

Essential Information for COPD Patients and Oxygen Users Partnering with your power company can save you money or even save your life!





Disaster Preparedness for Floods, Storms, and Fires: Essential Tips for People with COPD or an Oxygen Concentrator

Natural disasters like floods, storms, and fires can pose serious challenges for everyone, but for individuals with chronic obstructive pulmonary disease (COPD) or those who rely on oxygen therapy, the stakes are even higher. Preparedness is critical to ensure safety, maintain access to necessary medical equipment, and reduce health risks during emergencies. This guide provides essential tips to help you stay safe and ready, with a focus on using a portable oxygen concentrator and managing COPD.



How New Safety Protocols Affect Respiratory Patients

Hurricane and fire season seems to start earlier and last longer every year. The recent devastating fires raging in California have reinforced the need for emergency preparedness.

Because many of the largest fires in recent years have started from high winds and downed power lines, many energy companies have enacted new safety protocols and started proactively shutting down power in sectors where high winds or other dangers are present. Of course, this presents a problem for those on oxygen concentrators or other life saving devices. Be sure to contact your power company to take advantage of safety programs and maybe even save yourself some money on your energy bills along the way.

Power Company Programs that May be Available for those on Medical Devices



You can work with the power company in your area to stay safe and maybe even save you some money on your electric bill! You may be able to sign up for:

- Advanced notice via text or phone call for power shut-off
- Priority for getting power back on
- Immunity from surge pricing
- Rebates for generators
- Grants and stipends for alternative energy sources such as solar panels and battery storage

Contact Your Power Company Today!

Click links below

Alabama

<u>Alabama Power</u>

Alaska

Alaska Electric Light and Power

Arizona

<u>Arizona Public Service</u>

Arkansas

Entergy Arkansas

California

Pacific Gas and Electric Southern California Edison Pacific Power

Colorado

Xcel Energy Black Hills Energy

Connecticut

Eversource United Illuminating

Delaware

Delmarva Power

Florida

<u>Duke Energy</u> Florida Power and Light

Georgia

<u>Sumpter Electric Cooperative</u>

Hawaii

Hawaiian Electric

Idaho

Idaho Power
Rocky Mountain Power
Enbridge

Illinois

Amren

Indiana

Indiana Michigan Power

AES Indiana

NIPSCO

lowa

MidAmerican Energy Company
Alliant Energy

Kansas

Evergy

Kentucky

Kentucky Power

Louisiana

South Western Electric Power Company

Maine

Central Maine Power

Maryland

Baltimore Gas and Electric First Energy Delmarva Power Massachusetts

National Grid US Eversource

Michigan

Indiana Michigan Power
Consumer Energy
Xcel Energy

Minnesota

East Central Energy Minnesota Power Xcel Energy Otter Tail Power

Mississippi

Mississippi Power

Missouri Amren

Montana

North Western Energy Montana Dakota Utilities Co.

Nebraska

North Western Energy

Nevada

Nevada Energy

New Hampshire

Eversource

New Jersey

First Energy

New Mexico

Public Service Company of New Mexico

New York

First Energy National Grid ConEdison

North Carolina

Dominion Energy

North Dakota

Otter Tail Power Company Montana Dakota Utilities

Ohio

Ohio Edison/First Energy Dominion Energy

Oklahoma

<u>Public Service Oklahoma</u> <u>Oklahoma Gas and Electric</u>

Oregon

Pacific Power

Pennsylvania

First Energy

Rhode Island

Rhode Island Energy

South Carolina

Dominion Energy

South Dakota

North Western Energy Otter Tail Power Company Montana Dakota Utilities

Tennessee

Middle Tennessee Electric Nashville Electric Service

Texas

<u>Oncor</u>

Utah

Enbridge Rocky Mountain Power

Vermont

Green Mountain Power

Virginia

Dominion Energy

Washington

Pacific Power

Washington D.C.

West Virginia

First Energy

Wisconsin

Allaint Energy
Wisconsin Public Service
Madison Gas and Electric

Wyoming

Rocky Mountain Power
Enbridge
Montana Dakota Utility



Escalate Requests to Managing Agencies

If your power company wasn't on the list, that means that at the time that this handbook was created, they hadn't implemented any of these programs, or we weren't able to find information on their website. We encourage you to contact them and let them know that as a customer, you feel that these initiatives would be valuable to you. If they don't seem amenable to starting any of these programs, you may contact your State Energy Office. Links can be found on the following page.

