

VCR -80 Freezer Backups

The VCR office has acquired multiple -80 freezers across campus to use for backup in research labs. The freezers are in almost all the research buildings and are currently available for use in case of emergencies as well as planned defrost.

What to do when your -80 freezer fails

1. Confirm the backup freezer you are planning to use is available by emailing ne-biobank@unmc.edu. In case of night or weekend emergencies, it is permitted to start moving the samples into available freezers without confirmation from the biobank.
2. Prioritize and relocate material accordingly (*see best transfer practices below)
3. Please note the amount, type, and shelf location within freezer of the materials being transferred due to the possibility of other labs using the freezer as well.
4. Complete the RedCap form here: [\(Link to redcap form\)](#)
5. Fill out and print “Front freezer sheet” emailed with the RedCap confirmation. Place in plastic sheet on the front of freezer. This sheet shows that the backup freezer is in use and not available.
6. Gary Dobesh or Brittany Adams will contact the lab to verify the movement of samples.
7. Make an action plan to repair your freezer and remove your materials in a timely fashion. Preferably 1 week or less.
8. Email gary.dobesh@unmc.edu and brittany.adams@unmc.edu when samples are moved back into regular freezer and remove the log sheet from the front of the freezer.

Planned Defrost of -80 Freezers

Defrosting of -80 freezers are recommended to be annually. Planned defrost can only be started on Mondays to allow for freezer to be available for any weekend emergencies.

1. Complete the RedCap form here: [\(Link to redcap form\)](#)
2. Gary Dobesh or Brittany Adams will contact the lab with assigned backup freezer
3. Fill out and print “Front freezer sheet” emailed with the RedCap conformation. Place in plastic sheet on the front of the freezer. This sheet shows that the backup freezer is in use and not available.
4. On Monday move all the materials to the backup freezer assigned as early in the day as possible.
5. Defrost the freezer on Monday and Tuesday and turn it back on Wednesday.
6. The freezer should be at -80 by Thursday. Materials to be moved back to the lab freezer on this day.
7. Email gary.dobesh@unmc.edu and brittany.adams@unmc.edu when samples are moved back into regular freezer and remove the log sheet from the front of the freezer.

Best practices for material transfer

We understand time is critical when a -80 freezer is failing. But please be mindful introducing an abundance of warmer material into an empty freezer or having the door open for long spans of time. This will cause the temperature to rise very quickly. This can lead to a condition known as “heat shock”. This happens when the freezers are put under duress of high demand for a brief period of time. This will cause the freezer to recover much slower and may not even get back to -80. To avoid this please observe the following best practices:

1. Prioritize your material and move the most sensitive/valuable material first
2. Load material incrementally (i.e., shelf by shelf starting at the top) closing the door between shelf loads allowing for recovery
3. Avoid introducing an abundance of room temperature material all at once
4. Avoid introducing styrofoam or other temperature control materials into freezer
5. Limit the amount of time the door is opened
6. Once material is loaded, avoid opening the door until the unit has recovered completely.