



Power outages can occur from a variety of situations (e.g., natural disasters) and can last for prolonged periods of time. This can present unique challenges in the home for ensuring your families safety. Taking preparedness actions now can help keep your family safe and healthy.

## Before a Power Outage

- **Prepare an emergency supply kit.**
  - Food, water and necessities for all members of the family to last 3 to 5 days
    - Non-perishable food or food that doesn't require refrigeration
    - Water: One gallon per person per day
    - Any medications needed for family members
  - First aid kit, battery powered radio, flashlight with extra batteries
    - Avoid using candles as they can be a fire hazard.
  - Sleeping bags or blankets, and extra clothing
  - Emergency contact numbers
  - Food thermometer
- **Family communication and evacuation plan.**
  - Know how you will contact each other if you are in separate locations or establish a location to meet.
  - Have an out-of-state relative or friend serve as the family contact person.
- **Protect electrical equipment.**
  - Install surge protectors and/or battery back-up systems for sensitive electronic equipment (e.g., computers).

## During a Power Outage

- **Stay informed.**
  - Listen to your battery powered radio for situation developments.
- **Decide whether to stay or go.**
  - Depending on the amount of time you will be without power, it may be best to remain at home (e.g., temporary outage) or evacuate (e.g., power outage in winter with loss of home heat).
  - If driving to another location, proceed with caution and be alert to traffic lights that are not working.
- **Backup power.**
  - Use standby or backup power sources for emergency power. Only use generators in well-ventilated areas. Generators are a major cause of fatal carbon monoxide poisoning.
  - Use battery-operated light sources (flashlights or glow sticks). Do not use candles due to the risk of fire.
  - Never use gas ovens, gas ranges, barbecues or propane heaters for indoor heating.

- **Protect electrical equipment.**
  - Surges or spikes can occur when the power returns; this can damage electrical equipment. Turn off and unplug any electrical equipment (e.g., electronics and appliances).
- **Turn off as many lights and other electrical items as possible.**
  - This helps to eliminate potential fire hazards and lessens the power draw when service is restored.
  - Keep one light turned on so you will know when the power is back on.
- **Keep your food supply safe.**
  - Keep your refrigerator and freezer closed as much as possible throughout the power outage.
  - If your freezer is completely full, the food inside it should be safe for up to 48 hours. If it is half-full, the food inside should be safe for up to 24 hours.
  - If you have been without power for over 48 hours, do not eat any of the food in your freezer.
  - NEVER taste a food to determine its safety!
  - Check the temperature of any and all food before you cook or eat it.
  - Throw away any food that has a temperature higher than 40°F or has been out for more than two hours.
  - If the food in your freezer still contains ice crystals or is 40°F or below, then the food is safe to cook and eat, or refreeze.
  - When in doubt, throw it out!

## Water Safety

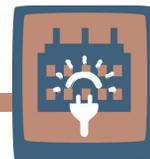
- **Water purification systems may not be fully functioning during power outages.**
  - Check with local authorities to be sure your water is safe to drink.
  - If your water is not considered safe, boil or treat any water used for drinking, cooking, washing dishes, brushing teeth, washing and preparing food, washing your hands, making ice, or preparing baby formula.
  - "Safe" water includes bottled, boiled, or treated water.
  - Contact your local public health department for water treatment directions.

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# POWER OUTAGES AND YOUR BUSINESS

Man-Made and Technological Threats



Power outages can occur from a variety of situations, such as overwhelmed power systems during extreme heat situations or natural disaster situations. Power outages present unique challenges when they occur in the workplace. Prepare now to ensure the safety of your employees and protect your equipment and business.

