

Around the world, people live, work and learn indoors. Indoor environments can affect our health and productivity. The US Environmental Protection Agency estimates that air pollutants can be two to five times – and occasionally more than 100 times – higher indoors than outdoors. Since many people today spend about 90% of their lives indoors these figures are significant.

Children’s developing bodies make them particularly vulnerable. For them, this is a vital issue. **Indoor environments have been shown to affect both learning performance and health.**

A study of 52 Canadian schools determined that, after controlling for socioeconomic factors, students in ‘poor’ buildings had grade averages 5.5% below those in ‘fair’ buildings and 10.9% below those in ‘excellent’ buildings.

Indoor environment problems can result from a variety of factors, including

- products used (for building operation as well as for education)
- practices (the ways things are done)
- building condition (including ventilation problems, results of deferred maintenance, and specific contaminants)

Better indoor environments deliver many benefits. Improving school Indoor Environment Quality (IEQ) has been shown to:

- increase productivity for students and staff
- improve attendance
- reduce potential for IEQ-related health problems such as asthma triggers
- reduce long-term and spin-off costs including medical and insurance costs
- reduce maintenance and operating costs
- reduce building repair costs

Most importantly, safe and healthy school environments help schools with their core mission — educating students.

How Enviro-Health Consulting Can Help

We can respond to environmental health and safety issues in existing schools, including helping to solve puzzling IEQ problems.

We can also:

assist with Source Control of contaminants regarding

- low-emission cleaning and maintenance products and methods
- selecting and using classroom materials
- integrated pest management programs
- fragrance-free programs
- vehicle no-idling programs

deliver presentations or workshops to increase knowledge and help build commitment to healthier schools

provide training and technical assistance on school workplace health and safety, such as first aid kit requirements, WHMIS training and Safe Work Practices for renovation projects.

We specialize in helping designers and builders to include critical healthy design features in new and renovated schools. We have worked collaboratively on the development of several new Nova Scotia schools to create indoor environments that will start healthy and stay healthy for the life of the school.

Enviro-Health Consulting can also help your school or system implement Health Canada’s *Tools for Schools Action Kit*. This Indoor Air Quality (IAQ) kit helps prevent, identify and resolve indoor air quality problems through simple, low-cost measures that

- reduce IAQ-related health risks including triggers for asthma
- identify sources of mould and other hazards
- improve comfort and performance levels
- avoid costly repairs
- avoid negative publicity and loss of community trust



Tools for Schools is being used in 30,000 schools in the United States.

“We saw a significant decrease in the absenteeism rate...since we completed the IAQ upgrades.”

P. Santiago, School Nurse, Little Harbour School, NH

Expert advice can make a difference.

Enviro-Health Consulting Ltd. has skilled professionals with the right expertise to help you make the best decisions for both existing and new schools.

A study done by Dorgan Associates for the National Energy Management Institute in Alexandria, Virginia, estimates that improving IAQ in buildings could result in a payback in terms of improved productivity and decreases in medical costs in less than two years.

IAQ Update, May 1994



Sir John A. Macdonald High School Hubley, NS



Halifax West High School Halifax, NS

Enviro-Health Consulting Ltd.

Our team of professionals is ready to help you to

- design and build healthy new schools
- respond to environmental health and safety issues in existing schools
- implement Health Canada's *Tools for Schools Action Kit*

We can also assist by

- making presentations and leading workshops to increase knowledge and commitment to healthy schools
- training and providing technical assistance on school workplace health and safety.

Our expertise extends to such issues as Source Control of contaminants for operations and maintenance, green cleaning materials, integrated pest management, indoor mould concerns, classroom material selection, filtration devices, chemical-reduction programs, no-idling programs, and avoiding renovation hazards.

Through smart choices we can create healthier schools and increase student and staff success.



Enviro-Health Consulting Ltd.

13 Tremont Drive
Halifax, NS B3M 1X8
902-457-3002
envirohealth@ns.sympatico.ca

Karen Robinson, CEO, Enviro-Health Consulting Ltd., is a skilled professional with over 15 years of experience in the field of environmental impacts on health. She is an effective problem solver and team player with proven leadership and organizational ability.

Karen is the author of numerous reports, articles and presentations on healthy schools issues. Related experience includes

- consultant to the Halifax Regional School Board on the implementation of healthy school guidelines for new and existing schools
- primary author of *Healthy School Design and Construction*, guidelines for the Nova Scotia Department of Education
- invited speaker (locally, nationally and internationally) on environmental health and safety, indoor air quality, and healthy building design and construction
- President (volunteer) of CASLE (Citizens for A Safe Learning Environment)
- Treatment Committee Chair, Board of Directors of the Environmental Health Association of Nova Scotia

Awards

- The Queen's Golden Jubilee Medal for community service in the health field, 2004
- Commendation from the Nova Scotia Legislature for actions to protect schoolchildren from asbestos, 1996
- Canadian Institute of Child Health's national Innovation Award of Excellence (with CASLE), 2005

"Karen Robinson has been instrumental in heightening awareness and fostering change in issues such as school indoor air quality, occupational health and safety, healthy school design and safe work practices."

Debbie Hum, Councillor, Halifax Regional Municipality

Clean, safe and healthy schools promote student success.



Enviro-Health Consulting Ltd.