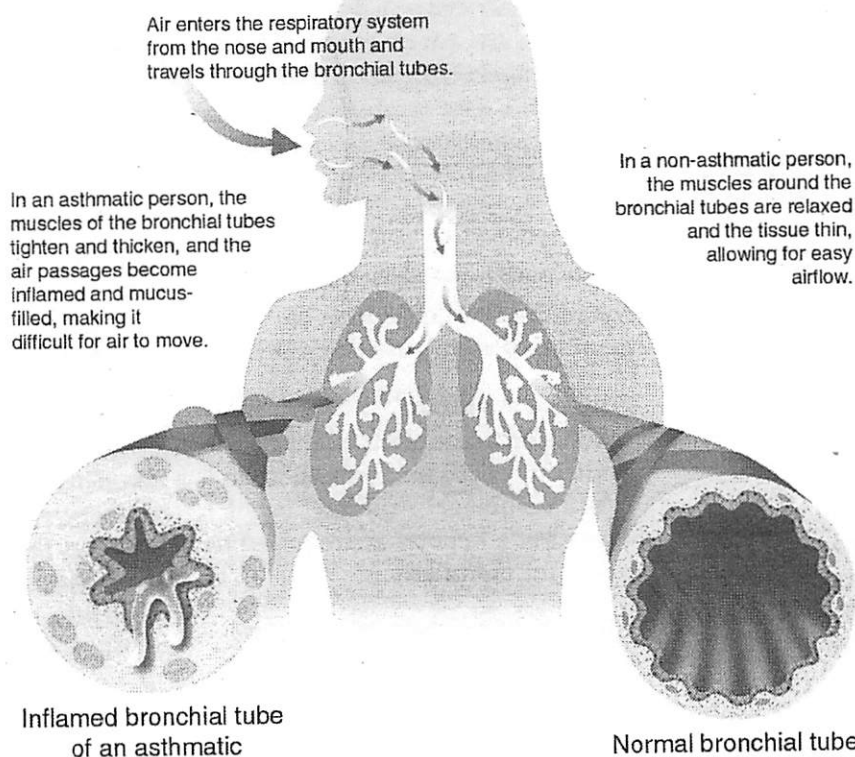


SENSITIVITY MATTERS

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Why asthma makes it hard to breathe



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- *Canada's ECO classrooms*
 - *Eosinophilic Enteropathy*
 - *Asthma*
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Allergy and Environmental Sensitivity Support and Research Association Inc.

Life in an ECO classroom — 100% better

by Avis Degaust

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index.html](http://www.environmentalhealth.ca/index.html)*

Krista Manuel and Lindsay Shano are two high school students who attend Nova Scotia's first Environmentally Controlled Opportunity (ECO) classroom. This special classroom, which opened last year is located in Lockview High, Fall River. It provides environmentally sensitive students an opportunity to attend school in a safe, healthy classroom environment. Krista, a grade eleven student, is now in her second year. "The ECO classroom has helped me 100%. In junior high it was hard to attend. I missed a lot of time, my marks went down and I found it difficult to catch up." She describes this year as great. "My health and attendance have improved and overall my marks have been really good," she says with a smile.

Lindsay, a grade ten student is finishing her first year in the ECO classroom. She describes her struggle with health symptoms, which started in grade six. "I missed a lot of time because of headaches and other symptoms, and this year I'm attending school more than I ever did, my health is much better and my marks have gone up." Before the ECO classroom existed, both girls were unable to attend school on a regular basis because a normal class environment made them physically sick. When they did attend, irritants in the environment made concentration on their schoolwork difficult.

Krista and Lindsay interact with their subject teachers on a daily basis for course content and evaluation. The majority of their time is spent working on their studies with supervision from their classroom teacher, Ms Meg McKenzie. Krista describes the daily environment as being, "very clean, very fresh and very healthy. It is easy for me to concentrate, I am able to work well and independently and I want to do my work." One of the goals of the ECO classroom is to integrate students back into the regular classroom setting gradually as health permits. Students can be full-time. Both Lindsay and Krista have been doing so well this year, that recently they have been able to attempt integration into the regular classroom.

