognized that this is a physical problem, not an attitude or mental problem.

15. PCB ballast lights were removed during class time and stored in the furnace room. These are not harmful if not leaking but have been known to leak, or even spray PCB laden oil when disturbed. (Cornwallis School, Government officials corrected the problem after parents reported it.)

16. The Teachers Resource Centre was a relatively healthy building before improper renovations were done. We understand almost all staff have become ill from this site, which has now been permanently closed and relocated. The costs of this in dollars, not to mention staff's loss of health, have not been made public. Interestingly, this building was declared a mould free building by the mould testing of Jan '94.

17. These air quality tests of Jan. '94 found that virtually every school had some classrooms with elevated CO2 levels, of over 1000 ppm.

- 24 of 47 buildings contained unacceptable moulds or fungus.

- 23 contained fungal species that are notorious mycotoxin producers and that are "unacceptable occupants of indoor air".

Seven of these included the *Stachybotrys Chartarum*, formerly known as *Stachybotrys Atra*, a particularly dangerous fungus.

- One school contained a fungus which is a known human pathogen.

- 13 contained higher levels of "acceptable" moulds which indicated chronically wet environments.

- Only 10 buildings were determined to have minimal fungal contamination.

Parents were generally not informed of the tests or their implications, and as the clean up process slowly proceeds, in most cases children and staff have continued to use the contaminated areas.

18. Carpets are removed with questionable (or no) Safe Work Practices (SWP) due to a disagreement over what constitutes a mouldy carpet. Mouldy carpet removal requires strict precautions according to Government regulations. (In the Kings County and Pictou County school board districts all carpets are removed using strict SWP. They prefer to err on the side of caution. Research has shown that the Sink Effect allows harmful substances to collect in the carpet fibers to be released when disturbed.)

19. In the repointing of a school's outer brick walls, the grinding of grout created silica dust. School was in session and children unprotected, while workers wore full protection. When asked about this by a parent a worker replied that they just wear protective gear because "they

like to", and not to worry. (Fairview Heights) Health officials resolved the hazard after it was reported by a parent.

20. In at least two schools, over March break, parents frustrated my the level of cleanliness in their schools cleaned their children's classrooms. In one the curtains were so stiff from mould (visible) and dirt that they had to be stood upon to bend and force them into transportable size. It took six washings before the fabric colour was evident. Compacted dirt coated the rafters, lights, door frames, etc., and huge sections would float down as the parents cleaned. The windows were believed to be the aged, yellowed Plexiglas, but were discovered, after much scrubbing, to be clear glass.

21. CASLE has conducted an informal survey of city custodians. Several custodians from several schools reported being given a strong cleaner and told to remove graffiti. They reported experiencing nausea, burning eyes, and general illness, and have refused to use that product again. We have learned that custodians have not been adequately trained. Custodians report that when ----- took over, brief instruction was given on SM products. "This green liquid is SM's windex. Use this." Some report receiving brief instruction in WHMIS requirements, and some were shown how to mop using the figure-8. Then they were given official looking forms that stated they had undergone a training program, and were expected to sign.

Some report just being handed a ring of keys and being told "This is your wing." They report not being issued goggles or other protective equipment listed as recommended on the MSDS of several cleaning products they are required to use. Many Halifax custodians have expressed a desire for (1) more training, (2) Less toxic products, (CASLE's and many individuals' considerable efforts to encourage this and to provide alternatives that are being successfully used in other schools and institutions, have so far met failure.) and (3) safety equipment. They express having difficulty getting help from either their employer or their union over these health issues. In contrast, in the Pictou area school board custodians and maintenance men are given a training course of 30 to 40 hours for upgrading or before being assigned a school.

22. The list could go on and on. In one somewhat humorous incident, pigeon's nesting over a school entry caused the Health inspection section of the Dept. of Environment to require they be removed. However another section of the same department insisted they be left undisturbed until the baby pigeons left the nest. In the end, the pigeons welfare won out over the children's. (St. Joseph's)

And much surely happens without being seen. Such incidents go on throughout the year and across the province in the less enlightened districts. We need a standardized system based on prevention. We can not go on "putting out fires" because by then the harm has already been done.

Examples of Recent Progress

This progress has not come easily, but was hard earned by determined citizens.

1. There have been renewed communications with the Departments of Labour, Health and Environment, and they are willing to assist in the upgrading of the schools' Health and Safety system.
2. The pressing need for upgrading of school Environmental Health and Safety was brought up in the Provincial Legislature by both Conservative and NDP representatives.
3. The Ministers of the Departments of Health, Labour, and Environment have written their support of the importance of these issues. CASLE's presentation to you today is a result of

that commitment.

