

LABORATORY FREEZER DEFROSTING GUIDELINES

WHEN SHOULD I DEFROST MY LAB'S FREEZER?

Follow manufacturers' recommendations for how often to defrost your lab freezer. If ice build-up makes it difficult to close the freezer, you may need to defrost sooner.

CAUTIONS FOR DEFROSTING A LAB FREEZER

- Do **NOT** let water run onto the floor. You or others could SLIP and FALL! The building and/or equipment on lower floors could be damaged.
- Do **<u>NOT</u>** leave a freezer to defrost unattended over a weekend.
- Do **NOT** use sharp objects to remove bulk ice. This can lead to freezer damage, leakage of the refrigerant, and potential chemical exposure.
- Use appropriate PPE (e.g., (cryo)gloves, safety glasses, lab coat, etc.).
- For radioactive material: contact Radiation Safety *before* defrosting to collect an ice sample and test it for radioactive contamination.
- For biological material: if spilled, follow your lab's spill procedures and/or the Emergency Response Guide.

PROCEDURES FOR PROPERLY DEFROSTING A LAB FREEZER

- 1. Plan (allow for at least 2 days for the entire defrosting process, especially for -80°C freezers). Before defrosting, review/update inventory and remove unwanted materials from the freezer. Transfer freezer boxes and racks to back-up freezer.
- 2. (Ideally in the morning) Place collection bins and absorbent material (i.e., universal sorbent pads) inside and underneath the freezer to collect melted ice.
- 3. Unplug the freezer and allow ice to melt. Open all outer and inner doors. Replace absorbent material if/when needed. Leave doors open for 24 hours (or as needed).
- 4. Dispose of ice and wipe off excess water. (See above if storing radioactive and/or biological materials).
- 5. After the freezer is dry, close all doors and restart freezer.
- 6. Bring freezer to set temperature before placing materials back into freezer.

IF I NOTICE A LEAKING FREEZER, WHAT DO I NEED TO DO?

- $\Rightarrow~$ Contact your Supervisor and Lab Safety Contact to make them aware of the situation.
- ⇒ If radioactive material is spilled in in the process of defrosting, call Duke Police and ask for Radiation Safety (911 from a Duke phone, 919-684-2444 from a cell phone).
- \Rightarrow For mechanical issues, contact your preferred vendor for freezer maintenance.

OESO LABORATORY SAFETY DIVISION LABSAFETY@DUKE.EDU 919-6

919-684-8822