



National Network

Information, Guidance and Training on
the Americans with Disabilities Act



Call us toll-free
1-800-949-4232 V/TTY

Find your regional center at
www.adata.org

Provided By:
Pacific ADA
Center

1-800-949-4232 (Voice/TTY)
(510) 285-5600 (Voice/TTY)
adatech@adapacific.org
www.adapacific.org

Emergency Power Planning for People Who Use Electricity and Battery Dependent Assistive Technology and Medical Devices

This emergency power planning checklist is for people who use electricity and battery dependent assistive technology and medical devices. Electricity and battery-dependent devices include:

- **Life-supporting**
 - respirators, ventilators and other devices to breathe
 - home dialysis and suctioning equipment
 - alternating air mattresses
 - emergency alert systems (which include wired as well as wireless components, and which also depend on the ongoing operability of a household's communications system)
 - CPAP machines (sleep apnea)
 - temperature-controlled environments for people unable to tolerate high or low temperatures
- **Communication**
 - augmentative and alternative speech devices
- **Medication**
 - insulin pumps (diabetes),
 - storage of medicine that requires temperature control,
- **Mobility**
 - power wheelchairs and scooters
 - lifts
 - height adjustable beds

Some of this equipment is vital to your level of independence while other equipment is critical to keeping you alive! Use the checklist to make power-backup plans. Review and update this checklist every six months (one way to remember to do this is when you set your clocks forward in the spring and back in the fall).



Emergency Power Planning for People Who Use Electricity and Battery Dependent Assistive Technology and Medical Devices Checklist

Date Completed	Does Not Apply	Item
Planning Basics		
	<input type="checkbox"/>	Sign up to receive alerts in your area and if you are traveling.
	<input type="checkbox"/>	Create a plan for different sources of power such as extra batteries, generators, battery generators, solar with battery storage.
	<input type="checkbox"/>	Read equipment instructions and talk to your equipment suppliers and health insurance provider about your backup power options. Ask for answers to:
	<input type="checkbox"/>	<ul style="list-style-type: none"> • Determine if you would be hurt if your device stops for a short time? If yes what is that time?
	<input type="checkbox"/>	<ul style="list-style-type: none"> • Can a power surge cause your device to stop working? If yes, what type of surge protector do you need?
	<input type="checkbox"/>	<ul style="list-style-type: none"> • Does your device have a backup system? If yes, how long will it operate? Where is it located?
	<input type="checkbox"/>	<ul style="list-style-type: none"> • Can your device operate on another power source? If yes, what type?
	<input type="checkbox"/>	<ul style="list-style-type: none"> • Can you manually operate your equipment?
	<input type="checkbox"/>	<ul style="list-style-type: none"> • Can your equipment be powered from a vehicle battery? If yes, what is needed and how do you do this safely?
	<input type="checkbox"/>	<ul style="list-style-type: none"> • Will your device still work if it does not have power for an extended time? If yes, how long can it work without power?
	<input type="checkbox"/>	<ul style="list-style-type: none"> • What should you do if you lose power in the middle of treatment (breathing, suctioning, infusion, etc.)? Should you restart equipment if it is stopped in the middle or resume where it stopped?
	<input type="checkbox"/>	<ul style="list-style-type: none"> • What is the working time of batteries and backup batteries that support your system?
	<input type="checkbox"/>	<ul style="list-style-type: none"> • When should batteries be replaced?
	<input type="checkbox"/>	Get advice from your equipment providers regarding options for the type of backup power you plan to use.
	<input type="checkbox"/>	Regularly test backup or alternative power equipment to ensure it will function during an emergency.
	<input type="checkbox"/>	Teach many people to use your backup systems and operate your equipment.