State Energy Offices (SEOs) play a vital role in shaping and implementing energy policies at the state level. Their responsibilities vary by state but generally include the following key functions:

1. Energy Policy Development

- Develop and implement state energy policies and plans.
- Work on renewable energy, energy efficiency, and climate-related goals.

2. Energy Program Administration

- Administer state and federal energy programs (e.g., energy efficiency upgrades, renewable energy grants).
- Distribute funding, such as federal grants from programs like the Weatherization Assistance Program (WAP) or the State Energy Program (SEP).

3. Energy Efficiency Initiatives

- Promote energy conservation measures for residential, commercial, and industrial sectors.
- Support retrofitting projects to improve energy efficiency in buildings and infrastructure.

4. Renewable Energy Promotion

- Encourage the development and adoption of renewable energy sources, such as solar, wind, and geothermal.
- Support renewable energy research, pilot projects, and grid integration.

5. Energy Resilience and Emergency Preparedness

- Plan for energy resilience during natural disasters or grid disruptions.
- Coordinate with utilities and other entities for energy reliability and disaster recovery.

6. Public Outreach and Education

- Raise awareness about energy-saving practices and renewable energy options.
- Provide technical assistance and resources to businesses and homeowners.

7. Economic Development

- Foster energy-related economic growth by attracting clean energy industries and jobs.
- Support workforce training for energy efficiency and renewable energy careers.

8. Regulatory and Technical Support

- Collaborate with other state agencies, local governments, and utilities on energy-related regulations and initiatives.
- Provide technical expertise for energy infrastructure projects.

9. Energy Data Collection and Analysis

- Collect and analyze energy data to guide policy decisions.
- Monitor energy trends, consumption, and emissions in the state.



Links to State Energy Offices

Alabama

Alabama State Energy Program

Alaska

<u>Alaska Energy Authority</u>

Arizona

<u>Arizona Office of Grants and</u> Federal Resources

Arkansas

<u>Arkansas Energy Office</u>

California

California Energy Commission

Colorado

Colorado Energy Office

Connecticut

Energize Connecticut

Delaware

<u>Delaware Division of</u> <u>Energy and Climate</u>

Florida

Florida Office of Energy

Georgia

<u>Georgia Environmental Finance</u> <u>Authority - Energy Resource Division</u>

Hawaii

Hawaii State Energy Office

Idaho

Idaho Energy and Mineral Resources

Illinois

Illinois Environmental Protection Agency Office of Energy

Indiana

Indiana Office of Energy Development

lowa

<u>Iowa Energy Office</u>

Kansas

Kansas Energy Office

Kentucky

Kentucky Office of Energy Policy

Louisiana

Louisiana State Energy Office

Maine

Maine Energy Office

Maryland

Maryland Energy Administration

Massachusetts

<u>Massachusetts Department of</u> Energy Resources

Michigan

Michigan Agency of Energy

Minnesota

Minnesota Department of Commerce

Mississippi

Mississippi Energy Services

Missouri

<u>Missouri Department of Natural</u> <u>Resources - Division of Energy</u>

Continued on Next Page

Montana

Montana Department of Environmental Quality

Nebraska

Nebraska Energy Office

Nevada

Nevada Governor's Office of Energy

New Hampshire

New Hampshire Office of Strategic Initiatives - Energy Division

New Jersey

New Jersey Division of Energy

New Mexico

New Mexico Energy Conservation and Management Division

New York

New York State Energy Research and Development Authority

North Carolina

North Carolina State Energy Office

North Dakota

North Dakota Energy Office

Ohio

Ohio Energy Efficiency Program

Oklahoma

Oklahoma Secretary of Energy and Environment

Oregon

Oregon Department of Energy

Pennsylvania

<u>Pennsylvania Department of</u> <u>Environmental Protection -</u> <u>Energy Programs Office</u>

Rhode Island

State of Rhode Island Office of Energy Resources

South Carolina

South Carolina Energy Office

South Dakota

<u>South Dakota Department of</u>
Environment and Natural Resources

Tennessee

<u>Tennessee Department of</u> Environment and Conservation

Texas

<u>Texas State Energy</u> Conservation Office

Utah

Utah Office of Energy Development

Vermont

State of Vermont Department of Public Service

Virginia

Virginia Department of Energy

Washington

Washinaton State Energy Office

Washington D.C.

