ST MARY'S
COLLEGE of MARYLAND

Mold Identification & Prevention Training

Environmental Health & Safety

Objective

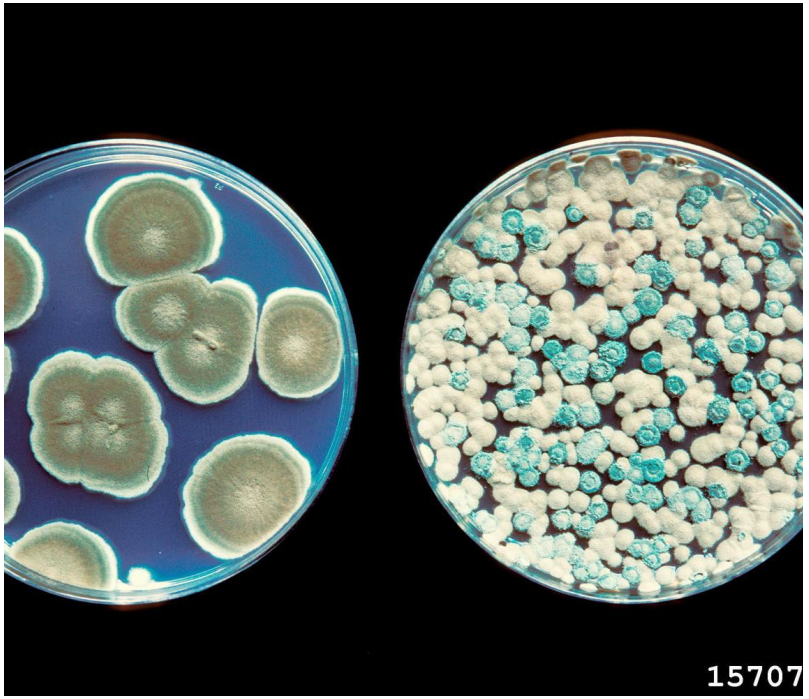
- To minimize the potential for mold and fungal growth using prevention techniques such as identifying, controlling, and remediating areas infested with fungal growth. We work to ensure a health and safe environment for all SMCM campus residents.

Overview

- How does Mold Exposure Occur?
- Requirements for Mold Growth
- Health Effects Associated with Mold Exposure
- What To DO When Mold is Found
- Hazard Assessment
- Occupant Communication

How Does Mold Exposure Occur?

- Mold is a naturally occurring organism that produces seed-like spores that are small enough to travel through the air.
- We are exposed to mold daily in the air we breathe. Exposure occurs through breathing, ingestion, and/or skin contact.
- The level of airborne molds increase when moisture problems arise in buildings creating mold growth on building materials.



Requirements for Mold Growth

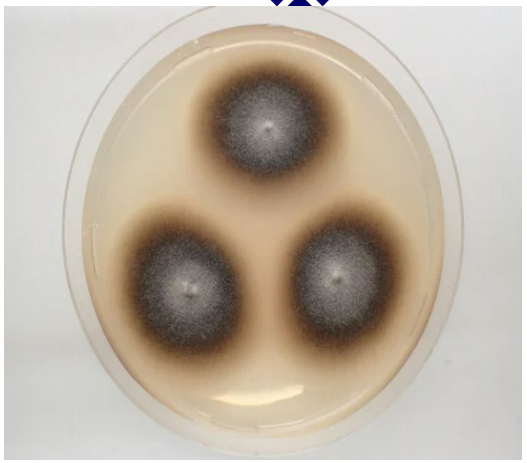
- Organic Food Source: sources with open spores. Mold grows on just about anything. All it needs is water and a nutrient source. Primarily on products containing cellulose
- Moisture: *No moisture, No Mold*. Even high humidity (greater than 60%) on the surface of organic materials can be sufficient to change dormant mold spores in the air we breathe into active fungus growth. Under the right conditions, mold growth multiplies rapidly

