

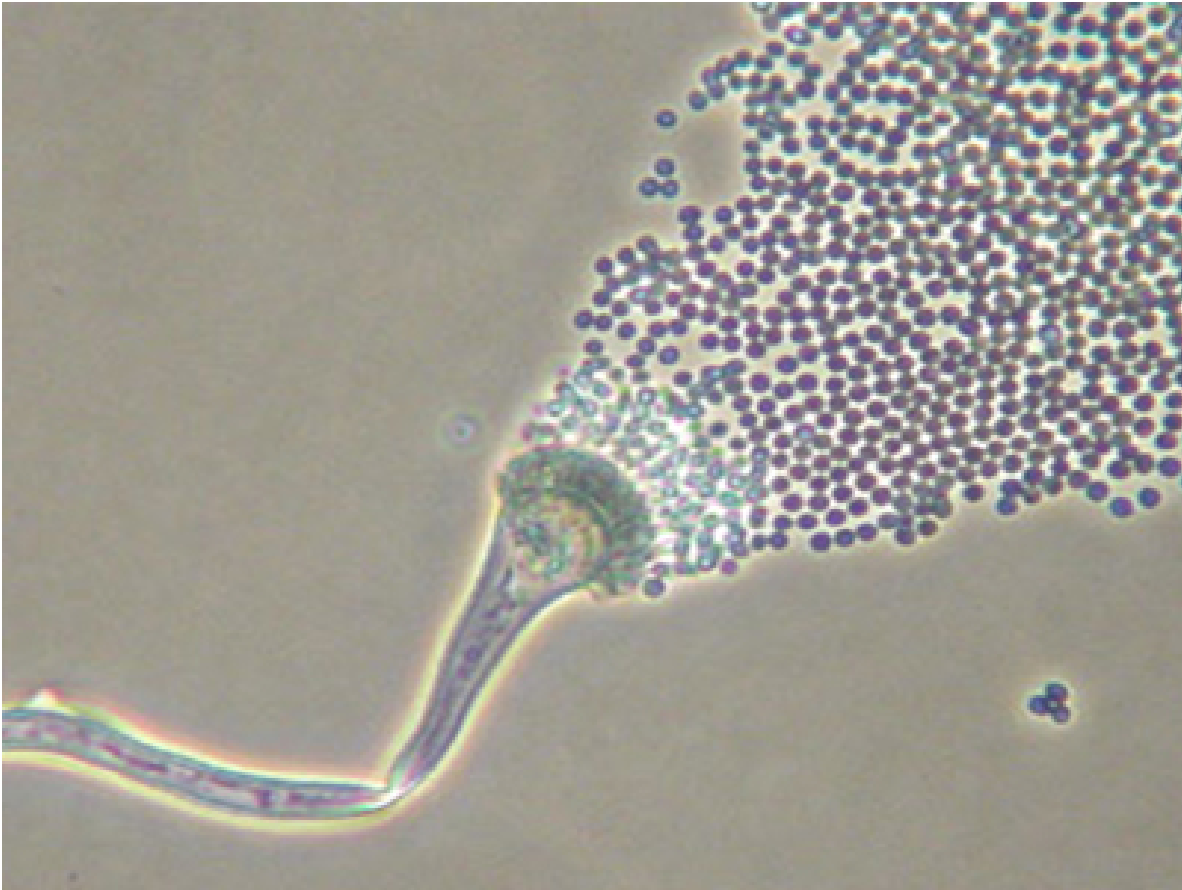
MOLD: Keep it Outside

Identifying, Fixing & Preventing Indoor Mold Issues

What is Mold?



Mold Spores



Spores are EVERYWHERE!

- Reproduction
- Invisible
- Easily Airborne
- Cause of health effects

How does your mold grow???

