

## Facts about Mould for Homeowners - Question & Answers

### What is mould and where can I find it?

Mould (fungi) is present *everywhere* - indoors and outdoors. There are more than 100,000 species of mould. At least 1,000 species of mould are common in Canada. Some of the most commonly found are species of Cladosporium, Penicillium, and Aspergillus. Mould is most likely to grow where there is water or dampness - such as in bathrooms and basements.

### How can mould affect your health?

Most types of mould are usually present at sufficiently low concentrations such that routine contact is not hazardous to healthy individuals. However, those with asthma or allergic sensitivity, or with compromised or immature immune systems, may be more sensitive. Some moulds are inherently toxic, so any exposure may be a health concern. The most common symptoms of overexposure are cough, congestion, runny nose, eye irritation, and aggravation of asthma. Depending on the amount of exposure and a person's individual vulnerability, more serious health effects - such as fevers and breathing problems - can occur but are unusual.

### How can you be exposed to mould?

When mouldy material becomes damaged or disturbed, spores (reproductive bodies similar to seeds) and colony fragments can be released into the air. Exposure can occur if people inhale the spores or fragments, directly handle mouldy materials, or accidentally ingest it. Also, mould can sometimes produce chemicals called mycotoxins. Mycotoxins may cause illness in people who are sensitive to them or if they are sufficiently exposed. Large exposures are typically associated with certain occupations such as agricultural work.

### How does mould grow?

All moulds need water to grow. Mould can grow almost anywhere there is water damage, high humidity, or dampness. Most often moulds are confined to areas near the source of water. Removing the source of moisture - such as through repairs or dehumidification - is critical to preventing mould growth.

### How do I Clean Up Mould Contaminated Surfaces

For hard and impermeable surfaces (for example, wood, floors, undamaged painted surfaces) that are less than 3 square meters (10 square feet) simply wash the affected area with a detergent solution. You may have to use a brush or scraper to help remove the mould. The use of bleach is not necessary. Try to minimize the use of the detergent solution to prevent more water damage and mould growth. Dry the area with a cloth after washing the area clean. When doing this work wear an N95 respirator, gloves and goggles to protect yourself. Also seal any return air grills and supply air diffusers in the room and shut the door to the room. After removing all the mould contamination, it is advisable to do a floor to ceiling wet wipe followed by a dry wipe of all surfaces in the room.

### What is Stachybotrys Chartarum?

Stachybotrys chartarum is a type of mould that has been associated with health effects in people. It is a slimy greenish-black mould that can grow on nitrogen poor, cellulose rich materials, such as drywall, sheetrock, dropped ceiling tiles, paper and wood that is chronically moist or water-damaged due to excessive humidity, water leaks, condensation, or flooding. This type of mould cannot grow on painted drywall or tile grout.

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<sup>1</sup>Available at most hardware stores

## How can you tell if *Stachybotrys Chartarum* is present?

*Stachybotrys chartarum* can only be positively identified by specially trained professionals through a microscopic exam. Many moulds are black in appearance, but are not *Stachybotrys*. For example, the black mould commonly found between bathroom tiles is not *Stachybotrys*.

## How can *Stachybotrys Chartarum* affect your health?

Typically, indoor air levels of *Stachybotrys* are very low or nonexistent; however, as with other types of toxic moulds, any measurable level indoors is cause for concern and requires investigation. Health effects associated with exposure include allergic rhinitis, flu-like symptoms, dermatitis (rashes), sinusitis, conjunctivitis, immune suppression, and aggravation of asthma. Some related symptoms are more general - such as inability to concentrate and fatigue. Usually, symptoms disappear after the contamination is removed. Other health risks such as cancer, liver and kidney damage due to mycotoxin exposure are suspected and are currently being investigated by scientists.

## Will my health be affected and should I see a physician?

If you have symptoms that you suspect are caused by exposure to mould, you should see a physician. Keep in mind that many symptoms associated with mould exposure may also be caused by many other illnesses. You should tell your physician about the symptoms and about when, how, and for how long you think you were exposed.

## Are there laboratories to identify moulds?

You can collect a sample of suspect mould contaminated material and have it tested in a laboratory to confirm that it is mould. In the Yellow Pages under "Laboratory" are many laboratories that can identify whether or not you have moulds and even identify the type or species of mould. It is up to you to choose and find one suitable to your needs.

## What about air testing and building investigations?

If you want to do air testing or have a mould investigation done in your home or place of business, consultants or contractors with expertise in moulds can be found in the Yellow Pages under the headings "Asbestos Abatement and Removal", "Environmental Consultants" and "House Cleaners". Many asbestos contractors and consultants also have expertise with moulds.

Alberta Health Services - Calgary Region does not endorse or attest to the qualifications or expertise of any of the consultants, contractors or laboratories listed in the Yellow Pages. Potential consultants or contractors should be familiar with the mould remediation protocols referred to on page 3.

## Where can I get more information about mould?

The following web-accessible resources provide guidance regarding moulds and health effects, identifying and mitigating moulds problems in buildings and on the interpretation of airborne monitoring results.

- The New York City Department of Health (2008), "Guidelines on Assessment and Remediation of Fungi in Indoor Environments." Available at: <http://www.nyc.gov/html/doh/html/epi/moldrpt1.shtml>.
- U.S. Environmental Protection Agency (2001), "Mold Remediation in Schools and Commercial Buildings." [http://www.epa.gov/iaq/molds/mold\\_remediation.html](http://www.epa.gov/iaq/molds/mold_remediation.html)
- Health Canada (1995), 'Fungal Contamination in Public Buildings: A Guide to Recognition and Management.' Available under the heading "Air Quality" at: <http://www.hc-sc.gc.ca/english/search/a-z/a.html>
- Health Canada (2004), "Fungal Contamination in Public Buildings: Health Effects and Investigation Methods." Available at: <http://www.hc-sc.gc.ca/ewh-semt/pubs/air/fungal-fongique/index-eng.php>.
- American College of Occupational and Environmental Medicine (2002), Evidence Based Statements, "Adverse Human Health Effects Associated with Molds in the Indoor Environment." Available at: <http://www.ocoem.org/guidelines.aspx?id=850>

The Environmental Health program of Alberta Health Services - Calgary Region, has more technical information we can email or fax you.

Please contact us at 403-943-2288.