<u>District of Columbia Department of</u> <u>Energy and Environment</u>

West Virginia

West Virginia Office of Energy

Wisconsin

Wisconsin Office of Energy Innovation

Wyoming

Wyoming State Energy Office





General Disaster Preparedness Tips

Create an Emergency Kit Assemble a well-stocked emergency kit specifically tailored to your needs. Include:

- Medications (at least a two-week supply) and prescriptions.
- Portable oxygen concentrator (POC) with extra batteries and chargers. Your D/C power cord is especially important since evacuation routes often have a huge backup.
- Keep your concentrator batteries charged. It will help them maintain their charge capacity and may save your life in an emergency.
- Non-perishable snacks and water.
- A first aid kit.
- Important documents like medical records, insurance details, and emergency contact numbers.

Have a Communication Plan

- Share your emergency plan with family, friends, or caregivers.
- Keep a list of emergency numbers, including your healthcare provider and local emergency services.
- Consider a medical alert system or app that notifies others in case of an emergency.
- Stay Informed. Watch news alerts and have a battery power radio in case the electricity goes out.
- Sign up for local weather alerts and emergency notifications.
- Know evacuation routes and shelter locations. There are often "special needs shelters" that are set up for charging medical devices and accommodating those with medical needs. Be sure to learn where those are in your area in advance.
- If you have friends or family out of the area, evacuate early if you can.

Prepare Your Home

- Install smoke and carbon monoxide detectors.
- Keep an emergency exit clear of obstacles.
- Ensure your oxygen equipment is secure and protected from damage.
- Invest in air cleaners and plastic sheeting so that you can cordon off an area if the air in your area is unhealthy but you are not being evacuated.

Flood Preparedness

Floods can occur with little warning, making it crucial to act fast.

- Relocate Your Oxygen Equipment
- Store your POC and oxygen tanks in waterproof, high locations away from potential flooding.
- •Use waterproof bags to protect smaller medical devices.
- Keep your concentrator, charging cords and batteries together in a go bag so you can grab them at a moment's notice.
- Have a Waterproof Emergency Kit
- Pack your medications and other essentials in waterproof containers.
- Include a battery-operated flashlight and radio.
- Do not wait for floodwaters to rise. If evacuation is advised, leave as early as possible.
- Ensure your POC and extra batteries are charged and in good working order.



Floods often lead to mold and bacterial growth, which are both extremely dangerous for those with a respiratory condition.

Wear a mask or respirator if you need to clean or be near flood-damaged areas. If possible remain, in another location until your home can be fully dried, and aired out with all mold and mildew cleaned up.

Storm Preparedness

Whether it's snow, rain, or even just wind, severe storms can disrupt power supplies and create barriers to accessing medical care.

Backup Power Options

- Invest in a generator or portable power station to keep your oxygen concentrator functioning during outages.
- Ensure you have extra batteries for your oxygen equipment.

Stay Indoors

- Avoid exposure to wind, rain, and lightning.
- Stay in a safe area of your home away from windows and doors.

Charge Your Devices

• Keep your oxygen concentrator batteries, phone, and other essential devices fully charged when a storm is predicted.

Monitor Air Quality

- Storms can stir up pollutants and allergens. Use air purifiers and stay indoors as much as possible.
- Download an app on your phone that monitors air quality.
- You can also go to www.Airnow.gov to find out what the air quality is.



Know Where Emergency Power Will Be Available

• Places like hospitals, fire stations and police buildings likely have emergency generators and will be able to assist those on life saving devices, such as oxygen concentrators that require power or charging.

Fire Preparedness

Wildfires or house fires can be particularly dangerous for people with COPD due to smoke inhalation and air pollution.