Krista has joined her Oceanography classmates and Lindsay is trying to attend all of her four credits. One great feature of the ECO classroom is the flexibility to move in and out of the room when necessary. When students experience symptoms from environmental pollutants or irritants they can return to the ECO classroom until symptoms disappear. "When I'm attending the regular classroom and my headaches return I make a decision on what to do," explains Lindsay. Results from the ECO classroom indicate not only improvements in student's health, attendance, and academic performance but also an increase in self-confidence and self-esteem.

"A few drawbacks of life in an ECO classroom are the lack of interaction with other students and not being able to join school activities, clubs, and in class and what the teacher has to say and it's unfortunate that I can't attend school functions, but I'm glad to see and spend time

with my friends outside at lunch time." The girls explain that web cam technology is currently being installed to enable them to see and hear what's going on in other classrooms and that this technology can also be used to tune in from home.

When asked what they liked best about the ECO classroom, Lindsay responded, "I like this school and my teachers. The best part is knowing that I don't have to go home every time I'm sick. I can socialise with my friends, and come back to the ECO classroom when I need to." Krista added, "I'm thankful that I'm able to attend this ECO classroom. I really enjoy this school. I love the staff and Ms McKenzie is a devoted and awesome teacher. It's wonderful to know this room is here and will be here for others when they are ill. If it wasn't for this class I'd be home schooled. I'm happy that I'll be able to graduate with my friends. This room is 100%!"

Krista and Lindsay wish that others understood more about how environmental sensitivities affect people's health and learning. They say there are "a huge amount of students that don't understand, don't care or don't recognise the problem, especially regarding the use of fragrances." They also hope to have more classmates in the future and they want everyone to know the Lockview High School ECO classroom is great place to be. (Any Halifax Regional School Board student in grade 9-12 experiencing difficulty with environmental sensitivities in their school is eligible to attend this classroom.)

*Avis Degaust is the Education
Director for Citizens for a Safe
Learning Environment (CASLE).*

ECO classrooms (Environmentally Controlled Opportunity Classrooms)

by S. Moser, Citizens for A Safe Learning Environment

*Reprinted with permission from the website of Citizens for A Safe Learning Environment, 287 Lacewood Drive, Unit 103, Suite 178, Halifax, Nova Scotia, B3M 3Y7 Canada
www.chebucto.ns.ca/Education/CASLE/*

The intent of creating an Environmentally Controlled Opportunity (ECO) classroom is to provide an opportunity for environmentally sensitive students to attend school when they would otherwise be unable. Even though new schools may be safe for most individuals, they may not be safe for all. It is essential to include an ECO classroom in new schools to accommodate the arising needs of hypersensitive students and teachers.

Students who are sensitive and allergic to items in the environment can exhibit physical symptoms such as throat, ear, eye and lung irritation, muscle and joint pain, flu-like symptoms, headaches, exhaustion, tremors, light sensitivity and skin rashes. Behavioural symptoms can include depression, difficulty learning or concentrating, mood swings, hyperactivity, short-term memory loss, aggression and irritability.

Exposure to items in the environment such as pollens, dust, mould, and chemicals, which can be tolerated by most individuals, can seriously affect an environmentally sensitive child. Due to an accumulated hypersensitivity, these children are not just allergic to one thing, but many. Their immune systems have been compromised or suppressed, so that they react to numerous things in the environment. With each exposure, they become more

sensitive, so eventually, they react to very minute portions of the allergen. These children need to be provided with a classroom that has been built with the least toxic materials, is free of allergens, and contains a separate ventilation unit, as well as air purifiers.

The first ECO classrooms to be built in Canada were in the Waterloo District in 1985. Doug Morris, Superintendent of Special Education was instrumental in establishing these classrooms. In 1993 there were six facilities in operation at the elementary and secondary level. By 1994, several school districts in Ontario had made significant changes in their environmental practices to improve the air quality in their schools.

