

# Air Quality

Air quality plays an important role in employee health, comfort, and overall well-being. Poor indoor or outdoor air quality can contribute to symptoms such as headaches and fatigue and may aggravate respiratory conditions, including asthma and allergies. Workplace air quality can be influenced by building conditions, housekeeping practices, ventilation systems, and outdoor air sources.

## Managing Air Quality



Air quality concerns are addressed using a risk-based approach to identify potential hazards and determine appropriate controls. Risk assessments may consider factors such as ventilation and HVAC performance, indoor and outdoor air sources, work activities, employee reports, cleaning practices and environmental conditions (e.g., wildfire smoke). Where risks are identified, controls are implemented using the hierarchy of controls, with priority given to engineering and administrative control measures.

## Preventative Measures and Best Practices

Air quality can be managed proactively, using best practices outlined in the [2025 Guidance on Improving Indoor Air Quality in Office Buildings](#), including:

- Maintaining ventilation and HVAC systems through regular inspection and servicing.
- Managing moisture and responding promptly to water leaks to prevent mold growth.
- Using lower-emission and fragrance-reduced products where possible.
- Reviewing and responding in a timely manner to air quality concerns.
- Maintaining good housekeeping and cleaning practices.
- Considering outdoor environmental factors when assessing indoor air quality risks.



## Outdoor Air Quality Considerations

Outdoor air quality can affect employees who work both outdoors in the elements and indoors in an office type setting. Smoke from wildfires, smog, vehicle exhaust, and nearby construction or industrial activities may impact the air quality in your workplace.

During periods of poor outdoor air quality, it is recommended to monitor the [Air Quality Health Index \(AQHI\)](#), adjust ventilation where possible, modify work activities or schedules, and communicate protective measures to employees.

## Reporting Air Quality Concerns

Maintaining air quality is a shared responsibility. Employees are encouraged to report unusual odors, visible mold or water damage, ventilation concerns, or symptoms they believe may be related to air quality. Employees should also follow any instructions or temporary measures implemented during poor air quality events to your supervisor/manager, Human Resources or Employee Wellness & Safety.



## Conducting an IAQ investigation

- Treat IAQ concerns seriously and promptly.
- Collect health complaint data using a questionnaire specific for your workplace. You may need assistance from an expert.
- Look for patterns.
- Meet affected people to clarify your findings.
- Check the heating, ventilating and air-conditioning (HVAC) system with the building operator/engineer.



### Sources

Building occupants



Carbon dioxide, tobacco smoke, perfume, body odours

Building materials



Dust, fibreglass, asbestos, gases

Carpets, fabric, foam chair cushions



Dust mites

Off-gas emissions furniture, carpets, paints, workplace cleaners, solvents, pesticides, disinfectants and glues



Gases, vapours, odours, volatile organic compounds (VOCs)

Damp areas, stagnant water and condensate pans



Microbial contaminants, fungi, moulds, bacteria

Photocopiers, electric motors, electrostatic air cleaners



Ozone

### Indoor air contaminants

### Symptoms

Dryness and irritation of the eyes, nose, throat, and skin  
Headache  
Fatigue  
Shortness of breath  
Hypersensitivity and allergies  
Sinus congestion  
Coughing and sneezing  
Dizziness  
Nausea

People generally notice their symptoms after several hours at work and feel better after they have been away from the building.

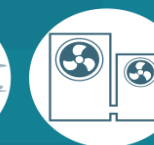
### IAQ issues

#### Common Causes

- Lack of outdoor air for HVAC system
- Poorly designed or maintained HVAC system
- Pollutants from the outdoor air
- Emissions from inside sources
- Poor temperature and humidity control

## Indoor Air Quality

### Take a preventative approach to IAQ



- Provide an adequate volume of outdoor air
- Ensure that air is properly distributed
- Prevent outdoor pollutants from entering the building
- Provide separate ventilation for special-use areas
- Promote the use of unscented products
- Choose building materials, paints and furniture with low emissions
- Discourage mould growth
- Follow standards and best practices for your building's ventilation, thermal comfort, and pollutant control



**What the law says:** All jurisdictions include the 'general duty clause' which requires employers to provide a healthy and safe workplace. This includes the provision of healthy indoor air. In addition, IAQ is implied in most building codes as design and operation criteria.

Canada

**CCOHS.ca**  
Canadian Centre for Occupational Health and Safety

2015-04