



Matawa
FIRST NATIONS MANAGEMENT

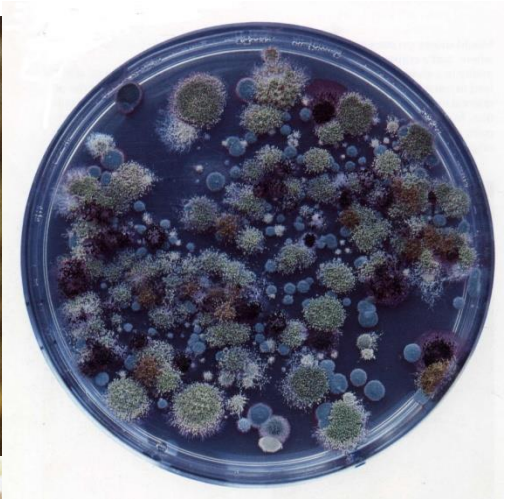
Mould in Housing

Karen Perusse, CPHI(C)
Environmental Public Health Officer



Mould - Overview

- 1) What is Mould?
- 2) Conditions for Mould Growth
- 3) Health Effects
- 4) Investigation
- 5) Areas of High Risk of Mould Growth
- 6) Control Measures and Remediation
- 7) Tips for Occupants to Prevent Mould



What is Mould?

Mould is the common word for any **fungus** that grows on food or damp materials. Mould can be black, white or almost any colour. It often looks like a stain or smudge and it may smell musty.



In order to grow, mould needs moisture and a material it can live on. It then releases "spores" into the air which are small enough that people can breathe them into their lungs. Breathing in large amounts of these spores and the by-products they produce can negatively impact your health.

Conditions for Mould Growth

In order for mould to grow you need:

- 1) Relative Humidity** - of 50% or higher
- 2) Moisture** (water infiltration, plumbing leak, condensation, flooding)
- 3) Time** (material must be wet for >48 hrs)
- 4) Food source** (dust, drywall, cardboard, cellulose, insulation, wood, fabric, etc.)

What are the Potential Health Risks for Mould?

There is a relationship between indoor mould, damp conditions and increased;

- Eye, nose and throat irritation
- Coughing and phlegm build-up
- Wheezing and shortness of breath
- Symptoms of asthma
- Allergic reactions

*People respond to mould in different ways, depending upon the amount of exposure and the person's overall health

Role of your Environmental Public Health Officer (EPHO)

If you suspect your home may be contaminated with mould:

- Contact your local EPHO.
- An investigation, which is a thorough visual inspection of the home including all high risk areas for mould growth, will be conducted.
- A full written report with recommendations and often photographs will be completed with the permission of the occupant, a copy will be provided to all those present during the inspection including, the occupant, Chief and Council, the Housing Authority, and those who require it to further any actions.
- Chief and Council can then use the written report as a recommendation and guideline to address the mould issue within the home and begin remediation.

Role of your Environmental Public Health Officer (EPHO)

EPHOs also offer education, advice, and fact sheets to community members, Chief, Council, Community Health Nurses, Band Managers, and Health Directors in regards to mould, and how to prevent and remediate it within homes.



Investigation

Visual Inspection

Identifying damp areas or where water damage has occurred



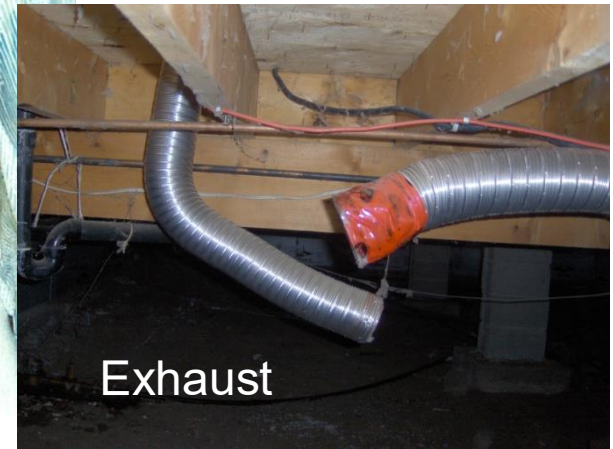
Sampling

* Air sampling is not recommended



****The best way to reduce your health risk to mould is to identify and remove the moisture source and clean up the mould****