The first students to be chosen for these classrooms were students who were on a home study program. Within months of attending these classrooms, students made significant improvement in their attendance and academic performance. Not only did their grades improve, but so did their behaviour, activity levels and self-esteem. Many of the part-time students in the ECO classrooms were able to be integrated back into the regular classroom with great success.

Dr. Doris Rapp made the following observations about ECO classrooms in a presentation at the National Conference on Children with Sensitivities in Ottawa in 1996:

You are very fortunate in this particular area of the country because in Halton and in Kitchener you have environmentally safe classrooms. You are leaders in the whole world in Canada in respect to this. In those schools they have found that they have

increased the academic performance, improved the attendance, decreased the illness, taken children from home teaching and they are now able to go to school.¹

Students on home study should be the first students to be considered to attend an ECO classroom. Admittance on a part time basis should also be considered. It may be necessary to establish a committee to decide the criteria for admittance to this type of classroom. Following are some considerations in establishing an ECO classroom.

Program Goals

1. To provide a self-contained environmentally controlled classroom for students.
2. To provide access to all regular programs and activity with peers, to the degree appropriate for each individual.

Program Objectives

1. To design and implement an appropriate educational program for each student.
2. To further accommodate the special health needs of students in the program.
3. To facilitate the involvement of students within regular classroom programs.
4. To assess each student's progress on a continuous basis.
5. To assist and support parents in securing the involvement of health care professionals for guidance and home environment modifications.
6. To act as a resource to students, parents, teachers and administration regarding ecological sensitivities.

Human Resources

One teacher to instruct a maximum of 12 students. (Grade primary - 6)

One teacher to instruct a maximum of eight students. (Grade level 7 - 12)

Program Planning Team

This team should include:

- school administration
- teachers
- school psychologist
- public health nurse
- parents

Referral and Assessment Procedures

Consideration is given to the following:

- students who are on a home study program
- medical evaluation
- parent support and involvement
- student's responsibility for self and others
- educational assessment

Curriculum Needs

Each student will follow the regular curriculum with necessary adaptations to accommodate their individual sensitivities in consultation with the Program Planning Team.

Design Features and Materials

- a separate self-contained temperature/humidity controlled and HEPA filtered ventilation system that will maintain a positive air pressure within the classroom
- ceramic tile flooring and concrete walls with low-toxicity paint
- ceiling panels, hardwood furniture, shelving manipulative items sealed with low-toxicity finish
- full-spectrum lighting or electronic ballast with T-8 lamps
- filtered water supply stored in a glass container
- metal window blinds

- private attached washroom (where this is not possible, special consideration must be taken for cleaning products used in public washrooms as well as the distance from the classroom)
- refrigeration unit
- white boards and low-toxicity bulletin boards instead of chalk boards, with odourless, water-based markers
- hypo-allergenic floor mats and cotton futons for napping
- high-quality room air purifiers to remove dust, moulds, pollen and other air particles
- a portable oxygen tank for the initial treatment of minor accidental chemical exposures
- a computer, printer and internet services
- a telecommunication unit which could access other classrooms such as science labs would be ideal
- books should be older rather than new, if this is not possible textbooks should be baked at 100° Fahrenheit for five hours then aired
- glass boxes may needed for viewing books
- signs outside the classroom should prohibit anyone from entering who smells of perfume, smoke or chemicals

Classroom Guidelines

1. Lunches are stored and consumed in the ECO classroom, with no sharing of food unless authorised.
2. Students and teachers who enter the ECO room must:
 - wear only fragrance-free personal hygiene products or those that have been approved by the students themselves
 - refrain from the use of nail polish, anti-static products and scented fabric softeners
 - avoid the wearing of clothing exposed to cigarette smoke or other noxious fumes; freshly

dry-cleaned clothes, new plastic material

- refrain from touching pets before coming to school

Cleaning Procedures

- cleaning products used must be tolerated by all students
- cleaning should not take place while students are in the classroom
- unauthorised materials must not be used in the ECO classroom
- washrooms used by these students must be cleaned with special chemical free cleaners
- waste baskets must be emptied daily
- floors must be swept daily and mopped weekly
- all furniture and window blinds should be cleaned weekly
- the H.V.C. (heating, ventilation, cooling) system must be inspected and filters changed frequently
- special maintenance that is required of the classroom must occur during break periods
- pesticides should not be used during school hours and a 24 hour notice for pesticide use should be posted
- plants should not be allowed in the classroom