1. Moderate Temperatures
2. Food Source
3. MOISTURE





For most people:
**Allergies &
Asthma**

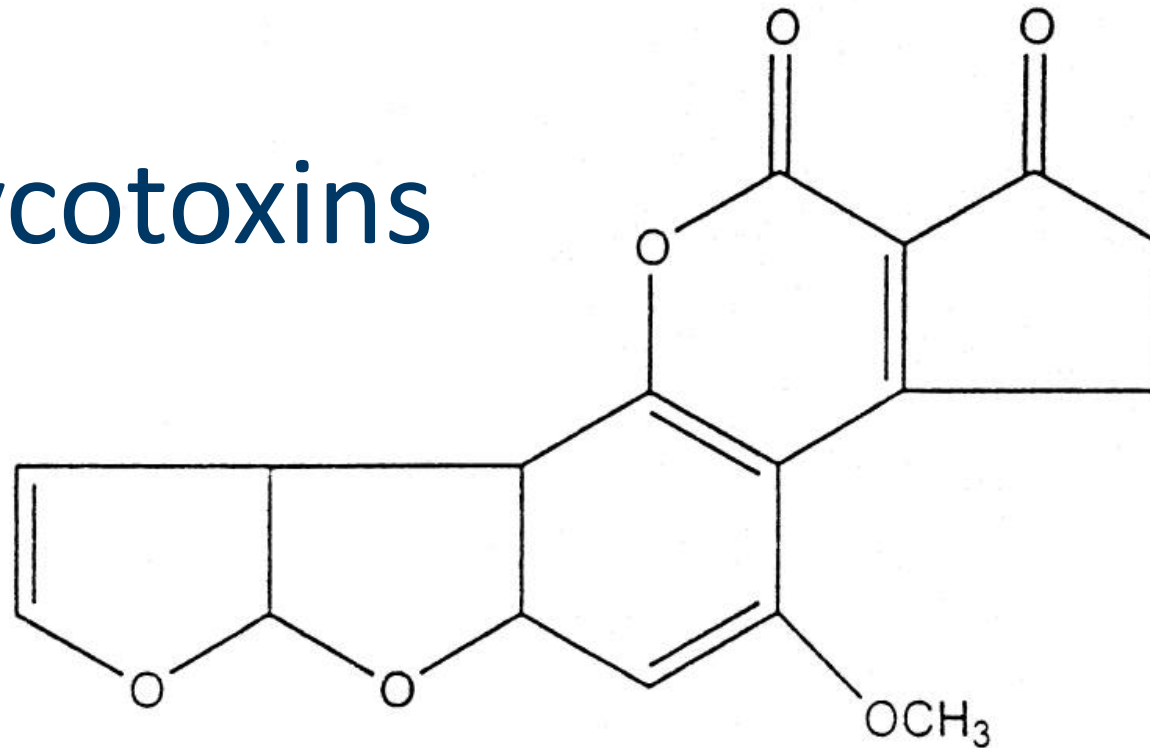




Very Rare: **Mold Infections**



Mycotoxins



Toxic Black Mold



Stachybotrys sp.

- Health risks are unproven
- Can produce mycotoxins

IMPORTANT:

All mold can cause health effects.

All mold is cleaned up the same way.

Don't put up with any mold in the indoor environment.

Find & Fix Moisture Problems



Flooding



Rushford, MN- Sept 2007



Efflorescence (not mold)

