

Emergency Shutdown Guidelines

All laboratory personnel should be trained in their role in shutting down equipment and securing experiments. The following guidance outlines critical factors to consider when developing a plan for shutting down laboratories in an emergency. In the case of an imminent threat such as a fire, the safety of personnel is the priority in determining actions that can be taken prior to evacuation.

Pre-planning Activities

- Develop procedures for safely shutting down research. This should include securing chemical, biological, and radioactive materials. The procedures should be reviewed with the laboratory staff and readily available.
- Identify freezers, refrigerators, and critical research equipment and ensure the equipment is plugged into emergency electrical outlets. Emergency electrical outlets are red and provide emergency power to equipment during a power outage.
- Identify equipment that requires special procedures to restart after a power outage. Procedures for restarting this equipment should be readily available to the laboratory staff.
- If experimental animals are in use, special precautions may need to be taken into account for disruptions to power, ventilation, care, and feeding.
- Ensure critical research data is backed up periodically.
- Develop a plan for contacting laboratory staff during an emergency or a planned closure.
- Each laboratory should have at least one outlet-mounted or hand-held emergency flashlight.

Shutting Down the Laboratory for an Emergency Closure

- Close the sash on chemical fume hoods.
- Safely store and secure all hazardous materials.
- Close gas valves and secure gas cylinders.
- Ensure cryogenic liquids are properly vented.
- Check pressure-, temperature-, air-, or moisture-sensitive materials and equipment. Reactions in progress may need to be terminated depending on the type of emergency and the duration expected. Water-reactive materials should be placed in sealed containers and stored in areas that are unlikely to become wet.
- Turn off heat-generating equipment (e.g., hot plates, stir plates, ovens) and nonessential electrical devices.
- Check that the refrigerator, freezer, and incubator doors are tightly closed.
- Exit the laboratory, lock the door, and follow the instructions for an evacuation or a planned closure.

Resuming Laboratory Operations after an Emergency Closure

- If you discover a condition that poses a threat to you or to others, such as a fire or a hazardous material release, isolate the hazard (e.g., close the door to the lab), notify occupants in the area, activate the fire alarm, exit the building, and call the FIU Police at 7-5911 (6-5911 for BBC)
- Do not use laboratory equipment — such as a chemical fume hood or biological safety cabinet — that is alarming or not working properly. Call the Facilities Work Management at 7-4600

- Check equipment that may have been affected by a power disruption. Keep the refrigerator and freezer doors closed until temperature levels return to normal.
- If you have any safety or health questions, contact the Department of Environmental Health and Safety 7-2621 or ehs@fiu.edu