Other Considerations

- separate transportation should be provided for those students who cannot travel on a bus
- this transportation should provide a smoke-free environment and should be non diesel
- educational programs for students, staff and parents should be provided so that everyone can become aware of environmental issues
- academic and health assessment should be ongoing
- a variety of support services should be provided

Evaluation

Evaluation for this program can be measured upon the success of the participants in this program using various criteria. Success not only means academic success, but involves a wide range of criteria such as attendance, self-esteem, behavioural patterns, social skills etc.

Reference Note

1. Rapp, Doris. "Practical Answers to Common Learning and Health Problems: Schools, Housing and Diet." National Conference on Children with Sensitivities

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CASLE (Citizens for A Safe Learning Environment) is a charitable organisation based in Nova Scotia, Canada. Over the last decade CASLE members have worked successfully to improve the products, practices and condition of schools. For more information visit CASLE's website at www.chebucto.ns.ca/Education/CASLE.

Integrated pest management for Australian schools and childcare centres

The Total Environment Centre manual on Integrated Pest Management for schools and childcare centres is expected to be available in late September. (We should have a copy to show

people at our AGM.) Prevention, monitoring, and controlling pests can dramatically reduce the use of pesticides, and therefore reduce the risk of children's exposure.

"There is a global push to remove toxic pesticides from schools and childcare centres. In the US and Europe easy to understand manuals, such as the one TEC has produced have been used to help train managers, teachers and parents to reduce and remove the

use of pesticides within schools and childcare centres," said Ben Cole, Total Environment Centre Chemicals Campaigner.

For further information contact: Ben Cole — Chemicals campaigner phone: 02 9299 5599, fax: 02 9299 4411, email: toencen@magna.com.au or visit www.tec.nccnsw.org.au/ Total Environment Centre, Level 2, 362 Kent Street, Sydney 2000.

Health effects of dust from Ground Zero

The attack on the World Trade Centre on 11 September last year resulted in thousands of tonnes of pulverised asbestos and heavy metals billowing over lower Manhattan. Minute toxic particles stayed in the air for months. The dust contained inorganic carbon, carbonate carbon, sulphur, copper, lead, zinc, titanium, glass fibres containing silicon, aluminium, magnesium, iron, titanium, vanadium, nickel and other elements. Independent researchers found up to 4% asbestos in some samples.

50,000 people live in lower Manhattan and 400,000 people work within a mile of Ground Zero. It now seems that the dangers of this air pollution were

downplayed. Normally people are warned about the dangers of asbestos and the importance of a professional clean up. But the authorities decided that in lower Manhattan flat owners and landlords should be responsible for the clean up. Many residents found that because the EPA downplayed the hazards, landlords and insurance companies refused to pay for professional cleaning.

While the EPA and the New York Department of Health reassured everyone, many people suffered from respiratory problems, asthma, sinus infections and headaches.

On 11 February at a Senate subcommittee hearing in Lower Manhattan to investigate WTC air quality, Dr. Steven Levin of the Mount Sinai School of Medicine noted the development of chemical sensitivity in some of the WTC disaster patients they have seen.

"Some of our patients once away from Lower Manhattan have noticed a general improvement in their symptoms but find that exposure to cigarette smoke, vehicle exhaust, cleaning solutions, perfume, or other airborne irritants provokes reoccurrence of their symptoms in ways they never experienced before 9/11."

The EPA is now offering to test homes for asbestos and provide professional cleaning.

The Chemical Sensitivity Foundation (<http://chemicalsensitivityfoundation.org/>) is establishing a registry to track the health problems that have been developing post 9/11 in those living or working near Ground Zero.

— from The Guardian (UK) 5/6/02
and
<http://chemicalsensitivityfoundation.org>