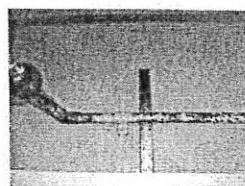
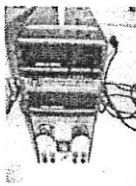
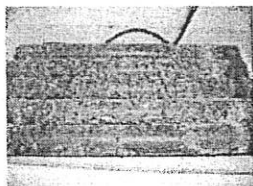


Biosafety Technical Bulletin: Cold Rooms and Mold

Low temperatures and limited air movement present ideal conditions for condensation and moisture build-up, which presents an ideal environment for mold growth in cold rooms. Improper work practices can quickly lead to surface contamination within a cold room. Unabated mold growth may lead to potential health problems via inhalation of mold spores as well as result in mycological contamination of research experiments. Spores can also be tracked out of the room and around the entire floor of the building. Because cold rooms tend to be shared spaces between multiple users, a single user could create problems affecting everyone. *Report any unresolved facility problems to your building manager. Report health and safety concerns to EHS at 301-846-1451.*



PREVENTING MOLD GROWTH - Controlling room water condensation/ moisture and promptly disposing of wet or damp organic materials (e.g., paper products, cardboard, miscellaneous trash, etc.) are important in preventing mold growth.

- Promptly clean up spilled laboratory liquids (e.g., buffers).
- Report any facility leaks from plumbing, etc. to the trouble desk at 301-846-1068.
- Limit paper products stored in cold room. If necessary for experiments, store paper products (e.g., Kim wipes) in a closed plastic container.
- Keep door firmly shut – if left open, water condensation increases due to high relative humidity, promoting mold growth. Avoid unnecessary opening/closing of doors.
- Replace weather stripping around the door to the cold room on a periodic basis to ensure warm air cannot seep into the cold room.

Since cold rooms are typically shared spaces, an established protocol should be adopted by all users to reduce the chance of mold growth in the space. At a minimum,

- Allocate specific storage space(s) for each laboratory. Each laboratory will then be responsible for ensuring that nothing stored within designated storage space(s) are harboring mold.
- DO NOT store cardboard, Styrofoam, and paper products in cold rooms. Metal or plastic containers are allowed.
- Replace wood shelves with open stainless steel or phenolic shelves.
- DO NOT store items on the floor or leave items in the sink.
- Label equipment and any on-going experiments with name, date and responsible Principle Investigator (PI). **Note:** *Any unlabeled samples should be discarded by laboratory managers.*
- Store unused bacterial plates ONLY. Discard if contaminated.
- Dispose of trash (paper towels, tubes, etc.) **outside** of cold room.
- Keep door firmly shut.

CLEANING TIPS TO MINIMIZE MOLD GROWTH IN COLD ROOMS

- Keep surface(s) clean. Clean cold room monthly (at a minimum). Clean more often if necessary.
- Document cleanings using a log sheet.
- Wipe down plastic surfaces with **freshly prepared** 1:10 dilution of household bleach, soap and water.
- Wipe metal surfaces (including tops and bottoms of shelves) with 70% ethanol or EPA approved disinfectant.
- Use wet method to clean floor and walls with freshly prepared 1:10 dilution of household bleach.
- Clean sink with 10% bleach and rinse.
- Regularly inspect stored items for mold. If item(s) are contaminated, promptly remove/discard or otherwise decontaminate using either 70% ethanol or freshly prepared 1:10 dilution of household bleach

References:

<http://or.ucsf.edu/ehs/7240-DSY/12446>

http://med.stanford.edu/somsafety/forms/coldrm_prac.pdf

<http://www.bustmold.com>

NCI-Fredrick Fact Sheet

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