

# Fact Sheet

## Power Outages

The power can go out for a variety of reasons, including storms, damaged equipment or powerlines, or planned outages. It's important to be ready for the electricity to go out to protect yourself, your equipment, and your research.



### Plan Ahead

- Have flashlights or other battery-powered lights available in your lab, especially if it is located in an interior room with no windows. Check lights regularly to make sure they are working, with working bulbs and fresh batteries. When it is time to reset clocks for Daylight Savings Time, it's a good reminder to check your flashlights as well. Some labs have added glow-in-the-dark tape to illuminate exits or use touch-operated lights near their fume hoods to use if the power goes out while they are working.
- Keep your aisles and exits clear, and your emergency signage and contacts list up to date.
- If you have emergency power outlets, choose what to power carefully – it should be the most critical equipment in your lab. Consider the consequences of a longer outage as well a shorter outage. If you are unsure if you have any emergency power outlets, ask Facilities Management.
- Make a list of equipment that requires special attention in the event of a power outage. This should include any equipment that you need to make sure to unplug, equipment that you need to make sure is on back-up power, and any other special equipment.
- For truly critical equipment, consider an Uninterruptible Power Supply (UPS). A UPS will provide power during the time between power failure and emergency power coming online. Your equipment should still be plugged into emergency power, but a UPS should be used if it is critical that there be absolutely no interruption in power.
- Make a plan for freezers/refrigerators during a power failure. Include information on the alarm systems on the appliances, what to do if they go off, and when to take action.
- Make a list of equipment to restart, recalibrate, or reprogram after a power outage. Include the order equipment should be taken care of, and how to perform actions safely.
- If your experiments use high or low temperatures or pressures, plan ahead for how to relieve or maintain conditions in order to prevent uncontrolled reactions or releases. Include this in your Standard Operating Procedure (SOP) for that procedure. Also consider posting emergency shut-down instructions near the experiment.



### Hazardous Work during Outages

- Immediately stop any hazardous work, including work in fume hoods. Even though fume hoods may be on back-up power, you should still discontinue work. Close containers, cover work, and otherwise

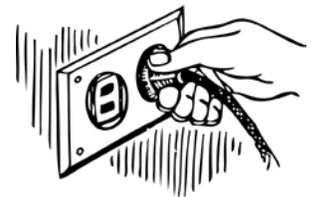
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contain or secure anything you are working with. If you are working in a fume hood, close the sash. Turn off gas at the cylinder valve if you are able and it is safe to do so.

- If hazardous conditions cannot be controlled, isolate or evacuate the area. Evacuate others if needed.
- Do not use candles or other open flames to provide light.
- Do not perform any hazardous work. If there is enough natural light, the emergency exit signs are still working, and the power loss is not due to an emergency such as weather, fire, or a structural failure, you can stay in the area and continue to do non-hazardous work.

## Equipment during Outages

- Check all equipment plugged into emergency outlets to make sure they are running properly. It may take 30-90 seconds for emergency power to start up.
- Avoid opening refrigerators or freezers to keep them as cold as possible. Freezers will hold temperatures for several days if left closed.
- If you use dry ice to preserve materials, remember that it should not be used in walk-in refrigerators or enclosed spaces because of the danger of asphyxiation.
- Shut off or unplug computers, printers, shop machinery, and other electronic or potentially dangerous equipment. This helps prevent unexpected start-ups or damage from power surges when electricity is restored, and makes it easier for power to come back online.



## Evacuation

- If your lab has rooms with no natural light, check them for other people. Help them exit, if needed.
- If you are trapped in an elevator, use the emergency phone to call for help. If you are outside of the elevator, do not try to pry the doors open to help others get out. Wait for assistance.
- If your area has emergency lighting, remember that it will only work for a limited time. Make sure to leave the area while the emergency lights are still on.
- Evacuate the building if you are asked to do so, if a fire alarm goes off, or if other emergency notifications provide instruction.

## After Restoration

- If evacuated from a building, do not re-enter until it has been approved by authorities.
- Restart equipment and check for function, especially fume hoods. Follow any pre-prepared instructions or lists you may have made.
- Make a note of any equipment/materials damaged by the power outage and report it to your department administration for potential insurance compensation and repairs.
- Contact DEHS or 911 for assistance if any issues came up as a result of the outage, such as spills, hazardous releases, or other concerns.

## Questions

If you have any questions about protecting yourself or your research during a power outage, contact your Department Safety Officer, your DEHS Research Safety Professional, or call the DEHS office at (612) 626-6002.