



Indoor Air Quality in the Workplace

Indoor air quality (IAQ) at the office or workplace shares many of the same indoor air quality problems as a home. Building materials, carpets, cleaning products, and poor ventilation can present air quality issues in both environments. However, some IAQ problems such as scents and fragrances, automobile exhaust, cleaning solvents, and manufacturing activities can be more common at the workplace.

Why should an EMPLOYEE care about indoor air quality at work?

As an employee, your health may be at risk from poor IAQ at work. Poor IAQ can worsen allergies and asthma, cause eye, nose and throat irritation, or can result in fatigue, nausea or illness. The health effects of these symptoms can lead to poor work performance and productivity, as well as impacting your own well being. In the long-term, these symptoms could also lead to sickness, missed work and loss of income.

People generally notice their symptoms after several hours at work, and feel better after they have left the building or when they have been away from the building for a weekend or a vacation.

Many of these symptoms may also be caused by other health conditions including common colds or the flu, and are not necessarily due to poor IAQ. This fact can make identifying and resolving IAQ problems more difficult.

Why should an EMPLOYER care about indoor air quality at work?

As an employer you have a responsibility



to ensure a safe and healthy work environment. Poor IAQ can impact the health of your employees and result in increased absenteeism, reduced productivity, and potential safety hazards. Increased health claims from IAQ related illnesses can be avoided. Salary costs for absent or unproductive employees can far exceed building operation costs. Talk to your employees today about their air quality concerns.

What are common indoor air contaminants in the workplace?

Here are examples of common indoor air contaminants and their main sources:

- Carbon dioxide (CO₂) - tobacco smoke, perfume.
- Dust, fibreglass, asbestos, gases, including formaldehyde - building materials.
- Toxic vapours, volatile organic compounds (VOCs) - workplace cleansers, solvents, pesticides, disinfectants,

glues.

- Gases, vapours, odours - off-gas emissions from furniture, carpets, and paints.
- Dust mites - carpets, fabric, foam chair cushions.
- Microbial contaminants, fungi, moulds, bacteria - damp areas, stagnant water and condensate pans.
- Ozone - photocopiers, electric motors, electrostatic air cleaners

Buildings constructed to be energy efficient, i.e. "airtight", can actually be detrimental to IAQ if they are not properly designed. An inadequate amount of outside air entering and circulating in the building can cause a build-up of air contaminants.

What can I do about IAQ as an EMPLOYEE?

Personal habits often affect the quality of air in the workplace. While many minor

problems are insignificant by themselves, every bit of pollution adds up. Do your part to promote a clean, odour-free, pleasant place to work.

- Do not block air vents with furniture, equipment or boxes.
- Use whiteout and magic markers as seldom as possible. When they're not in use, put the lid on them.
- Clean up water or coffee spills to prevent mould growth.
- Avoid wearing strong fragrances or using air fresheners.
- If you observe situations which may lead to poor IAQ (i.e. inoperable windows, water leaks, visible mould, etc.), notify your employer immediately

What can I do about IAQ as an EMPLOYER?

Take the following steps to help ensure that your workplace and its workers are provided with adequate air quality.

- Take a routine 'walkthrough' of your workplace to identify possible sources of air quality pollutants and remove or relocate them accordingly.
- Adjust your HVAC system according to the season and workplace



occupants. The recommended temp. range is 20°C - 27°C, with a relative humidity of 30%-60%.

- Ensure routine maintenance is conducted on your HVAC system(s).
- Take your HVAC system and air flow into account when renovating the workplace (four air changes per hour is recommended).
- Abide by the Occupational Health and Safety Act that is enforced by the Ministry of Labour (MOL). Be

aware of the MOL's indoor air quality requirements.

- Consider consulting a qualified professional who can provide expert advice and adequate air testing for your workplace. Air testing equipment may be purchased as well, but can be expensive.

For more detailed information about various indoor air quality parameters, their sources, potential health effects, and acceptable standards, visit hnhu.org.