

Cold Room Cleaning and Maintenance Practices

Introduction

A number of health and safety issues have occurred in cold rooms. These problems range from mould growth to unsafe use/storage of chemicals to improper storage of research samples. This document reflects the practices that researchers are expected to follow when using cold rooms.

Because many cold rooms are shared between multiple groups, all users must take the appropriate action to resolve the issue.

Prevention of Mould Growth

Mould has been found in many cold rooms. Every surface in a cold room can become contaminated with mould quickly should an improper work practice occur. The result is possible health problems from inhalation of the mould spores, as well as, contamination of research materials.

Preventing mould growth in cold rooms is achieved by controlling condensation, moisture, and removing materials contributing to mould growth. The following actions need to be followed in the prevention of mould growth in cold rooms:

- Remove sources of moisture and promptly dispose of damp organic materials appropriately.
- Promptly clean up spilled liquids (i.e. buffers, media) appropriately. Mould can thrive on any organic medium.
- Report water leaks to Facilities Management by calling 966-4496 or by putting in a Service Request with FMD at <https://facilities.usask.ca/>.
- Do not use the cold room for long term storage of media or culture plates unless they are properly sealed inside plastic bags or containers. They are a haven for mould and bacterial growth.
- Keep door firmly shut. Doors left open can increase the relative humidity in the rooms and promote mould growth.
- Watch for condensation on surfaces. Condensation may be an indication of a loss of containment.
- Remove all cardboard and paper products. Because they are composed of cellulose they are a perfect breeding ground for mould. If some paper products (i.e. kimwipes) are required, place them in a sealable plastic container or plastic bag.
- Regularly clean and bleach any cold room sink to prevent mould coming up from the plumbing. Record and document the cleaning and maintenance in a log.

CLEANING AND MAINTENANCE OF COLD ROOMS

General Cleaning

Regular cleaning schedules for cold rooms (a minimum of every 6 months) prevent mould or contamination issues. If the room contains a sink, it is important to regularly clean the sink more often (once a month) to prevent mould growth from the plumbing system. For regular

maintenance use soap and water, or a disinfectant wipe (e.g. Lysol) to wash surfaces. Wear personal protective equipment (PPE), such as safety glasses, disposable gloves, closed toe-heeled shoes, and lab coat.

Cleaning Procedure for Mould

- Prepare the appropriate cleaner or disinfectant for use. Ensure that the cleaner/disinfectant used will not damage the cold room or leave excess moisture in the room. Never use bleach on metal surfaces (bleach on metal surfaces can result in pitting.). A spray on cleaner such as Cavicide is excellent for this purpose.
- Put on PPE, which includes disposable gloves, lab coat or disposable coveralls, safety goggles, and N95 respirator. Ensure the individual who is wearing the N95 respirator is fit tested. Individuals can be fit tested through Safety Resource every Wednesday morning. To schedule a time, please contact Safety Resources 306-966-4675.
- Use wet methods to clean the room whenever possible, especially when removing visible mould to prevent spreading the mould throughout the room. Sweeping, dusting, or brushing will release mould into the air and can cause inhalation exposures.
- Methodically, wall by wall, spray the cold room surfaces with Cavicide and wait 10 minutes for the cleaner to disinfect the surface (ensure there is enough disinfectant for the surface to allow appropriate contact time of 10 minutes).
- Use rags or disposable paper towels to wipe off all Cavicide.
- After this, wash down the walls again with soap and water and thoroughly dry the area with towels so that excess moisture is not left in the room.
- Clean the floor last and ensure the floor is dry when you leave.
- Remember to dispose of all cleaning waste appropriately, and place any mouldy or contaminated items in a Biomed bin for proper disposal.

Any questions or concerns? Report any unusual or unresolved contamination issues to Safety Resources at 966-4675.