



## ***Why Test Your Indoor Air Quality?***

Without a doubt, the quality of air indoors is worse than outdoors. Sick Building Syndrome (SBS) is a term used to describe situations where the occupants experience acute health and comfort effects that appear to be linked to the time spent in the building, but no specific illness or cause can be readily identified. A 1984 World Health Organization Committee report suggested that up to 30% of new and remodeled buildings worldwide may be the subject of excessive complaints related to Indoor Air Quality (IAQ). Cited causes, or contributing factors, of SBS include inadequate ventilation, chemical contaminants from indoor and outdoor sources, as well as, biological contaminants.

### **IAQ Health Signs & Symptoms**

You may be surprised to learn that there are a number of health related issues associated with SBS and Indoor Air Quality (IAQ). Some often mimic common cold & flu symptoms making recognition difficult. They include: rhinitis, nasal congestion, epistaxis, pharyngitis, cough, wheezing, worsening asthma, severe lung disease, dyspnea, conjunctival irritation, headaches or dizziness, lethargy, fatigue, malaise, nausea, vomiting, anorexia, cognitive impairment, personality change, rashes, fever, chills, tachycardia, retinal hemorrhage, myalgia, hearing loss.

### **Contaminants & Where They Come From**

#### ***Biological Pollutants include:***

1. Mould / mildew / fungus -- 85% of all homes have mould and 10% to 35% have serious mould contamination. Prolonged exposure can cause anyone to develop an allergy or toxigenic response. Sources may include water ingress and wood rot, dead plant material, humans, soil, air, dung, and food.
2. Dust Mites -- live in mattresses, pillows, carpets, fabric-covered furniture, bed covers, clothes, and, stuffed toys.
3. Pests -- droppings or body parts of pests such as cockroaches or rodents can be asthma triggers.
4. Pollen -- a fine, powder-like material consisting of pollen grains that is produced by the anthers of seed plants.
5. Animals -- dander, minute scales from hair, feathers, skin flakes, urine and saliva.
6. Infectious agents (bacteria or viruses).

#### ***Chemical Contaminants include:***

1. Carbon Monoxide (CO) -- where ever fossil fuels are burnt such as chimneys and furnaces, back-raffing from furnaces, gas water heaters, wood stoves and fireplaces, gas stoves, automobile exhaust from attached garages, environmental tobacco smoke.
2. Carbon Dioxide (CO<sub>2</sub>) -- In occupied areas, the concentration of carbon dioxide (CO<sub>2</sub>), a product of human respiration, is used as an indicator of inadequate ventilation. If levels are

- high, constant irritability and complaints from building occupants is expected.
3. Nitrogen Dioxide (NO<sub>2</sub>) -- kerosene heaters, unvented gas stoves & heaters, combustion sources, environmental tobacco smoke.
  4. Sulphur Dioxide (SO<sub>2</sub>) -- combustion sources (such as coal, petroleum, kerosene, propane and oil).
  5. Formaldehyde (HCHO) -- pressed wood products (hardwood paneling, particle board, fibreboard) and furniture made with these pressed wood products, Urea Formaldehyde Foam Insulation (UFFI), combustion sources, environmental tobacco smoke, durable press drapes, other textiles, coated paper products, cosmetics, and glues.
  6. Radon (Rn) -- Sources include the earth and rock beneath a building, well water, building materials. Symptoms are not readily apparent with short-term exposure.
  7. Volatile Organic Compounds (VOC's) -- includes paints, paint strippers, other solvents, wood preservatives, aerosol sprays, cleaners, disinfectants, moth repellents, air fresheners, stored fuels, automotive products, hobby supplies, dry-cleaned clothes.
  8. Pesticides -- insecticides, termiticides, disinfectants, lawn and garden products

### **Not Sure What You Should Check For?**

**Healthy Homes IAQ™** has an in-depth method of assessing what areas might be a concern for you. With our Pre-screening Site Review we will look at various areas commonly associated with environmental problems in and around your building & property related to items such as those listed above. In this way, we can develop a strategy as to what various tests should be carried out, if need be, instead of blindly testing for a myriad of different items, if any testing is needed at all.

### **Indoor Air Quality Testing**

**Healthy Homes IAQ™** can not only check your home for indoor air quality issues, we can also take bulk or air samples on site for BC Gov't approved laboratory testing to help validate any concerns we observed.

### **Why a *Healthy Homes IAQ™* Report?**

We provide a comprehensive narrative-style written report with each of our professional Indoor Air Quality inspections or testing work. Our reports are:

- Not a simple checklist,
- Easy to read,
- Not overly technical and,
- Tells you the condition of your property in every day helpful language

