PREVENT MOLD IN COLD ROOMS

ABOUT MOLD IN COLD ROOMS

Cold rooms are an essential component of many biomedical and clinical research laboratories. They are typically used for temperature-sensitive storage, incubation, and analytical processing. Mold growth can occur in cold rooms when ambient **humidity is high**, where there is **poor ventilation**, **insulation failure**, or when wood, cardboard, and other **porous materials** that can grow mold are stored in the room.

Healthy individuals usually do not experience adverse health effects from moderate mold exposures. However, individuals with **mold allergies**, or those who are immunocompromised may experience **adverse health effects** from mold exposure. Moldimpacted cold rooms can also be **expensive to clean**, result in the loss of use of the cold room, and loss of research and clinical samples due to **contamination**.



Entry to cold room

PREVENT MOLD GROWTH

Prevent mold growth in cold rooms by controlling moisture and removing materials contributing to mold growth. Do the following:

Do not use cardboard or other absorbent materials for storage. Store research and clinical samples and supplies directly on shelves or in appropriate plastic boxes or metal containers.

- Keep surfaces clean. Promptly clean up spilled liquids as mold can thrive on any organic medium.
- Regularly inspect cold rooms and address maintenance issues promptly.
- Repair or replace damaged door gaskets that can provide a cold surface for condensation.
- Report water leaks to UW Facilities or Maintenance for repair.
- For spills of hazardous materials, follow the instructions on the <u>Spill Response Poster</u>.
 Contact EH&S for assistance.
- Keep door firmly shut to prevent condensation. Doors left open can increase the relative humidity in the room and promote mold growth. Maintaining relative humidity at less than 60% helps to discourage mold growth.
- For cold rooms that require frequent access, consider installing a plastic curtain near the door to minimize outside air entering the room when the door is open.
- Remove all wood, cardboard and paper products. Create signage to remind users to not store these materials in the cold room.
- Re-occurring moisture build-up issues or regular mold growth should be reported to UW Facilities.



Mold growth on base of chair in cold room

SPOT CLEANING

Small amounts of mold growth (see photo below) or minimal moisture accumulation can be cleaned by cold room users. To clean small areas of mold growth (spot clean), do the following:

- 1. Ensure that the underlying moisture issue is corrected before proceeding.
- 2. Wear disposable gloves and safety glasses to spot clean.
- 3. Prepare a 1:10 diluted mix of household bleach and water.
- 4. Apply the diluted bleach with pump sprayer to the affected mold area, and let sit for 15 minutes.
- 5. Wipe down the area.
- 6. Bag and dispose of clean-up materials as general waste.
- 7. Dry area with a fan as needed.

For large amounts of mold or moisture, contact EH&S and UW Facilities or Maintenance for assistance.



Mold growth on floor in cold room

UW FACILITIES ASSISTANCE

Following a flood, water leak or system failure, immediate action is required to prevent microbial growth. Contact UW Facilities for assistance.

UW Facilities will arrange for mitigation managed by companies specializing in flood response in buildings and/or mold abatement.

If the situation calls for a major clean-up the contractor must provide a mold abatement plan. Controls will be taken to protect employees from potential exposure to microbial and fungal contamination during removal and handling of water damaged items.



Major mold growth in cold room mitigated by UW Facilities' contractors

RESOURCES

The following resources provide useful information on mold and associated health effects:

- <u>Centers for Disease Control and Prevention:</u>
 <u>(CDC): General Mold FAQs</u>
- <u>CDC: More specific CDC mold information</u>
- <u>Environmental Protection Agency (EPA): Mold</u>
 <u>information</u>

Please contact EH&S at 206.543.7388 or ehsdept@uw.edu for more information about mold.