



## **Toxins-Free Schools**

### ***Student's Environmental Bill of Rights Backgrounder***

A number of school districts in British Columbia have already taken action to reduce toxic substances in the school environment by eliminating toxic cleaning products, paints and other products and replacing them with safer substitutes. Joint occupational health and safety committees, made up of representatives of employers and employees, have been instrumental in making the changes, and many initiatives have come from the workplace, as workers have asserted their right under health and safety legislation to reduce hazardous materials.

School districts have also been responsive to a growing public awareness about toxins in the school environment, evidenced in the BC Enviro poll conducted in November 2004. It found that 91 per cent of respondents supported the elimination of carcinogenic chemicals from schools, even if cost individual taxpayers more.

A growing body of evidence points to chemical exposure as a major contributing factor to a range of disorders in children, including asthma, autism, Attention Deficit Hyperactivity Disorder, reproductive and neurological impairment and cancer <sup>(1)</sup>. In many cases, the incidence of those disorders has risen in recent years.

The incidence of childhood cancer in Canada is up 28 per cent since the 1970s <sup>(2)</sup>.

The causes of autism are not fully understood but developmental exposure to chemicals is an important factor <sup>(3)</sup>, especially since the rate of autism in the U.S. has risen dramatically in the last two decades and is 5-8 times what it was in the 1980s <sup>(4)</sup>.

Childhood asthma is more clearly linked to a variety of environmental factors, with cleaning products, solvents and other chemical playing a significant role in the rapid increase in asthma cases. Health Canada reported in 1997 that doctors had diagnosed asthma in children four times more often in 1996 than in 1984 <sup>(5)</sup>.

Children are particularly vulnerable to the effects of toxic chemicals because of their higher metabolic rate and because their bodies continue to develop from birth until puberty. Exposure to chemicals at critical times of development can have permanent effects through adulthood.

Numerous chemicals found in the school environment are associated with disorders in children. The following are among the substances that school districts should include on a toxins-free checklist:

Pesticides, including insecticides and herbicides used on school properties, are associated with an elevated rate of leukemia, non-Hodgkin's lymphoma and brain cancer, among other cancers <sup>(6)</sup>.

Mercury from broken thermometers and lab spills in past years can create ambient levels of toxic mercury that can affect children's neurological development.

Solvents and glycol ethers used in school cleaning and maintenance products have been linked to learning disabilities and attention deficits, especially when children are exposed at critical times of development <sup>(7)</sup>.

Some of the cleaning and maintenance products used in schools contain reproductive toxins and carcinogens. Some are also asthmagens.

Asbestos, a known human carcinogen, is still found in some schools in both insulation and flooring materials.

Chromated copper arsenate, or CCA, was widely used as a wood preservative for playground equipment and while many schools have replaced the equipment, not all have. Children playing on equipment are exposed to carcinogenic arsenic.

While workers have the right to know what hazardous materials they may be exposed to on school properties, that right does not extend to students or parents at the school.

The Student's Environmental Bill of Rights would extend the "right to know" to students and parents and give them the right to refuse to enter a classroom "where harmful substances are reasonably believed to exist." Just as students are now entitled to "peanut-free" areas because of the allergy potential, students would be informed and given the right to avoid exposure to an asthmagen, for example, or a carcinogen such as formaldehyde, if the exposure could cause them harm.

An environmental bill of rights for students is consistent with the United Convention on the Rights of the Child, which Canada has ratified. Canada also signed the 1997 Declaration of the Environmental Ministers of the G-8 on Children's Environmental Health, which states that "prevention of exposure is the single most effective means of protecting children against environmental threats."

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## References

- (1) Mt. Sinai School of Medicine Centre for Children's Health and the Environment. Available online at [www.children-environment.org](http://www.children-environment.org)
- (2) Canadian Cancer Statistics, 2003. Canadian Cancer Society, National Cancer Institute, Provincial/Territorial Cancer Registries, Statistics Canada, Health Canada.
- (3) See note 1.
- (4) Parlikar, M.R. "More cases of autism or better identification of cases?" Butler Hospital, 2005. Available online at: <http://www.butler.org/body.cfm?id=125&chunkiid=89416>
- (5) Health Canada Population Health Survey, 1996-1997. Cited online at: [http://www.cmhc-schl.gc.ca/en/burema/gesein/abhose/abhose\\_078.cfm](http://www.cmhc-schl.gc.ca/en/burema/gesein/abhose/abhose_078.cfm)
- (6) Pesticides Literature Review. Ontario College of Family Physicians, 2004.
- (7) Schettler, Ted; Stein, Jill; Reich, Fay; Valenti, Maria. In Harm's Way: Toxic Threats to Child Development. A Report by Greater Boston Physicians for Social Responsibility, 2000.