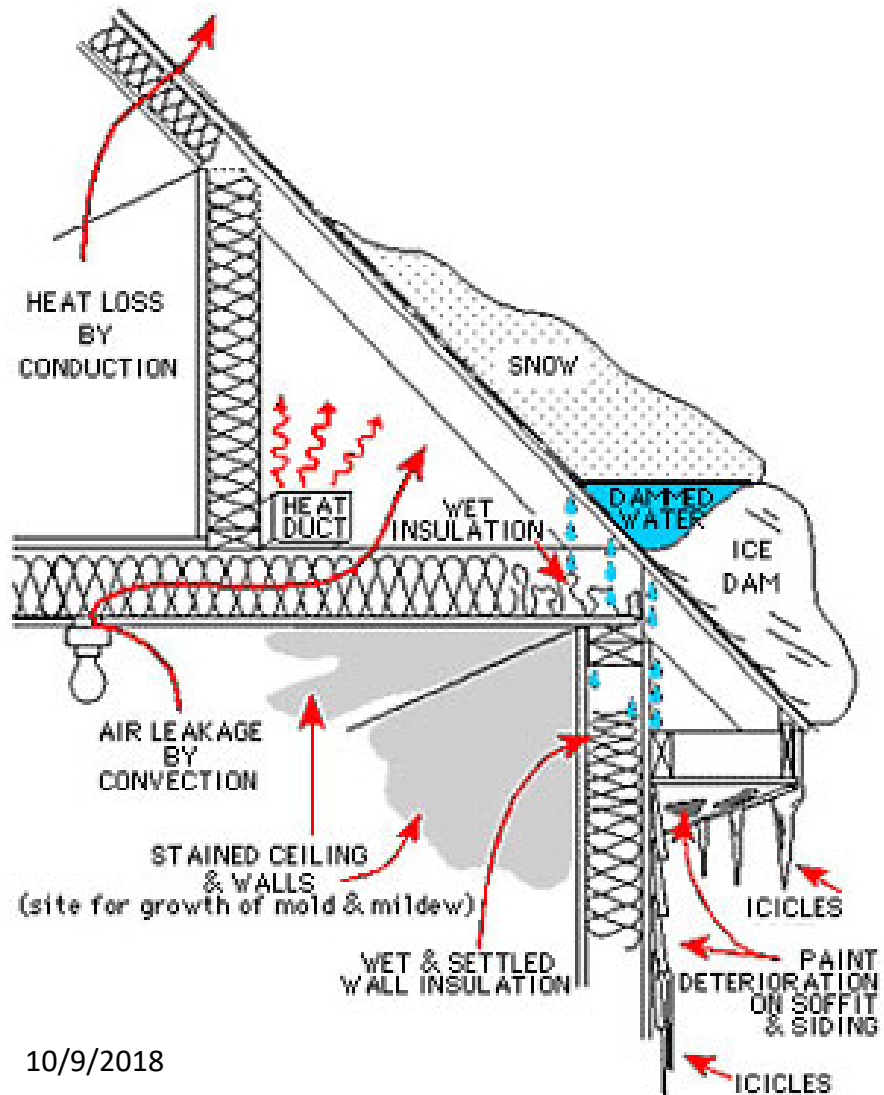


Pay attention to exterior drainage

Leaking Building Envelope



Ice Dams



Condensation



High Indoor Humidity + Poor Air Circulation

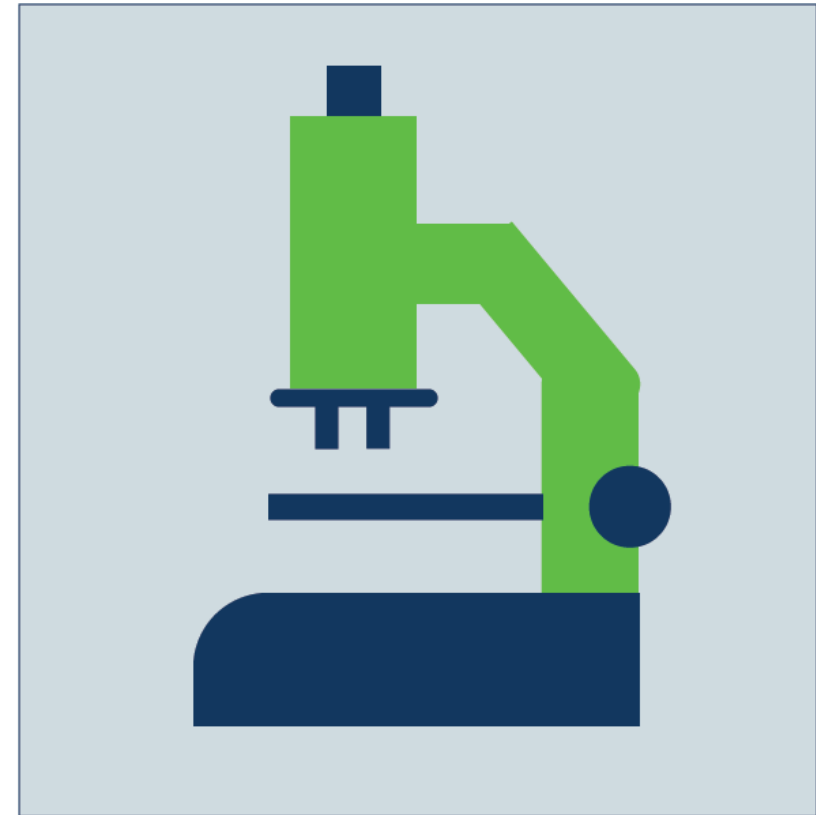
Keep indoor humidity under control

- 20-30% RH in winter months
- Ventilation
- Avoid humidifier use

MDH doesn't recommend mold testing in most cases

- Expensive
- No health based standards
- Testing may miss problems

Testing is not a substitution for visual inspection!



Non-invasive inspection

(Used during home inspections & real estate transactions)



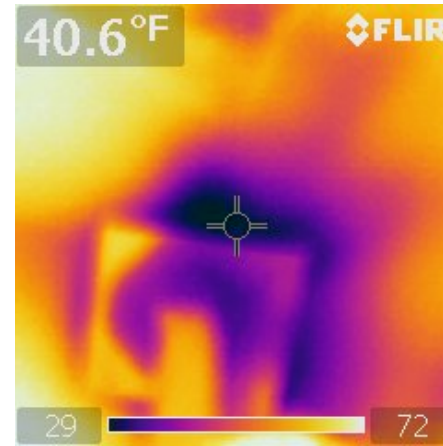
Inspection Techniques



Borosopes



Moisture Meters



Infrared Cameras



Smart Phone Camera

Minimally Invasive Inspections



- **Solve the water problem first!**
- Things to consider before clean-up:
 - Protecting yourself
 - Types of materials damaged
 - Size of area damaged



Rubber
Gloves



Safety
Goggles



N95 or N100
Respirator



Outer
Clothing

Clean or Throw Away?