Date Completed	Does Not Apply	Item
	<input type="checkbox"/>	Keep a list of alternate power providers.
	<input type="checkbox"/>	<ul style="list-style-type: none"> Ask your nearby police and fire departments and hospital if you could use them as a backup for your equipment power or if your backup systems fail.
	<input type="checkbox"/>	Label all equipment with your name, address, and phone number. Attach simple and clear instruction cards to equipment and laminate them for added strength.
	<input type="checkbox"/>	Keep copies of serial and model numbers of devices, as well as important use instructions in a waterproof container in your emergency supply kits.
		Life-Support Device Users
	<input type="checkbox"/>	Contact the customer service department of your power and water companies to learn if they offer a service to put you on early warning list for times when they know power or water will or may be shut off.
	<input type="checkbox"/>	All ventilator users should keep a resuscitation bag handy. The bag delivers air through a mask when squeezed. Teach your support team how to use this bag.
	<input type="checkbox"/>	If you receive dialysis or other medical treatments, ask your provider for the emergency plan including where you should go for treatment if your site is not available.
		Communication Device Users
	<input type="checkbox"/>	If you rely on a communication device, software or app, be sure you back up your vocabulary so you can easily retrieve it.
		Oxygen Users
	<input type="checkbox"/>	Check with your provider to determine if you can use a reduced flow rate in an emergency to extend the life of the system. Write on your equipment the reduced flow numbers so that you can easily refer to them.
		Be aware of oxygen safety practices:
	<input type="checkbox"/>	<ul style="list-style-type: none"> Avoid areas where there are gas leaks or open flames.
	<input type="checkbox"/>	<ul style="list-style-type: none"> Post "Oxygen in Use" signs.
	<input type="checkbox"/>	<ul style="list-style-type: none"> Always use flashlights rather than gas lights or candles when oxygen is in use (to reduce fire risk).
	<input type="checkbox"/>	<ul style="list-style-type: none"> Keep the shut-off switch for oxygen equipment near you so you can get to it quickly in case of emergency.



Date Completed	Does Not Apply	Item
Generator Users		
	<input type="checkbox"/>	Make sure use of a generator is safe and realistic for where you live. (See Resources: Generators).
	<input type="checkbox"/>	<ul style="list-style-type: none"> A 2,000 to 2,500-watt gas-powered portable generator, for example, can power a refrigerator and several lamps. (A refrigerator needs to run only 15 minutes an hour to stay cool if you keep the door closed. So, you could unplug it to operate other devices).
	<input type="checkbox"/>	<ul style="list-style-type: none"> Operate fuel dependent generators in outdoor areas to ensure good air circulation.
	<input type="checkbox"/>	Safely store fuel (See Resources: How to Safely Stockpile Emergency Gasoline).
	<input type="checkbox"/>	<ul style="list-style-type: none"> If you live in an apartment, the challenge is knowing if and where you can safely store enough fuel to operate a generator.
	<input type="checkbox"/>	<ul style="list-style-type: none"> Store a siphon kit (transfers fuel from a fuel storage container to a generator).
	<input type="checkbox"/>	Test generators monthly (or according to the instructions) to make sure they will work when needed.
	<input type="checkbox"/>	<ul style="list-style-type: none"> Some generators can connect to the existing home wiring systems; always contact your utility company regarding critical safety issues.
Rechargeable Batteries		
	<input type="checkbox"/>	Create a plan for keeping batteries charged for use during power outages.
	<input type="checkbox"/>	Stored extra batteries require charging even when they are unused. If your survival strategy depends on storing batteries, carefully follow a recharging schedule.
	<input type="checkbox"/>	Check with your vendor/supplier to find alternative ways to charge batteries. Examples include:
	<input type="checkbox"/>	<ul style="list-style-type: none"> Connecting jumper cables to a vehicle battery.
	<input type="checkbox"/>	<ul style="list-style-type: none"> Using an inverter that plugs into a vehicle's cigarette lighter.
	<input type="checkbox"/>	<ul style="list-style-type: none"> Be aware that when substituting a vehicle battery for a wheelchair battery, the charge will not last as long as a charge from a wheelchair's deep-cycle battery.
	<input type="checkbox"/>	<ul style="list-style-type: none"> If you depend on a motorized wheelchair or scooter, if possible, store a lightweight manual wheelchair for emergency use.
	<input type="checkbox"/>	Know the working time of any batteries that support your systems.



