

I. INTRODUCTION

The University of Wyoming (UW) is committed to protecting the health and safety of students, employees, faculty, and volunteers at the various UW facilities. Therefore, UW has established this policy for managing mold at UW facilities. Mold contamination in the indoor environment is a complex issue and there is scientific uncertainty regarding mold health effects. However, the US Centers for Disease Control and Prevention (CDC), the Institute of Medicine, the World Health Organization (WHO) and Health Canada all agree that living and working in a building with mold damage results in increased of respiratory disease. While there are guidance documents available, there are no accepted national or international standards for mold investigation, evaluation, or remediation. Mold most often arises due to the presence of moisture and/or water. While this policy addresses mold remediation, steps should also be implemented to correct the underlying moisture source.

II. PURPOSE

The purpose of UW's Mold Remediation Policy is to protect UW personnel during operations that involve mold remediation activities.

III. SCOPE

This Mold Remediation Policy applies to UW personnel who will clean up mold during their job duties at UW.

IV. DEFINITIONS

Fungi – Neither animals nor plants, fungi are classified in their own kingdom. The fungi kingdom includes a very large group of organisms, including molds, yeasts, mushrooms, and puffballs. There are more than 100,000 accepted fungal species—but current estimates range up to 10 million species.

Mold – A group of organisms that belong to the fungi kingdom. Although the terms mold and fungi have been commonly referred to interchangeably, all molds are fungi, but not all fungi are molds.

Mycotoxins – Compounds produced by "toxigenic fungi" that are toxic to humans or animals.

Spore – General term for a reproductive structure in fungi, bacteria, and some plants. In fungi, the spore is the structure that may be used for dissemination and may be resistant to adverse environmental conditions.

Toxic Mold – This has no scientific meaning, since mold itself is not toxic. The metabolic byproducts of some molds may be toxic (see Mycotoxins).

Toxigenic Fungi – Fungi that can produce mycotoxins.



V. IMPLEMENTATION

The following defines four categories of mold (incidental, minimal, moderate, and major) and provides information regarding remediation for each category. For questions regarding whether you are facing mold or questions regarding this policy, contact the UW Safety Office for assistance before proceeding.

Air, surface, or bulk sampling is not necessary. If visible mold is present, then it should be remediated regardless of mold species present. However, for minimal mold situations where building materials may require removal, asbestos bulk sampling may be necessary.

- A. Categories of Mold
 - 1. Incidental Mold
 - a. Limited visible contamination.
 - b. Not resulting from unexpected water or moisture intrusion.
 - c. Examples include surface contamination that might be present in a naturally moist environment such as a residential bath or shower, greenhouse, etc.
 - d. Surfaces can easily be cleaned in place.
 - 2. Minimal Mold
 - a. Visible contamination less than 10 square feet (<10 sq ft).
 - b. Visible growth scattered in a small colony or colonies.
 - c. Growth is on easy to access surfaces.
 - d. Most surfaces with growth can be easily cleaned in place.
 - e. Small items can be easily removed and bagged without significant release of contaminants.
 - 3. Moderate Mold
 - a. Contamination area between 10 and 100 square feet (10 sq ft to 100 sq ft).
 - b. Visible growth on porous or semi-porous materials and is light and spotty.
 - c. Non-porous materials are 50% covered with mold colonies.
 - d. There is the possibility of hidden contamination.
 - 4. Major Mold
 - a. Visibly contaminated areas is over 100 square feet (>100 sq ft).
 - b. Heavy distribution of visible mold on any type of surface.
 - c. Likely hidden contamination.



- d. Contamination may be well established (long-term water or moisture problem).
- e. Aggressive force needed to clean or remove contaminated surfaces.
- B. Mold Remediation Processes

The following are remediation guidelines for Incidental, Minimal, Moderate, and Major categories. A category may be treated via the guidelines for a higher category (for example, incidental mold may be addressed using the guideline for minimal mold) as determined by the professional judgment of the individual responsible for the remediation. Addressing mold remediation using a lesser guideline (for example, addressing minimal mold) with the guidelines for incidental mold) contact the UW Safety Office for guidance.

- 1. Incidental Mold
 - a. Clean using standard custodial practices.
 - b. Select appropriate cleaner for surface mold.
 - c. Follow usage instructions on the cleaner, generally spraying the surface, allowing it to sit, and damp wiping clean.
 - d. Use PPE recommended on the Safety Data Sheet (SDS) associated with the selected cleaner.
- 2. Minimal Mold
 - a. Contamination can be addressed internally by appropriately trained personnel who are approved to wear the required personal protective equipment (PPE). Or, UW may acquire the services of a remediation contractor.
 - b. Respiratory protection is required.
 - c. Area containment is not required. However, consider vacating nearby areas in consideration of personnel who may have mold allergies, who may have compromised immune systems, or who may have chronic respiratory concerns.
 - d. Utilize PPE in accordance with the chemical cleaner SDS as well as gloves, goggles, and N95 filtering face piece respirator.
 - e. Remediation shall be completed using the following cleanup methods:(1) Wet vacuum
 - (1) wet vacuum
 - (2) Damp wipe
 - (3) HEPA vacuum

(4) Removal of damaged materials sealed in plastic bags. Waste can be disposed as ordinary refuse.



Material for Furnishing Affected	Cleanup Methods (from 2e above)
Books and papers	3
Carpet and backing	1, 3
Concrete or cinder block	1, 3
Hard surface, porous flooring (linoleum, ceramic tile, vinyl)	1, 2, 3
Porous surface (caulk)	1, 2, 3
Non-porous, hard surfaces (plastics, metals)	1, 2, 3
Upholstered furniture and drapes	1, 3
Wallboard (drywall and gypsum board)	3
Wood surfaces	1, 2, 3

3. Moderate Mold

UW will acquire the services of a remediation contractor.

4. Major Mold

UW will acquire the services of a remediation contractor.

VI. REFERENCES

American Industrial Hygiene Association (AIHA). *Facts about Mold*. (2011). American Industrial Hygiene Association, 3141 Fairview Park Dr. Suite 777, Falls Church, VA. <u>https://www.aiha.org/get-involved/VolunteerGroups/Documents/BiosafetyVG-FactsAbout%20MoldDecember2011.pdf</u>

United States Department of Labor. Occupational Safety and Health Administration (OSHA) Fact Sheet. *Mold Hazards During Disaster Cleanup.* https://www.osha.gov/Publications/OSHA3713.pdf

United States Department of Labor. Occupational Safety and Health Administration (OSHA) Safety and Health Information Bulletin (2013). *A Brief Guide to Mold in the Workplace*. https://www.osha.gov/dts/shib/shib101003.html

United States Environmental Protection Agency (EPA) (2008). *Mold Remediation in Schools and Commercial Buildings*. EPA 402-K-01-001. <u>https://www.epa.gov/sites/production/files/2014-</u>08/documents/moldremediation.pdf