Mold growing on the back side of wallpaper.



Clean or Throw Away?



Cleaning Up Mold



1. Scrub
2. Collect Excess Water
3. Rinse with Clean Water
4. Dry

Cleaning Up Mold



Bleach really is **OPTIONAL***

- Ventilate area & dilute bleach
- Use it as a rinse after scrubbing the mold off
- Eliminating the water source is what keeps the mold away

* Unless you are cleaning up sewage, flood water.



Make sure everything is dry

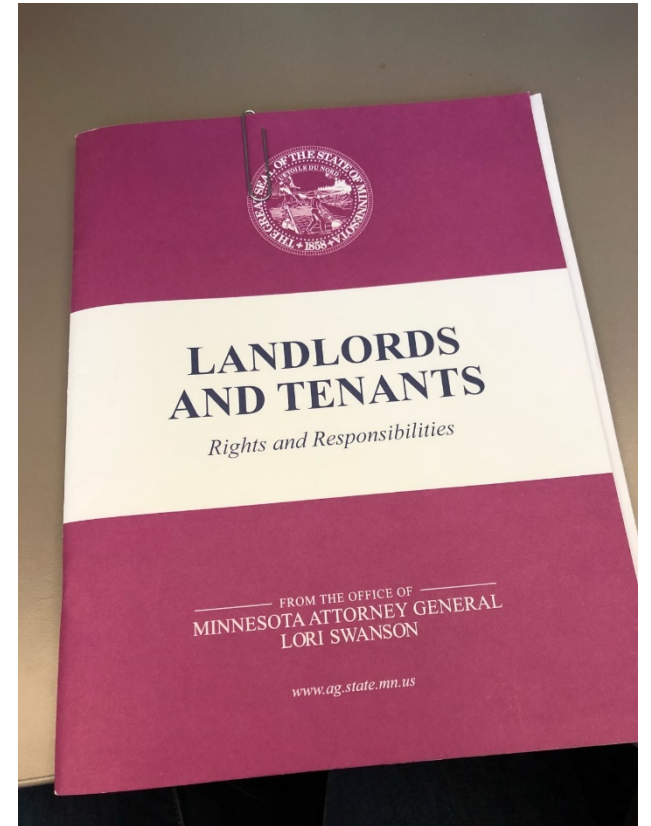
- Fans, dehumidifiers
- Think about new building materials

Renters & Mold Complaints



A nonprofit Minnesota tenant advocacy organization

612-728-5767



Schools & Mold Complaints



Minnesota Public Schools are required to have:

- An IAQ Coordinator
- IAQ Management Plan for the Building

Health Care Facilities & Mold Complaints



MDH Office of Health Facilities Complaints
651-201-4201

Financial Assistance for Homeowners

Possible sources of aid:

- Insurance Policies (hit or miss)
- Weatherization Programs
- Loans
 - MN Housing & Finance
 - USDA Loans
- Valuation reduction on property



m DEPARTMENT OF HEALTH

HOME TOPICS ABOUT US

Search

Mold & Moisture

- Mold in Homes
- Mold in Rental Housing
- Testing for Mold
- Guidelines for Selecting an IAQ Consultant**

Related Topics

- Air Quality by Topic
- Disasters: Floods
- Training for Professionals

Environmental Health Division

- EH Division Home

Guidelines for Selecting an IAQ Consultant

It is important to determine whether you truly need to hire a professional to evaluate or remediate a suspected indoor air quality (IAQ) problem. Remember that there is no one air test that can diagnose every air problem. Testing can be complicated and expensive, so it is important to be informed. For some problems, such as mold, we recommend starting with a thorough inspection before considering sampling.

Gather information about your situation before contacting a consultant. Not only will this help you potentially solve your own issue, it will help ensure you have the information needed to hire the correct professional. Review MDH's information on [indoor air quality](#) to assess your property and your health concerns. Keep an open mind and don't focus on only one potential issue, you may miss other possible problems.

Knowledge and skill levels vary among individuals providing IAQ services. Currently, there are no state or federal standards or certification requirements

Share This

Questions, Comments or Feedback
health.indoorair@state.mn.us
651-201-4601

Things to Remember:

- All mold indoors is a problem
- Mold can cause allergies and make asthma worse
 - Control moisture and you will control mold
 - Skip the mold testing (in most cases)

Contact Information



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651-201-4601

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