## Before a Power Outage

- **Have a business emergency/continuity plan.**
  - Determine the processes and equipment that would be affected by a power outage: electrical equipment such as computers, security or alarm systems, elevators, as well as lighting, heating, ventilation.
  - Maintain an inventory of all equipment used by your business. Prepare a list of equipment that will need to be turned off during an outage and then reset when power is restored.
  - Determine the impact of service disruption.
  - Back up computer data frequently and store the information in a secure off-site location.
  - Make sure computers and other electronics are plugged into surge protectors.
  - Test your backup battery systems, emergency lighting, phone, security and fire protection systems regularly.
- **Obtain an alternate power source.**
  - Use standby or backup power sources for emergency power.
- **Have an emergency lighting ready.**
  - Use battery-operated light sources (flashlights or glow sticks). Do not use candles due to the risk of fire.
  - Consider installing an emergency lighting system.
- **Establish shelter locations on your property.**
  - In the event that shelter-in-place measures are needed, have enough room for all employees, any customers or suppliers who may be at your business during the situation.
  - Stock the shelter with emergency supplies (e.g., flashlights, battery powered radio, first aid kit, food, water, and blankets).
- **Prepare your employees.**
  - Inform your employees of the business emergency plan; review it with them regularly.
  - Identify employees with special needs who may need assistance if you need to evacuate.
- **Make plans regarding customers.**
  - Determine the likelihood of customers being present if a power outage situation occurs.
  - Have an emergency plan for customers; review it with employees regularly.

## During a Power Outage

- **Stay informed.**
  - Listen to your battery powered radio for situation developments.
- **Backup power.**
  - Use standby or backup power sources for emergency power.
  - Only use generators in well-ventilated areas. Generators are a major cause of fatal carbon monoxide poisoning, which can cause loss of consciousness and death.
  - The most common symptoms are headache, dizziness, weakness, nausea, vomiting, chest pain, and confusion.
- **Equipment safety.**
  - Unplug or turn off all electrical equipment to prevent damage from electrical surges or spikes when power is eventually restored.

## After a Power Outage

- **Turn on the most essential equipment first.**
  - Wait 10-15 minutes before reconnecting other equipment, to avoid overloading the electrical system.
  - Give the system time to stabilize.
- **Check your facility to make sure everyone is safe and equipment is operating correctly.**
- **Review your preparedness plan to determine what worked and what areas can be improved.**

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Power outages can occur from a variety of situations, such as ice storms. The loss of power to farms using mechanical ventilation, bulk milk-handling equipment, automated feeding systems, heat or refrigeration can result in economic and livestock losses. Preparing now can minimize the impact and protect your livestock and equipment.

## Before a Power Outage

- **Have a standby or backup power source.**
  - This is especially important if you have vital electrical equipment on your farm.
  - If and when possible, buy equipment that has a battery powered backup system.
- **Protect electrical equipment.**
  - Install surge protectors and/or battery back-up systems for sensitive electronic equipment (e.g., computers).
  - Prepare a list of equipment that will need to be turned off during an outage.
- **Develop a emergency preparedness plan.**
  - Have a list of emergency contact numbers.
  - Have a plan on how to maintain operations on your farm should the power go out.
- **Have an emergency plan for water and feed resources for your livestock.**
  - Obtain emergency supplies of forage and grain.
  - Identify emergency resources for water.
  - Have a list of suppliers, truckers, and people that can help with the animals, especially if normal working conditions are disrupted.

## During a Power Outage

- **Backup power.**
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  - Only use generators in well-ventilated areas. Generators are a major cause of fatal carbon monoxide poisoning, which can cause loss of consciousness and death.
  - The most common symptoms are headache, dizziness, weakness, nausea, vomiting, chest pain, and confusion.
  - Use battery-operated light sources (flashlights or glow sticks). Do not use candles due to the risk of fire.
- **Equipment safety.**
  - Unplug or turn off all electrical equipment to prevent damage from electrical surges or spikes when power is eventually restored.

- **Ventilation for livestock.**
  - Do not close buildings tight to conserve heat, since animals could suffocate from lack of oxygen.
  - Open vents to facilitate natural air flow. Clear any debris from all vents.
  - Poultry facilities should be equipped with knock-out panels for emergency ventilation.
  - In dairy facilities, open doors or turn cows outside.
- **Food for livestock.**
  - Mechanical feeders will be inoperable during a power failure.
  - Have a plan in place for emergency feeding procedures.
- **Water for livestock.**
  - Provide all animals with plenty of water.
  - Your water pump may be driven with a small gasoline-powered engine; otherwise, you will need to haul water.
  - If you have an outside source of water, cattle can be turned out.
  - Regardless of the source of water, be sure it remains clean and safe for animal consumption.
  - As a last resort, dairy cattle can be fed their own milk if there is no water available.
- **Environmental conditions for livestock.**
  - If the power outage occurs during winter weather, back up heating measures will be needed.
  - If the power outage occurs during hot weather, back up air conditioning or ventilation will be needed.
  - Plan ahead to have the necessary equipment ready for these situations.

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