



Assistive Technology & Power Outages

The potential for a power outage is year-round. It may come during a spring thunderstorm, a summer tornado, a fall hurricane, a winter blizzard, or an accidental outage due to an accident or equipment malfunction. Individuals with disabilities use power dependent technology to accomplish daily activities. Not only do they keep you independent in your everyday activities, but they also provide a vital communication link to the outside world. The loss of these supports during a power outage can be devastating, costly and even life threatening. It is imperative to have a plan for your power dependent assistive technology in the event of a power outage to support your independence and safety.

Life-Sustaining Medical Equipment Tips (24/7 operation)

- Create a power outage plan before a disaster.
- Register with your local power company for a “medical alert flag” so they can contact you during an unplanned outage and before a planned outage.
- Have a plan for evacuation for extended outages.
- Keep devices fully charged to maintain power during outage.
- Install alarm for electrical service interruption during the night.

Basic Power Backup Guidance

- Create a plan for alternative sources of power
- Know the operating specification for electrical powered equipment and backup options
- Get advice from local power company regarding type of backup power you plan to use



- Know how long a full battery charge will last – type of battery, how much power does the device require
- Purchase a backup generator
- Keep backup batteries on hand
- Regularly check backup or alternative power equipment
- Keep list of alternate power providers – nonhospital generators
- Ask nearby police and fire departments and hospital if you could use them as a backup for equipment power if your backup systems fail

Battery Types

- Indoor
 - No spill
 - No explosive gas
 - AGM take more abuse than gel
 - Gel must be charged at a slower rate to prevent heat damage
- Outdoor
 - Automotive/RV
 - Large ampere capacity
 - Easily available
 - Hazardous if used inside
 - Standard garage charger can be used for recharging
- Deep Cycle Storage Battery
 - Designed for RV, boat, golf cart to be used outside in a ventilated area
 - Designed to provide a steady amount of current over a long period of time
 - Can provide a surge when needed, but not like a car battery
 - Designed to be deeply discharged over and over again
- Rechargeable Batteries
 - Create plan to recharge batteries when electricity is out
 - Check with vendor/supplier for alternate way to charge batteries



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- Know working time of batteries
- Choose equipment that uses batteries that are easily purchased from nearby stores

Generators

- Gasoline or propane fueled
- Operate in open, well ventilated areas
- Noisy
- May require pull cord for start up
- May come with a push button start
- May automatically start up when power fails
- Test frequently to ensure in working order

Indoor Power Supply

- Runs on batteries
- Automatic start
- Acts like a UPS
- 4-5 days of power at 3,000W per 24 hours
- Completely silent
- Requires no maintenance
- Expensive

Uninterruptible Power Supply (UPS)

- Combines a surge protector and a backup battery that plugs into a wall outlet
- Charger in the UPS keeps batteries charged
- UPS batteries take over when power fails

Power Backup and Low Tech Solutions for Specific Limitations:

Breathing/Respiratory Limitations (includes respirators and ventilators)

- Alternate charging source
- Alternate power source



- Extra batteries
- Rechargeable batteries
- Resuscitation bag

Cognitive Limitations (includes talking prompting devices)

- Extra batteries
- Rechargeable batteries

Communication or Speech Limitations

- Dry erase board
- Laminated alphabet boards
- Laminated communication board
- Low tech communication device
- Extra batteries
- Rechargeable batteries

Hearing Limitations

- Alternate power source or charging system
- Amplification system, i.e. pocket talker
- Dry erase board
- Extra cochlear implant batteries
- Extra hearing aid batteries
- Rechargeable batteries

Medical Needs (includes oxygen generation, kidney dialysis, respirators, electric beds and air mattresses)

- Alternate power source or charging system
- Extra batteries
- Rechargeable batteries
- Plan for medications that require refrigeration

Mobility Limitations (includes wheelchairs and scooters)

- Alternate power source or charging system



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- Battery charger
- Extra batteries
- Lightweight manual wheelchair as a backup
- Rechargeable batteries

Vision Limitations

- Alternate power source or charging system
- Extra batteries
- High-powered flashlight with wide beam
- Rechargeable batteries

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