4. With Health Inspector's "encouragement" a team had begun cleaning Halifax schools from top to bottom in January of 1996. The intention was to see this done at least once a year in all schools. (One principal asked that less toxic cleaners be used in his school...they had none so they used water! Also, it is interesting that the cleaning team found a 5-cent potato chip bag in a radiator they were cleaning.) CASLE does not know if all schools were cleaned or if the schools will be cleaned again this year.

5. There are now HEPA vacuums available for special cleanups.

6. The Department of Labour has endeavoured to activate Joint Occupational Health and Safety Committees in Halifax schools, and have seen that operating rules, structure for dealing with concerns, and a coordinator for the programme, have been put in place. Labour officials have provided us with a letter stating that parents can be members of JOHSCs if employee and employer parts of the committee agree. However, children are still not well protected under Labour Law.

7. Safe Work Practices (SWP) are in place for removal of asbestos floor tiles. (After five months struggle, and Department of Labour Orders.) It is not clear if tiles needing them are being properly identified.

8. Some of the hazards from mould overgrowth are more recognized. Effort is going into repairing building leaks and removing mould contamination, and carpets will no longer be installed in basement classrooms.

9. There are improvements in the SWP for removal of mouldy carpets, although there is disagreement over how to identify which ones are mouldy and therefore require stricter controls for removal and cleanup. Informed Principals are requiring strict controls.

10. There is a heightened awareness of the general health risks from carpeting. Carpets will only be installed in offices, libraries and music rooms and only if the principal requests them.

11. Halifax maintenance management attended the Construction Safety Association's Safety Basics course.

12. Some principals are requesting that maintenance work be done at times of less risk to children. Also, some principals inform parents and staff of potential risks of unavoidable work.

13. The Department of Education's Bulletin and Protocol of June '94 was released to all principals in Halifax June '95 after much effort from parents/CASLE. The Department of Education is presently conducting a survey to determine the usage of the bulletin.

14. Several schools have initiated their own Scent-free programs. (Virtually all cleaning products in use in Halifax schools contain added fragrance, making truly Scent-free schools impossible. Many also contain toxic chemicals including carcinogens, mutagens, and teratogens.)

15. At least one school is using less toxic methods in place of pesticides.

16. The Halifax District School Board's Environment Committee organized several inservices with Environmental Health experts, and wrote a guide for making schools healthier, (The July '94 Report of the Committee on Environmental Health), and briefly published a newsletter on these issues. There is little evidence that the July '94 report was used actively in the system.

17. There was to be a pilot project in one Halifax school to try less toxic cleaning and maintenance supplies and procedures, and to generally upgrade the air quality, but this appears to be either cancelled or on hold.

18. The newly amalgamated school board is attempting to address environmental health conditions in schools, but is sorely hampered by budget constraints.

Some General Comments:

a) **Lack of knowledge** on all levels is a major obstacle that CASLE is trying to help overcome. Nova Scotia is ahead of most parts of Canada in the interest in and knowledge about how the environment, particularly Indoor Air Pollution, impacts on people's health. Yet, **in the schools, often knowledge of and willingness to comply with even the older, and the less stringent safety requirements appears lacking.**

b) MacLean's Magazine recently quoted commissioner Peter Richard speaking of the tendency by Government Officials to follow "a strategy of appeasement, not action, when it came to safety." CASLE members have certainly noticed this to frequently be the case in the school system as well.

c) Another concern is over **the financial cost of some changes.** Funds must be made available up front to address the conditions in schools. CASLE points out that the costs are already being paid in indirect ways.

(1) The price in dollars is being paid in part by MSI, by various forms of insurance and by families paying uninsured health costs.

(2) Less toxic alternatives often cost less. Institutions such as CP Hotels and the Maryland Schools' Integrated Pest Management Program are reporting substantial savings through less toxic methods.

(3) Huge amounts of money are spent correcting problems that could have been foreseen.

The even less tangible price is the worry, stress, and grief that come from loss of well being, whether it be from asthma that begins with the return to school in the Fall, or from the loss of a career from illness caused by exposure to workplace hazard, or from loss of self esteem from being unable to think and learn well when in certain school rooms - thinking one is "just stupid". Schools are in the business of educating, but people cannot learn well if they are breathing polluted air. This is especially true for those already suffering from Environmental Illness, but research is showing this to be true for "normal" people as well.

Not all improvements in school Environmental or Occupational Health and Safety have to be expensive, and the knowledge of what and how to make those changes can be obtained from professionals already in our province. Much can be done simply by changing the way things are done. What seems to be needed is a recognition that changes will benefit the health and quality of education of all of the schools' occupants - **Healthy teachers are better teachers and healthy students are better students.**

CASLE wishes to point out the need for:

1. Clean, Non Toxic schools.

(a) cleaned and maintained air delivery systems, mould free, carpet free, scent free/chemical reduced, etc. including the use of least toxic products available.

(b) Safe Work Practices designed for children, not adults, for all potentially hazardous school maintenance. (Accurate identification of work needing SWP is essential.)

