FACT SHEET - ENVIRONMENTAL HEALTH AND SAFETY

Cold Room Guidelines

What is a cold room?

Cold rooms are walk-in spaces used by researchers to keep research materials below room temperature. In most cases, the air in these rooms are 100% recirculated. Old air is not exhausted, or no new air is introduced unless the door is opened. Due to this, cold rooms present unique hazards and guidelines need to be followed to ensure safety.

What can I do to prevent safety issues?

- **Post a Hazard Communication sign on the door. These can be ordered through EHS.**
- **Ensure all items are labeled with the name of the researcher, PI name, and date.**
- **Use storage shelves made of stainless steel or plastic. Stainless steel shelves permit airflow throughout the entire cold room.**
- **Do not store cardboard or Styrofoam in a cold room.**
- **Dispose of waste into proper waste system outside of a cold room.**
- **Inventory cold room supplies/materials at least twice a year and remove items that are no longer needed, are expired, or are moldy.**
- **Promptly clean all spilled liquids, including buffers and media.**
- **Regularly clean all surfaces with an appropriate cleaner using a wet clean-up method (damp cloth).**
- **Do not use 100% bleach on metal surfaces, as it may cause pitting.**
- **If 10% bleach solution is used as a cleaner, make sure to wipe down all metal surfaces with water and allow them to fully dry.**
- **Do not dry sweep when cleaning, it may disturb and distribute mold spores within the space.**
- **Store paper products (paper towels, tubes, etc.) outside the cold room.**
- **Keep the door firmly shut and minimize door opening to prevent condensation.**
- **Limit storage in the space. Too much clutter will restrict air flow.**

What activities are prohibited when using a cold room?

No storage of the following materials should be kept in a cold room:

- **Cryogens – due to oxygen deficiency**
- **Dry Ice – due to oxygen deficiency**
- **Compressed gases other than air – due to oxygen deficiency**
- **Flammables – due to fire risk**
- **Toxic Chemicals (including BME, formalin, chloroform) – due to hazardous atmosphere if spilled**
- **Acids – due to damage to cold room or compressor**
- **Food or Beverages – Contamination risks to food and materials inside cold room**

What are some hazards to be aware of in a cold room?

- **Oxygen deficiency – be aware of oxygen deficiency symptoms including lightheadedness, confusion, and lethargy. Leave the room immediately and seek proper medical attention.**
- **Mold exposure – Mold exposure may affect individuals differently. Exposure may cause an allergic reaction or cause respiratory conditions.**
- **Spills – If a spill is left to evaporate, it can create a more hazardous environment.**

What if there is a leak or mechanical issue with the cold room?

All water leaks or mechanical issues with a cold room should be reported to Service2Facilities.