Requirements for Mold Growth

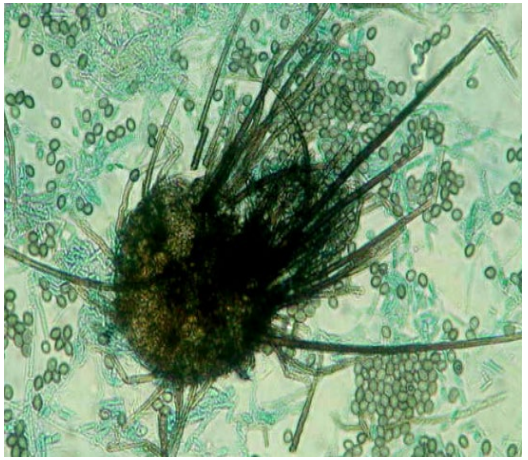
- Temperature: The ideal range is 68-86°F
- Stagnant air: Molds don't like rapid moving air, it makes them difficult to concentrate for rapid growth, plus air movement causes evaporative cooling

Molds found in SMCM Residences

Aspergillus: Most common mold type. Can be black, blue or green.



Stachybotrys: "black mold". This type is considered to be toxic



Chaetomium: spores appear "hairy" and are usually olive green/brown

Penicillium: Most commonly found on spoiled food. Various shades of green

Cladosporium: olive green color. Usually found on decaying plant material. Considered harmless to humans

Mold Exposure Health Effects

- Most molds will cause a reaction similar to allergies: watery eyes, runny nose, sneezing, itching, coughing, wheezing, difficulty breathing, headache, fatigue.
- Reactions will depend on the type and amount of mold present, as well as the susceptibility of the person exposed.

Mold Cleanup & Prevention

- A variety of mold cleanup methods are available for remediating damage to building materials and furnishings caused by moisture control problems and mold growth.
  - 1. Surface growth: scrub with a detergent/water mixture and dry area thoroughly
  - 2. Mold penetration: needs abatement, removal of affected materials

Mold Cleanup & Prevention

- Maintenance Role:
  - Locate the source of the moisture and eliminate the causative agent
    - Fix plumbing leaks & other water problems immediately. Dry all areas completely
  - Utilize prevention techniques to minimize the potential for mold and fungal growth.
  - Do not paint or caulk moldy surfaces
    - Clean up the mold and dry the surfaces before painting. Paint applied over moldy surfaces is likely to peel

Mold Cleanup & Prevention

- Types of Drying Systems
  - Open or Natural Dehumidification
    - Doors and windows are open
    - Continuous ventilation is provided by air movers
  - Closed or mechanical dehumidification
    - Use of dehumidifiers
    - Doors and windows closed
- Drying effectiveness is determined by:
  - Temperature
  - Humidity
  - Air Movement
  - Time

What Do I Do If I find Mold?

- Step 1. Notify the Physical Plant via Work Order
- Step 2. Notify the EH&S Manager, Jessy Cockrell, at jmcockrell@smcm.edu ext. 3347

Hazard Assessment

- The Physical Plant and EH&S will conduct a hazard assessment.
- Visual inspection:
  - The presence of mold, water damage, or musty odors must be addressed immediately
  - Ventilation systems must be checked for damp filters and other damp conditions. Ceiling tiles, walls, cardboard, and paper must be visually inspected for mold growth.
  - When visible mold growth is present, the remediation/decontamination process must begin
- Sampling
  - When visible mold growth is not present, but suspected, and/or an individual has been diagnosed with a disease that is, or may be associated with fungal exposure, air monitoring may be necessary

Hazard Assessment

You can help prevent mold!

The best way to avoid mold is to avoid moisture

- Keep areas dry– don't let water build up anywhere
  - Ventilate damp rooms
  - Wipe shower walls and doors after use
  - Wash shower curtains and bathroom tiles
  - Don't leave wet clothes laying around
  - Don't have too many indoor plants
- Use exhaust fans in kitchens and bathrooms
- Turn off humidifiers if you see condensation on the windows
  - Use dehumidifier and air conditioners in areas where mold tends to grow
  - Clean dehumidifiers and humidifiers on regular basis
- Notify Physical Plant of any leaks or seepage

Additional resources

- EPA Mold Remediation in Schools and Commercial Buildings Guide
  - https://www.epa.gov/mold/mold-remediation-schools-and-commercial-buildings-guide-chapter-1