## Mould in the workplace

## OHS information for employers, supervisors and workers

This resource has been developed to assist employers, supervisors and workers in understanding the risks of exposure to moulds and how to prevent harmful effects.

### **KEY INFORMATION**

- Mould is often relatively harmless, but can pose a health hazard in some circumstances.
- Elevated levels of mould are most frequently found in areas where there are wet building materials (most often paper or wood-based) and where there has been water damage.
- The best way to prevent mould exposure is to avoid the conditions that lead to indoor mould growth.

• Employers must establish controls to minimize exposure if workers may be exposed to mould.

## What is mould?

Mould is a type of fungi that occurs naturally both indoors and outdoors. Moulds are often relatively harmless. In some circumstances, however, they may pose a health hazard. For example, some types of mould produce chemicals called mycotoxins that can impact human health.

Workers can be exposed to mould by inhaling or ingesting mould, its spores, or chemicals it produces.

# What health effects could workers experience from mould in the workplace?

Since moulds are abundant in nature, people are exposed to them daily. Most people exposed to background levels of mould have no health effects. However, some individuals may experience adverse health effects such as allergic reactions or infections when exposed to moulds.

Common symptoms of toxic effects include headache, abnormal fatigue, nausea, eye and respiratory irritation, and aggravation of asthma or allergies. Most exposed individuals experience mild or no effects.

Since many of these health effects can be attributed to other causes, individuals experiencing these symptoms should check with their doctor if they suspect the problem might be due to mould.

### **DID YOU KNOW?**

Some individuals are at increased risk of experiencing health effects from exposure to mould. These include:

- People with weakened immune systems.
- People who have recently undergone surgery.
- People with inflammatory lung disease.
- Infants and elderly people.

## Where is mould usually encountered?

Although mould can be found almost everywhere, elevated levels of mould are most frequently found in areas where there are wet building materials (most often paper or woodbased) and where there has been water damage.

Common sources of moisture include leaking pipes, sewer backups, condensation on cold surfaces, humid environments, leaky roofs, windows and flooding events.

# What can be done to prevent mould from becoming a problem?

Controlling the growth of mould is the best way of preventing problems. In order to grow, mould needs the right combination of water, nutrients and a suitable temperature.

Promptly repairing water leaks, properly maintaining heating, ventilating and air-conditioning (HVAC) systems, and avoiding high humidity levels are important ways to prevent mould growth (mould can start to grow within 24 to 48 hours on a damp surface). Regularly cleaning carpets and other surfaces, selecting building materials appropriate to anticipated environmental conditions, and using HEPA-filtered vacuum systems (or alternatively, central vacuum systems vented to the outdoors) also helps prevent mould growth.

## How can I tell if there is a mould problem?

Visually identifying indoor mould growth is the first sign there may be a mould problem. Another indication is if air samples show more mould is found indoors than outdoors, or when the types of indoor mould differ from those found outdoors.

Clues to a possible mould problem can also include musty odours or individuals reporting mould-related symptoms of



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illness. Identifying contamination can be as simple as seeing mouldy material on exposed surfaces, or as difficult as finding hidden mould in carpets, behind walls, or within ventilation systems.

If a mould problem is suspected, it may be necessary to consult an experienced indoor air quality professional such as an industrial or occupational hygienist, or a building engineering specialist.

# What can be done if there is a mould problem?

If visible mould is present or indoor mould levels are substantially higher than the levels found outdoors, contaminated materials may need to be cleaned, disinfected or removed

When responding to a mould problem, consider taking the following actions:

- Explain the health risks to all affected workers.
- If possible, isolate the source of contamination from the rest of the workplace to reduce potential worker exposure.
- Eliminate the moisture source. If the moisture is not controlled or eliminated, the mould problem will return. If this is not possible, eliminate the materials capable of sustaining mould growth. Cleaning staff should be able to control small areas, where the patch of mould covers up to 0.09 m² (1 ft²), by following normal cleaning procedures. This usually involves cleaning affected areas with soap or detergents. There should be no visible mould left following cleaning activities, and the waste should be sealed in a plastic bag for disposal.
- Moderate or large areas of mould, where the patch of mould covers more than 0.09 m² (1 ft²), should be dealt with by hiring an indoor air quality specialist and/or mould abatement contractor. Proper procedures, equipment and appropriately trained abatement workers will be needed.

## Legislative requirements

Under Alberta's *Occupational Health and Safety (OHS) Act*, employers are required to protect the health and safety of workers. In addition, section 43.1 of the OHS Code states that where worker exposure to harmful substances may occur, an employer must establish controls to minimize worker exposure. The types of controls that are implemented must be based on employer's hazard assessment. For more information, see <a href="Hazard assessment and control: a">Hazard assessment and control: a</a> handbook for Alberta employers and workers.

## For more information

Best Practices: Mould at the work site (BP019) <a href="https://ohs-pubstore.labour.alberta.ca/bh019">ohs-pubstore.labour.alberta.ca/bh019</a>

Guidelines on assessment and remediation of fungi in indoor environments (New York City Department of Health, 2008) <a href="https://nyc.gov/assets/doh/downloads/pdf/epi/epi-mold-guidelines.pdf">nyc.gov/assets/doh/downloads/pdf/epi/epi-mold-guidelines.pdf</a>

Hazard assessment and control: a handbook for Alberta employers and workers (BP018)

ohs-pubstore.labour.alberta.ca/bp018

## Contact us

### **OHS Contact Centre**

Anywhere in Alberta

• 1-866-415-8690

Edmonton and surrounding area

• 780-415-8690

Deaf or hard of hearing (TTY)

- 1-800-232-7215 (Alberta)
- 780-427-9999 (Edmonton)

### Notify OHS of health and safety concerns

alberta.ca/file-complaint-online.aspx

Call the OHS Contact Centre if you have concerns that involve immediate danger to a person on a work site.

### Report a workplace incident to OHS

alberta.ca/ohs-complaints-incidents.aspx

### Website

alberta.ca/ohs

## Get copies of the OHS Act, Regulation and Code

### Alberta Queen's Printer

qp.gov.ab.ca

## OHS

alberta.ca/ohs-act-regulation-code.aspx

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