

Indoor air quality:

Mould and other biological contaminants

What are biological contaminants?

Biological contaminants are living things or produced by living things. They include mould, house dust, bacteria, viruses, animal dander, cat saliva, pollen, cockroaches and mites.

What are moulds?

Moulds are fungi, naturally found both indoors and outdoors. Except for yeasts, which reproduce by budding, moulds spread by releasing tiny spores into the air.

What are some health problems caused by moulds and other biological contaminants?

Many biological contaminants are small enough to be inhaled and some can cause health problems. Moulds, for example, can cause allergic reactions. Bacteria and viruses can cause infections. Mould can also cause infections, but it rarely does. Some studies have found increases in common symptoms such as coughing, wheezing and headaches in people who live in homes with dampness and visible mould.

What causes moulds to grow?

High humidity or indoor air moisture levels cause mould growth. For example, large differences between inside and outside temperatures can cause water to condense on windows causing mould to grow on frames or sills. Water coming into the house from outside, from the roof or from plumbing leaks can cause moisture. Damp areas can also result from daily activities around the house like bathing, washing clothes or cooking. Moisture from humidifiers or bathrooms without proper ventilation may also help mould grow.

How do I know if my home has moulds?

Look for discoloration or stains on damp areas and areas where water is used, like inside of sink cabinets. In damp areas, mould may grow where there is less air flow, like behind couches and under beds.

Mould often looks fuzzy or powdery and is usually light green to brown or black in colour. Mould growth may not be visible on the surfaces of interior-facing walls because of water coming into the wall from the outside. Moulds can also be found on or under water-damaged surfaces, such as behind baseboards, tiles and carpets.

Moulds often give off a 'musty' smell.

What can I do to prevent and control moulds?

The key to controlling mould is to control moisture. To prevent moisture, high humidity and condensation, follow these steps:

- Install and use exhaust fans vented to the outside in moist areas, such as kitchens and bathrooms
- Run the bathroom fan while showering and for 30 minutes after
- Vent clothes dryers to the outside
- Ventilate attic and crawl spaces to prevent moisture build up. If the crawl space is bare earth, cover it with plastic
- If there is high humidity in your home that cannot otherwise be controlled, use a dehumidifier. Make sure you choose a device that best meets your room size and humidity
- Repair all internal and external water leaks right away

- Remove water sources that may contribute to mould growth, such as standing water in planters
- Stop stagnant water from collecting around heating ventilation and air conditioning system parts. Empty drip pans regularly. Keep stagnant water sources clean and disinfected
- Do not use humidifying devices with water spray if anyone with asthma lives in the household. If you do use these devices, clean them before each use
- Clean and dry water damaged carpets, underlay and building materials within 24 to 48 hours, or consider throwing them out

How can I clean up mould?

If the area is small (less than one metre square), you can clean the mould yourself. Make sure you wear household rubber gloves, safety glasses or goggles and a KN-95 mask or better when you are cleaning. If the area is larger, it may require special training or commercial cleaners. If you are doing the cleaning yourself, make sure to:

- Clean all smooth surfaces with mould growth using detergent and water. Do not use too much water because the surface needs to dry completely
- Throw out contaminated porous materials, such as mouldy ceiling tiles, drywall or carpets with mildew. Cleaning the materials before disposal can help prevent mould spores from spreading through the house
- After cleaning up, make sure to fix the main issue (water damage, high humidity or poor ventilation) to prevent more mould from growing again

What can I do to control other biological contaminants?

- Keep the house clean and all surfaces dust-free to reduce dust mites, pollens and animal dander
- Regularly clean the heating vents and change heating and air conditioning system filters
- Vacuum the house weekly including floors, bedding and soft furnishings. People with allergies should leave the room during vacuuming and for at least an hour after the dust settles. If someone in the house suffers from allergies, you can consider buying a vacuum cleaner with a High-Efficiency Particulate Arresting (HEPA) filter. A HEPA filter traps very small particles that are not collected by regular vacuum cleaners. You may also consider installing a built-in vacuum cleaner that vents outside the main living area such as in the basement, crawl space or outside
- Regularly wash bedding, including pillows and mattress pads, in hot water – wash temperature should be at least 55°C (131°F)

For more information

- [Health Canada - Air Quality](#)
- [BC Lung Foundation - Air Quality](#) or call toll-free 1-800-665-LUNG (5864)
- [Canada Mortgage and Housing Corporation - Mould in Housing: Information for First Nation Occupants](#)
- [Government of Canada - Guide to addressing moisture and mould indoors](#)
- [The Canadian Lung Association - Your Healthy Home](#)



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