Minimize Smoke Exposure

- Stav indoors with windows and doors closed.
- Use air purifiers with HEPA filters to reduce indoor pollutants.
- Wear an N95 mask if you must go outside.

Evacuate Immediately if Necessary

- Have a "go bag" ready with your emergency kit and oxygen equipment.
- Keep your vehicle fueled and ready to leave quickly.

Plan for Oxygen Safety

- Oxygen is flammable, so avoid open flames or smoking near your equipment.
- Store oxygen tanks in a cool, ventilated area away from direct sunlight or heat sources.

Monitor Air Quality Index (AQI)

Use apps or websites to track Air Quality Index levels. Avoid outdoor activities when air quality is poor.

What Do the Air Quality Index Numbers Mean

The U.S Environmental Protection Agency runs the Air Quality Index which reports the quality of outdoor air. The AQI measures the density of the five major pollutants in the air. The pollutants are ozone, particulates, carbon monoxide, sulfur dioxide, and nitrogen dioxide.



The scale goes from 0 - 500. Anything over 300 is considered hazardous and everyone without breathing protection should leave the area immediately. The scale is as follows:

- 0 50 Green or good which means there is little risk
- 51 100 Yellow or moderate which means that air quality is acceptable
- 101 150 is **Orange** meaning unhealthy for sensitive groups such as those with COPD or other respiratory conditions
- 151 200 is **Red** or poor which means those in sensitive groups are at risk of serious health effects and healthy groups are at risk as well
- 201 300 is **Purple** and a health alert is issued for everyone
- 301+ is **Maroon** and air quality is at emergency conditions and everyone should leave the area as soon as possible



Helpful Resources During and After a Disaster

Apps for Disaster Preparedness and Response

FEMA App

- Real-time weather alerts, disaster resources, and recovery information (USA).
- iOS_| Android



American Red Cross Apps

- Includes apps for emergency alerts, first aid, blood donations, and shelter locations.
- Red Cross App Suite iOs | Android

Zello

- Push-to-talk app for communication when cellular networks are unreliable.
- iOS | Android

PulsePoint

- Sends alerts for nearby cardiac emergencies and offers CPR guidance.
- iOS | Android

Life360

- Family location tracking, check-ins, and safety alerts.
- iOS | Android

NOAA Weather Radar

- Real-time weather alerts and forecasts.
- iOS | Android

Websites for Disaster Information and Resources

Ready.gov

- Comprehensive disaster preparedness resources (USA).
- Visit Readv.aov

National Weather Service (NWS)

- Local weather alerts and warnings.
- Visit Weather.gov

ReliefWeb

- Global updates on disasters and humanitarian crises.
- Visit ReliefWeb.int

CDC Emergency Preparedness

- Guidance for health-related emergencies, including pandemics.
- Visit CDC Emergency Preparedness

International Federation of Red Cross and Red Crescent Societies (IFRC)

- Global disaster response and preparedness resources.
- Visit IFRC.org

National Hurricane Center

- Real-time updates on hurricanes and tropical storms.
- Visit NHC.gov

Organizations That Provide Disaster Support

Federal Emergency Management Agency (FEMA)

- Disaster relief and recovery assistance (USA).
- FEMA Website

American Red Cross

- Emergency shelters, blood donations, and disaster recovery aid.
- Red Cross Website

Team Rubicon

- Disaster response organization staffed by military veterans and first responders.
- Team Rubicon Website

Salvation Army Emergency Disaster Services

- Provides food, shelter, and financial aid during disasters.
- Salvation Army EDS Website

World Food Programme (WFP)

- Global leader in emergency food assistance.
- WFP Website

Doctors Without Borders (Médecins Sans Frontières)

- Medical assistance in global disaster zones.
- MSF Website

Local Emergency Management Agencies

Search for your city, county, or state emergency management website for localized support and alerts.

Additional Resources

211 Services

• Call or visit <u>211.org</u> for local resources, including shelter, food, and healthcare.

Global Disaster Alert and Coordination System (GDACS)

- Alerts on global disasters like earthquakes and floods.
- GDACS Website

Oxygen Needs

OxiMedical Respiratory

- Portable Oxygen Concentrators and accessories
- 1-888-643-4921 | OxiMedical.com

