Workplace Health and Safety Bulletin

WORK SAFE ALBERTA

Do I have a Workplace Mould Problem?

This Safety Bulletin has been developed to assist employers and workers in understanding the risks of exposure to moulds and preventing harmful effects. As this is an emerging issue, the recommendations described reflect what is currently known about this topic.

What is mould?

Mould is a type of plant belonging to the fungi family. It occurs naturally both indoors and outdoors. Other types of fungi include yeast, mildew and mushrooms. Mould needs the right combination of water, nutrients and a suitable temperature to grow. Moulds are often relatively harmless e.g. Clasosporium or common “leaf mould”. Moulds can be useful, as in the preparation of foods and antibiotics. In other circumstances however, they may pose a health hazard.

Mould is a type of plant belonging to the fungi family.

Potential health effects

Since moulds are abundant in nature, people are exposed to them daily. Most people exposed to background levels of mould remain healthy. Individuals exposed to abnormally high levels of moulds may sometimes experience adverse health effects. These include allergic reactions, infections or toxic effects. Common symptoms

Alberta Human Resources and Employment | Building Alberta's Workforce

of toxic effects include headache, abnormal fatigue, nausea, eye and respiratory irritation and aggravation of asthma or allergies. Most exposed individuals experience only 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 a problem that might be due to mould.

Most exposed individuals experience only mild or no effects.

Some individuals are at increased risk. These include persons with weakened immune systems, those who have recently undergone surgery and persons with inflammatory lung disease. Infants and the elderly are also at higher risk.

Where is mould most likely encountered?

Although mould can be found almost anywhere, elevated amounts of mould are most likely found in areas where there are wet building materials (most often paper or wood-based) and where there has been water damage. Common sources of moisture include leaking pipes, sewer backups, moisture condensing on cold surfaces, high humidity environments, leaky roofs and flooding events.

Mould can be found almost anywhere where there are wet building materials and where there has been water damage

When is mould most likely to be a problem?

Mould is most likely to be a problem when substantially more mould is found indoors than outdoors or when the types of indoor mould differ from those found outdoors. Both these conditions indicate mould is growing indoors. The problem is more serious if the mould is a toxic type such as Aspergillus or Stachybotrys.

Mould is most likely to be a problem when substantially more mould is found indoors than outdoors or when the types of indoor mould differ form those found outdoors.

Clues to possible mould problem include musty odours or individuals reporting mould-related symptoms of 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. Where 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?

When indoor mould levels are substantially greater than the levels found outdoors, contaminated materials need to be cleaned, disinfected and /or removed. In responding to a mould problem, consider the following:

Contaminated materials need to be cleaned, disinfected and/or removed.

- Explain the health risks to affected workers to minimize their anxiety or fears.
- If possible, isolate the source of contamination from the rest of the workplace to reduce potential worker exposure.
- Eliminate the moisture source. If moisture is not controlled or eliminated, the mould problem will likely return. Alternatively, if moisture needs to be present due to process requirements, do not use paper or wood-based building materials as these serve as nutrients on which mould often grow.
- Cleaning staff should be able to control small areas, where the patch of mould covers up to 0.09 m^2 (1 ft^2), by following normal cleaning procedures. This usually involves cleaning affected areas with disinfectant, a dilute bleach solution or detergents.
- Moderate or large areas of mould, where the patch of mould covers more than 0.09 m^2 (1 ft^2), 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.

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

Controlling the growth of moulds is the best way of preventing problems. Regularly cleaning carpets and other surfaces, promptly repairing water leaks, properly maintaining heating, ventilating and air-conditioning (HVAC) systems, avoiding high humidity levels and using HEPA-filtered vacuum systems or alternatively, central vacuum systems vented to the outdoors all help to prevent mould.

Controlling the growth of moulds is the best way of preventing problems.

If wet or high humidity areas are required within a workplace for specific purposes, ensure that those areas are constructed of water-resistant, easy-to-clean surfaces such as metal and not of paper or wood-based materials.

Legislated requirements

Under Alberta's *Occupational Health and Safety Act*, employers are required to protect the health and safety of workers. Where exposure to harmful substances such as toxic moulds are identified, an employer must establish procedures to minimize worker exposure and train workers in the use of those procedures and in understanding the associated health hazards. Workers must follow the established procedures, participate in the training and apply what they have learned through the training.

Resources

The following guidelines may be useful if a mould problem needs to be investigated or where substantial amounts of contamination need to be removed. It may also be necessary to consult a qualified indoor air quality specialist, such as an industrial or occupational hygienist, or building engineering specialist, to help interpret these and other available guidelines.

For more information

www.hc-sc.gc.ca/ehp/ehd/catelogue/bch_pubs/fungal.pdf
Fungal Contamination in Public Buildings: A Guide to Recognition and Management. Health Canada, 2004

www.gov.mb.ca/labour/safety/Mould.pdf
Guidelines for Investigation, Assessment & Remediation of Mould in Workplaces. Manitoba Department of Labour, March 2001

www.ci.nyc.ny.us/html/doh/html/epi/moldrpt1.html
Guidelines on Assessment and Remediation of Fungi in Indoor Environments. New York City Department of Health, 2002

Safe Operating Procedure –Mould Remediation, June 2006. Alberta Infrastructure and Transportation

Contact us:

Province-Wide Contact Centre

Edmonton & surrounding area:
(780) 415-8690

Throughout Alberta:
1-866-415-8690

Deaf or hearing impaired
- In Edmonton: **(780) 427-9999**

or
- **1-800-232-7215** throughout Alberta

Web Site

www.worksafely.org

Getting copies of OHS Act, Regulation & Code:

Queen's Printer

www.qp.gov.ab.ca

Edmonton (780) 427-4952

Workplace Health and Safety

www.whs.gov.ab.ca/whs-legislation

Call any Government of Alberta office toll-free
Dial 310-0000, then the area code and telephone number you want to reach