Areas at High Risk of Mould Growth





Downspout Missing or Damaged

Perimeter of House



Windows:

Condensation on surfaces due to excessive humidity, lack of ventilation, or low temperature



Results in Mould Growth



Under counter plumbing

Water Leaks



Mould Develops

Plugged/Clogged Vents

Bathroom



Dryer



HRV Inlet



Control Measures & Remediation

- First ...try to find and fix the source of moisture causing the mould.
i.e. Plumbing leak = Make any necessary repairs.
*The source of moisture should be fixed to try to make sure the mould cannot grow back once it's cleaned.
 - Before beginning any mould clean-up take steps to ensure that you do not expose yourself or others to mould spores.
 - Recommended PPE = adequate breathing mask (N95 or better respirator), safety glasses or goggles and rubber gloves.
- *Even with adequate precautions, mould spores may become airborne. As a precaution during clean-up, children, the elderly and sensitive people such as those with asthma, allergies or other health problems should leave the house. Consult your physician if in doubt

Cleaning Up Small Areas (< 1 m²)

You can clean mould areas that are less than the size of a standard large garbage bag folded in half (1 square metre).

Follow these steps:

1. Put on protective wear including a long sleeve shirt, appropriate and properly fitted dust mask, safety glasses or goggles and rubber gloves.
2. Prepare a bucket with water and a bit of dish detergent (unscented) and another with clean water. Cleaning drywall, can use baking soda instead of dish detergent.
3. Clean the surface
 1. Wipe the surface with a rag dipped in the soapy water
 2. Sponge with a clean, damp rag and dry quickly
 3. Do not allow the drywall to get too wet
4. Replace porous or absorbent materials (such as ceiling tiles, upholstery and carpeting) that become mouldy or are badly damaged.

Medium Areas (>1 m² but <3m²)

- Can be multiple patches but total mould area is less than 3m² (patches close together are considered 1 patch)
- In many cases professional help is needed to take care of medium amounts of mould but the cleaning may be able to be completed with proper training and precautions

Larger Areas ($> 3\text{m}^2$)

- Large areas of mould should be left to contractors who are trained to deal with mould assessment and cleanup
- If the area to be cleaned is large and cannot be isolated from the rest of the house, it may be necessary to relocate the residents during clean-up and renovation work
- All workers should be familiar with their PPE, its repair, maintenance and its cleaning requirements and the hazards associated with handling mould-contaminated material

How to Prevent MOULD

When you see water or moisture **act quickly**

- Check home foundation, walls, windows, roof, plumbing, tubs and sinks for water leaks. If you find a leak or a spill, dry the area and fix the leak.
- Check window sills regularly for condensation or moisture, particularly during the cold months. If found, act quickly to dry the wet surface.

How to Prevent MOULD

Ventilation, Ventilation, Ventilation!

- Turn on an exhaust fan or open a window when showering or cooking. Let the fan run for a few minutes after you are finished.
- Check clothes dryer, bathroom and kitchen fans, stoves, and oil or propane heaters to be sure they are vented outside.
- Open windows, when practical. Use fans as needed.
- **Turn ON and use your HRV!**

How to Prevent MOULD

Control moisture and keep home dry

- Keep home warm and ensure good air circulation.
- Rooms or areas that become cold can encourage condensation to form and surrounding materials to become damp and mouldy.
- Keep furniture and other belongings away from exterior walls to allow warm air to circulate.

How to Prevent MOULD

Remove items that may cause mould

- Reduce the amount of stored materials, especially in the basement and CRAWLSPACES
- Throw out wet and badly damaged or musty smelling items.
- Do not store firewood inside the home.
- Remove carpet in bathroom and basements
- Remove clutter and take out garbage regularly

How to Prevent MOULD

Prevent water from entering a home

- Install downspout extensions to take rainwater and melted snow away from the home.
- Make sure eaves troughs/roof gutters and downspouts are connected and working. Clean and repair regularly.
- Make sure the ground slopes away from the home foundation, so that water does not collect around the foundation and enter the home.



Matawa
FIRST NATIONS MANAGEMENT

Thank you

Questions and comments?