(c) Integrated Pest Management Programs in each school board and each with a coordinator.

2. Government Legislation requiring product labels list full disclosure of all ingredients contained in foods, personal care products, cleaning products, building materials, etc. to help prevent exposures to potentially hazardous materials. Presently, in cleaning materials for example, it is acceptable to omit listing ingredients present in amounts of less than 1%. On its

MSDS, one scented deodorizing product in use in Halifax schools lists under "ingredients: NONE".

3. A Department of Education Environmental Health Policy, Including required policies in each school board.

- (a) Based on prevention. "Wait and See" and "Putting out Fires" can not be allowed to go on.
- (b) Written protocols and guidelines for dealing with common incidents, such as oil leaks, chemical spills, sewer leaks, air system malfunction, etc. What to do if a problem is suspected or found.
- (c) An open and direct line of communication with the officials in charge of these issues.
- (d) Procedural avenues for easily putting into place improvements as new information becomes available.
- (e) Ongoing inservicing/training/newsletters.

4. A Joint Environmental Health Committee required in each school board, and made up of staff, school board, parents, Environmental Health professionals, and possibly students and representatives from associations such as the Lung Assoc. and the Allergy and Environmental Health Assoc. and with power to act on decisions.

5. Training for all involved: maintenance managers and workers, principals and staff, School Boards, parents, and students.

(Note: We understand the Department of Labour will soon require Occupational Health and Safety courses to be offered in schools. This Fall, at least two Halifax universities will to begin offering these. Also, Safety Manuals will soon be required to be written to fit the needs of each particular site. How can we ensure this is done in the school system, and that they are appropriate for children's health needs?)

6. Department of Labour Indoor Air Quality Legislation, or some other parallel legislation, must clearly state that children (and pregnant women and those in ill health) need more protection from hazards than do healthy adult males, and safety requirements in public buildings must reflect this fact.

7. A Provincial Indoor Air Quality (IAQ) Committee (perhaps called the Children's Occupational Health Committee) could function to oversee and monitor changes in the overall delivery of healthy school environments to all of our province's children. Department of Labour legislation only partially protects school children, as outlined in the Report on Schools. **This IAQ Committee, with the power to make decisions and require compliance of all school boards, could serve to protect the children where the Joint Occupational Health and Safety Committees leave off.**

The IAQ Committee should have representation from Environmental Health professionals.

8. Help ensure that school boards have enough money to address their school's unhealthy conditions. Only when the necessity is clearly recognized will the funds have any chance of being made available.

CASLE encourages the Government Departments to make use of the following sources of information. (Many more resources are also available.)

- a) Consultations/inservices with Environmental Health Professionals.
- b) Indoor Air Quality: Tools for Schools - the US EPA's Action Kit on indoor air quality in schools. Superintendent of Documents, P.O. Box 371954, Pittsburgh, Penn. 15250-1800.
- c) Report to the New York State Board of Regents on the Environmental Quality of Schools,

New York State Education Department, Albany, New York 12234, 1994. Also, models of action from other school systems. (Maryland, Texas, Sweden, Kitchener-Waterloo. etc.)

d) The Healthy School Handbook, the U.S. National Education Association, 1995

e) Is This Your Child's World? Doris Rapp, MD, 1996.

f) The 1994 Bulletin and Protocol from the Dept. of Education's Indoor Air Quality Committee. (Include Environmental Health experts on the IAQ Committee.)

g) The Halifax District School Board's Report of the Committee on Environmental Health, 1994.

h) The CMHC's booklets and research on less toxic buildings and building materials.

i) Health, Labour, and Environment legislation relevant to schools, including Taking Responsibility, and the Draft Regulations on Indoor Air Quality.

j) The Construction Safety Association's Safety Basics Course. This course could be made a requirement for all companies doing work on school buildings. However, allowances would have to be made to adjust for children's more vulnerable bodies, since this course is based on adult workplace hazards and on research on adult bodies.

In Conclusion:

The present system is not working. CASLE members are attempting to speak for the children who are not being heard, but who are at great risk. The health of our own children has been greatly compromised. Our children are no longer the exception. Unfortunately, more and more are joining them every day.

Environmental Health and Safety is too important to be left to the chance that any particular school board might have the necessary knowledge and will to protect the children. Changes are needed at all levels, from government departments to the classroom. Those who hold our children's well being in their hands need to be uniformly trained and required to comply. We ask that the Government Departments who have it in their power to put overall improvements in place will work together to protect the children uniformly across the province.

As MacLean's Magazine recently reported, Westray Inquiry Lawyer John Merrick pointed out, "We've heard over and over again that safety starts at the top, the proper approach begins at the top, the mind sets start at the top, quality starts at the top."

We are willing to assist in any way we can.

Respectfully Submitted,

Citizens for A Safe Learning Environment (CASLE)

Represented by

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Discussion period: You know your departments best. What can your department do to help close the gaps?