Health and Safety
Santé et sécurité

HAZARD

Indoor Air Quality

What is indoor air quality?

Indoor air quality refers to the physical, chemical and biological state of air within buildings. Poor indoor air quality is a hazard that affects PSAC members' health.

Hazards

Poor indoor air quality can negatively impact workers' physical and psychological health. Poor physical health contributes to workplace stress. This stress can be compounded when workers' concerns about poor indoor air quality are dismissed or minimized by employers. Poor indoor air quality is serious and needs the employers' immediate attention.

Indoor air quality hazards fall into three categories: physical, chemical and biological.

PHYSICAL

- Improper temperature and humidity levels
- No HVAC maintenance workers or program in place
- Overcrowding
- Placement of workspace partitions, furniture and equipment that prevents proper ventilation
- Renovations that alter workplace layout without adjustments to HVAC system capacity
- HVAC systems that begin to operate only after workers have arrived or are shut down before the end of the workday
- Outdoor air intakes close to loading bays and busy streets

CHEMICAL

- Asbestos in places like ceiling tiles, pipe and duct insulation, and old wallboards and plaster
- Volatile organic compounds (VOCs) like formaldehyde, organochlorines, phenols emitted from furniture, building materials, carpets and plastics
- Carbon dioxide exhaled by building occupants
- Carbon monoxide from gas burners and furnaces inside workplaces, and vehicle exhaust and tobacco smoke outside workplaces
- Pesticides in plant sprays and insect and rodent control products
- Solvents such as benzene and toluene in cleaning products, copier toners and paints
- Hazardous dust, fibres and odours from building materials and occupants
- Photocopiers, motors and other equipment
- Cleaning products
- Radon from naturally occurring radioactivity in minerals and soil around workplace foundations

BIOLOGICAL

- Toxic moulds that grow on wood, drywall, upholstery, ceiling tiles, carpet and other building materials where moisture has accumulated

- Bacterial diseases like legionnaires disease, Pontiac fever and humidifier fever that originate from poorly-maintained HVAC systems
- Dust mites that can cause allergic reactions
- Pollen and biological aerosols that don't get filtered out of indoor air due to poor HVAC maintenance

Identifying the problem

The first step is recognizing that poor indoor air quality is a health and safety hazard in your workplace. Surveys and mapping techniques are excellent tools to identify indoor air quality hazards. An indoor air quality survey can be done in co-operation with the employer, but the union should approve the survey and be involved in collecting and assessing the results.

The union should conduct its own survey if the employer resists the idea or denies that poor indoor air quality is a problem. Workers should carry out regular workplace inspections.

Taking action

Indoor air quality hazards largely centre on issues of control, cutbacks and employer neglect. Taking action on poor indoor air quality involves members exercising control at work.

The following actions can help combat poor indoor air quality:

- Insist employers increase the ventilation intake rate of outdoor air
- Demand employers take action on testing for and fixing indoor air quality hazards
- Put indoor air quality issues on the health and safety committee's agenda
- Conduct regular workplace inspections to uncover indoor air quality hazards
- Report indoor air quality hazards
- Refuse unsafe working conditions caused by poor indoor air quality

Strategies for change

Complementing the actions listed above, the following strategies can eliminate poor indoor air quality:

- Keep indoor air quality issues on the health and safety committee agenda until they are resolved
- Monitor and test indoor air for contaminants
- Demand regularly scheduled maintenance and cleaning of HVAC systems as well as monitor the records of that maintenance
- Monitor the employers' compliance to existing health and safety laws and regulations pertaining to indoor air quality hazards
- Where legislation does not provide for specific indoor air quality controls, monitoring, or access to information, the union can negotiate contract language that protects workers from indoor air quality hazards
- Put the issue of poor indoor air quality on the bargaining table
- Organize collective job action around the issue of poor indoor air quality

Employer responsibility

Employers have the responsibility to provide a healthy and safe workplace. This responsibility is known as the general duty clause. Clean indoor air is an important part of a healthy workplace. PSAC members also have a role to play. Through education and activism, they can help ensure we all have clean air to breathe.