



**W**e tend to associate air pollution with the outdoor environment, with smog and vehicle exhaust, pesticides and the like. In fact, indoor air can actually be substantially more polluted than the air we find outside. Levels of about a dozen toxic Volatile Organic Compounds (VOC's), for example, have been found to be two to five times higher in homes than outside.

In apartment buildings, VOC's and other toxins are emitted into the air by common building and maintenance materials, such as cleaners, paints, glues, treated wood products, carpeting, and air fresheners. Residents also contribute to problem through smoking and by using scented personal care products, such as perfumes. Major repairs and renovations, increasingly common among Ontario's aging apartment stock, further degrade air quality, as can ventilation systems that fail to stop air

transfer between units or provide an adequate supply of fresh air.

Poor indoor air quality is unhealthy for everyone. However, there is an increasing body of research pointing out the particularly serious health implications for children and pregnant women. Children are extremely vulnerable due to their size and developing bodies. People with Environmental Sensitivities and other immune system or respiratory conditions can be completely debilitated by exposure to very low levels of toxins in the air.

### **"Canaries in the Coal Mine"**

Environmental Sensitivity (ES) – often called Multiple Chemical Sensitivity - is a medically recognized condition that likely affects about four million Canadians<sup>1</sup>. For people with ES, exposure to scented products, fumes from cleaning or maintenance materials, smoke and other air contaminants can trigger a variety of

serious physical reactions, including hives, seizures, difficulty breathing, bronchitis and pneumonia, nausea, muscle spasms, depression and cognitive impairments. While some people will have mild reactions, others can become completely disabled. People with ES have been compared to "canaries in the coal mine," alerting those of us that are "healthy" to the dangerous substances in our environment.

There are a variety of approaches to improving air quality in apartment buildings. These approaches have been broadly summarized as follows:

- Reduce or eliminate the sources of toxins in the air
- Remove toxins in the air that have been created
- Seal units and provide adequate air pressure to reduce transfer of toxins and other pollutants
- Provide an adequate supply of clean, fresh air

*1 Environmental Hypersensitivity Association of Ontario/Women's College Hospital's Environmental Health Clinic, 2003, "Multiple Chemical Sensitivity: Are You at Risk?". The number is extrapolated from US population studies that have found between 16 and 33% of respondents identify themselves as "unusually sensitive to everyday chemicals" or who "get sick after smelling chemical odours." This is a far larger number than the number of people actually diagnosed with ES or MCS (which is about 3% of the population).*



# HOUSING

By John Fraser, Program Director,  
Centre for Equality Rights in Accommodation

A great way to start is to avoid using scented, toxic cleaning and maintenance products. Non-toxic “green” cleaning products are now readily available, as are low and no-VOC paints and stains. Wherever possible, housing providers should also avoid carpeting, which releases VOC’s, dust, animal dander and other substances, and particle board and other treated wood products which usually contain formaldehyde. Housing providers can minimize the impacts of maintenance, repairs and renovations by ensuring the work area is adequately contained and ventilated, and that residents are given ample notice so that they can take their own steps to reduce exposure to toxins in the air.

*Making changes to improve the indoor air quality of apartment buildings – and create healthier housing – does not have to be overwhelming.*

Ensuring that buildings are adequately ventilated can be more complicated, but is equally important. Proper ventilation can ensure that common areas and individual apartments are receiving fresh air that can help flush out pollutants. Ensuring that kitchen and bathroom exhaust fans are working properly, and that potential “leakage” points in units, such as plumbing and electrical outlets, are sealed can also make a big difference.

## Your Residents Will Thank You

Making changes to improve the indoor air quality of apartment buildings – and create healthier housing – does not have to be overwhelming. In many cases, these changes will primarily involve adjusting day-to-day cleaning and maintenance practices. Of course, it is never easy to modify approaches that have been in place for many years. But it should be doable. And your residents will thank you. In fact, the prospect of living in a healthy, “green” building will undoubtedly be appealing to many prospective residents.

Over the past few months, the Centre for Equality Rights in Accommodation (CERA) has been working with a variety of community partners, including the Federation of Rental Housing Providers of Ontario (FRPO) and regional landlord associations, to develop educational resources for housing providers interested in creating healthy housing. We are currently working on a set of healthy housing guidelines and an associated resource kit which we hope will give landlords and property managers workable strategies and help them source non-toxic products.

An excellent resource that is currently available is the Guide to Less Toxic Products produced by the Environmental Health Association of Nova Scotia. This guide is available online. The Canada Mortgage and Housing Corporation also has a variety of helpful documents, including *Healthy Highrise*, *Solving Odour Transfer Problems in Your Apartment*, and *Building Materials for the Environmentally Hypersensitive*. ■■