Date Completed	Does Not Apply	Item
	<input type="checkbox"/>	When you have a choice, choose equipment that uses batteries that are easy to purchase from nearby stores.
		When Power is Restored
	<input type="checkbox"/>	Check to make sure the settings on your devices have not changed (medical devices sometimes reset to a default mode when power goes out).
		Other Backup Plans
	<input type="checkbox"/>	
	<input type="checkbox"/>	
	<input type="checkbox"/>	
	<input type="checkbox"/>	
	<input type="checkbox"/>	

* Even if you are on the “priority reconnection service” list, your power could still be out for many days following a disaster. It is vital that you have power backup options for your equipment.

Resources for More Information

Power-Dependent Equipment - <http://www.redcross.org/prepare/disaster/power-outage>

Home Use Devices: How to Prepare for and Handle Power Outages for Medical Devices that Require Electricity - <https://www.fda.gov/media/80782/download>

Emergencies / Disaster Resources for People with Disabilities and Emergency Managers - <http://www.jik.com/mrp.html>

How to Safely Stockpile Emergency Gasoline - <https://www.electricgeneratorsdirect.com/stories/6-How-to-Safely-Stockpile-Emergency-Gasoline.html>

Generators

Consumer Reports Information on Generators

- Generator Buying Guide: <https://www.consumerreports.org/cro/generators.htm?searchToken=generators>
- 5 Things to Know About Portable Power Stations: <https://www.consumerreports.org/portable-power-stations/portable-power-stations-things-to-know-battery-inverter-generators/>
- How to Safely Get a Generator Up and Running in a Hurry: <https://www.consumerreports.org/generators/how-to-safely-get-a-generator-up-and-running-in-a-hurry/>
- Videos
 - Generator Tips: <https://www.consumerreports.org/video/view/appliances/home/6026787279001/generator-tips/>
 - Generator Safety: <https://www.consumerreports.org/video/view/consumer-101-extras/6026775948001/generator-safety-teaser/>
 - 5 Tips to Keep Your Portable Generator Ready: <https://www.consumerreports.org/video/view/home-garden/outdoor/3909184331001/5-tips-to-keep-your-portable-generator-ready/>
 - Generac's quieter, fuel-saving generator: <https://www.consumerreports.org/video/view/home-garden/energy-efficiency/3167260796001/generacs-quieter-fuel-saving-generator/>



Emergency Power Planning

- Home generator advice: <https://www.consumerreports.org/video/view/home-garden/energy-efficiency/2437113716001/home-generator-advice/>
- Latest power generators: <https://www.consumerreports.org/video/view/home-garden/news/2119694589001/latest-power-generators/>
- Generator Buying Guide: <https://www.consumerreports.org/video/view/buying-guides/1795676678001/generator-buying-guide/>
- Homes for different generations: <https://www.consumerreports.org/video/view/home-garden/news/1452668334001/homes-for-different-generations/>
- Quieter generators: <https://www.consumerreports.org/video/view/home-garden/energy-efficiency/1441351231001/quieter-generators/>

For more information, call and speak to an ADA specialist at **1-800-949-4232**. All calls are confidential.

Content was developed by the Pacific ADA Center, and is based on professional consensus of ADA experts and the ADA National Network.



A member of the ADA National Network

555 12th Street, Suite 1030

Oakland, CA 94607

Toll Free: 800-949-4232 V/TTY

Local: 510-285-5600 V/TTY

Fax: 510-285-5614

<http://www.adata.org/>

This information product was developed under grants from the Department of Education, NIDRR grant numbers H133A110014 and grants from the Department of Health and Human Services, NIDILRR grant numbers 90DP0021 and 90DP0015. The contents do not necessarily represent the policy of these Departments, and you should not assume endorsement by the Federal Government.

© Copyright 2019 ADA National Network. All Rights Reserved.

May be reproduced and distributed freely with attribution to ADA National Network (www.adata.org).