

Is your laboratory prepared for an emergency, including a severe weather event?

Laboratory equipment, materials and research can be protected during emergency situations by taking precautions that will minimize the impact of dangerous conditions (e.g. wind, rain, flooding) and/or loss of services (electric, heat, water). Continuity planning is an effort to ensure that essential functions of the University can continue across a wide range of potential emergencies. Several steps you can take as an individual are described below. To learn more about developing a continuity plan for your area contact EH&S at 413-545-2682 or email oem@ehs.umass.edu.

Prior to any storm or potential closure PIs, Lab Safety Coordinators, and Lab staff should take steps to:

- Protect research, ensure facilities remain safe and ensure everyone knows what and what not to do during and after the storm

Ask yourself the following questions:

- Are you signed up to receive UMass Amherst Alerts? (See bottom of page 2 for more details)
- Which lab appliances are supported by backup power? How should research materials in appliances without backup power be maintained if necessary?
- Do you have a plan to care for research animals in the event that heating, cooling, power or water are not functioning? Have you communicated this plan with others on campus?
- What is your plan to protect against losses due to freezer failure, including -80 freezers? Are critical specimens in freezers backed up by generators? Are there alternate freezers to which items might be moved in the event of a failure? Have you communicated with others regarding your plan?
- Have you identified all of the critical functions carried out as part of your research? Determine which research functions may be completed remotely and which require campus access. Identify staff whose knowledge or skills are particularly necessary for your research and consider how you might find others to fill in if necessary.
- Do you maintain lists of important emergency contact, staff and supplier phone numbers both physically and electronically in multiple secure locations?

Preparations should begin ahead of these events if they are forecast:

- Identify and make a plan for any research materials that are temperature sensitive. Inquire within your department and school or college for the availability of backup power for freezers and incubators.
- Fill Ziplock freezer bags with water and put them in -20°C freezers. This will help keep freezers cold in case of an outage. They can also be moved to refrigerators to keep items cold.
- Fill liquid nitrogen dewars and cryogen reservoirs on magnets and other equipment so that these do not need to be tended to for a few days
- If possible, change cell culture media a little ahead of schedule so that cells can be left unattended for a few days.
- Autoclave the biohazardous waste the day before potential closure
- Do not place orders for perishable research materials

- Inform EH&S if the storage or containment of any materials could become hazardous with lack of power, water, or ventilation.
- Ensure that the contact information on your lab door card is current and perhaps includes a cell phone number (make neat corrections if needed)
- Ensure chemicals, hazardous materials, or sensitive equipment are properly stored (if your lab is on a lower level, be aware of potential flooding, and lift chemicals or other sensitive items to the bench)
- Ensure that non-critical equipment is turned off and unplugged prior to the storm (i.e. computers) as power bumps could occur that may damage equipment. Consider shutting down all equipment that could be damaged by a power bump. Consider using uninterruptible power supplies and surge protectors.
- Consider shutting down any equipment that could be damaged or that could result in a hazardous situation if cooling (e.g., process chilled water) were to fail
- Prepare a list of contact numbers for lab staff and campus resources

When the campus issues an emergency closure statement

- Secure laboratories and research areas so that they remain safe if you are unable to return for a day or two
- **Lab personnel should not remain working in laboratories.** Principal investigators are responsible for the safety and security of their lab personnel, and therefore should not require or encourage personnel to remain on campus during a University closure.
- Make sure lab doors are closed and locked
- **No experiments should be left running that could potentially create hazardous situations.** For example, no reactions that require heating are to remain running due to the risk of fire. Because of the uncertainty of access to buildings during and immediately after the storm, there is a possibility that researchers may be unable to get back to their labs to monitor and/or take care of ongoing experiments.
- Look for campus email and text messages for updates on the campus status and availability of bus transportation

When you come back to campus,

- Carry your ID in case you are asked for identification by UMPD
- Make sure someone knows where you are on campus

Remember to prepare a lab continuity plan that meets your specific needs. This plan should be shared with your lab and department. The plan should be implemented whenever an emergency occurs or is forecasted. Remember, you must take responsibility to protect your laboratory and research. Please do not hesitate to reach out to EH&S for assistance in developing a plan.

Sign up for UMass Amherst Alerts Emergency Text Messaging System

UMass Amherst Alerts Emergency Text messaging system is one of the primary methods the university will use to notify the campus community of an ongoing or imminent campus emergency, including weather-related closures. You are encouraged to register for these critical emergency notifications at <http://www.umass.edu/emergency>