

Natural Disaster Preparedness for Individuals with Neurological Conditions

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Quick Facts

- In the event of a natural disaster, it is important to plan and prepare in advance as much as possible
- Individuals with neurological conditions should consider their specific needs, including equipment use and life-saving medical supplies, when preparing for emergency situations

Natural disasters, such as floods, storms, and heat waves (to name a few) can be extremely dangerous, and may be even more harmful if you have a neurological condition or disability. For example, if you live in Pittsburgh or the surrounding areas you might have been impacted by the recent storm in May of this year that caused significant power outages across Western PA. Perhaps you were already well prepared for this kind of event, or perhaps you found it challenging and had to find ways to adapt and consider ways to be better prepared in the future. The goal of this article is to provide general knowledge and safety tips in order to build awareness and best prepare you and your loved ones in the event of a natural disaster related emergency. Check out the resources throughout the article and at the bottom of the page for more details.

Every area of the country has different levels of risk for disasters. According to [FEMA's National Risk Index](#), Pittsburgh's Allegheny County has a 'relatively low' overall risk and Washington County's overall risk is listed as 'very low.' The highest ratings for these counties are for the following hazards: cold waves, hail, heat waves, ice storms, landslides, riverine flooding, strong winds, tornadoes, and winter weather.

As one example of the connection between natural disasters and neurological conditions, consider extreme heat or heat waves. Individuals with multiple sclerosis (MS) can be especially sensitive to overheating, and extreme temperatures can exacerbate symptoms (Hanc, 2025). Individuals with other neurological conditions such as stroke, Alzheimer's disease, Parkinson's disease, and others may have changes to their bodies' sensory systems that impact their hydration levels and therefore put them at risk of dehydration (Camacho & E&E News, 2024). Extreme heat, as well as other natural disasters, can also impact air quality which can increase the risk of stroke in the general population (Levine, 2025; Camacho & E&E News, 2024). Additionally, stress from experiencing a natural disaster or emergency situation can also impact heart health and/or prevent one's ability to take necessary medications to control risk for stroke.

To avoid heat-related illness, all individuals, regardless of diagnosis, should be cautious regarding excess sun exposure and maintaining adequate hydration, especially if a heat wave is in effect in your area. Consider if you have experienced any of the above-listed hazards in Allegheny or Washington counties. If you live or travel outside of these areas, use FEMA's National Risk Index to assess your specific location's risks: <https://hazards.fema.gov/nri/map>. The more you know, the better you will be prepared.

Make An Emergency Plan



During an emergency, the last thing you want to do is rush to gather supplies or plan next steps at the last minute. You may not be able to plan for everything in the case of an emergency, but there are several steps you can take to keep you safe and prepared. Below is a non-exhaustive list to get you started (CDC, 2024; Ready, 2025).

- ❖ Keep a list of contacts of people who can help you in the event of an emergency, including family, friends, medical providers, medical treatment facilities (especially if you are on dialysis or require other life-sustaining medical treatment) and accessible shelters and/or public facilities with resources to meet your needs. Keep this list in a waterproof container in your emergency kit (more details on this below) and on any electronic devices, such as your mobile phone.
- ❖ Consider informing a trusted family member or friend of where you keep emergency supplies and/or provide them a copy of house/apartment key so they can reach you if needed.
- ❖ Contact local transit and/or [emergency management agencies](#) for accessible transportation options in case you need to evacuate during an emergency.
- ❖ Contact your local emergency management agency to see if you can register yourself as an individual with a disability in order to receive targeted assistance during emergencies.
- ❖ If you use a wheelchair, consider having a portable air pump as well as a patch kit or extra inner tubing for the tires. If possible, have an extra seat cushion on hand especially in the event of an evacuation.
- ❖ If you use medical equipment in your home that requires electricity, you can contact your utility provider to put you on a list for priority power restoration. Additionally, consider the options below:
 - Always keep your equipment charged, such as power wheelchairs including an extra battery, as well as communication devices and portable phone chargers
 - If possible, have a manual chair as backup option
 - Consider purchasing a portable generator (or a whole-house generator if this is within your budget) and learn how to safely use it
- ❖ Talk to your doctor and/or pharmacist about making a plan for an emergency supply of your medications. In general, carry a few days' supply of your prescriptions at all times, as well as a written list of all medications.
- ❖ Wear medical alert tags on your person and/or place them on frequently used bags/purses, and add relevant medical information to your electronic devices.
 - If you have a communication disability, carry printed cards or keep relevant medical info on your electronic devices
- ❖ Consider the other individuals you live with who may need assistance, including service animals or pets. For animals, plan for specific food, water, and supplies, and look into shelters that allow for animals in the case of an evacuation.

- ❖ Emergencies and disasters can be very stressful. Although it will be stressful no matter how much you plan, consider your personal stress management strategies to best cope with potential challenges and/or possible symptom flare-ups.

Build A Kit

To best prepare for an emergency, it is recommended to keep a kit with approximately 3 days worth of essential supplies. Below is a list of general recommendations, but please also consider your daily routine and what additional supplies you may specifically need.

**References: (Ready, 2025; Levine, 2025).*

1. Water - aim for at least three large bottles of drinking water.
2. Food - shelf stable items such as peanut butter, crackers, canned foods, pastas, etc.
3. A first aid kit including items such as over-the-counter pain relievers (e.g., Tylenol/Ibuprofen), gloves, bandaids, antibiotic creams, face masks (N95 or KN95), hand sanitizers
4. Flashlight with batteries
5. Blanket(s)
6. AM/FM radio with batteries
7. A seven-day supply of all prescription medications plus paper copies of the prescriptions, dosages, allergies, etc
 - a. If you use a baclofen pump, ask your doctor for a week's supply of the drug in pill form
 - b. Have a cooler and chemical ice packs for any medications that need to be refrigerated
8. Copies of insurance cards, as well as contact info for doctors, family members, or friends
9. List of the style and serial number of medical devices, including instructions for using your equipment in case someone needs to assist you
10. Additional items (if applicable)
 - a. Eyeglasses and/or contacts
 - b. Hearing aids
 - c. A backup supply of oxygen
 - d. Communication devices (e.g, augmentative communication device or other assistive technology that you rely on)
 - e. Any necessary items for pets or service animals

Sheltering and Evacuating

In order to plan for a potential evacuation due to an emergency or disaster, it is important to know your location's risks. As mentioned above, Pittsburgh (Allegheny & Washington counties) has a relatively low overall risk for natural hazards.

Despite the low risk, it is still important to know how to stay up to date, when and where to go, and what to bring. For example, check with local officials regarding shelter spaces in your area (or use search engines such as through the [Red Cross](#)), determine areas you can go if you need to (such as a friend or family's home in a different county or city), and be ready for travel (e.g., have full tank of gas if you drive, be aware of alternative routes and accessible transportation options).

To stay informed, have a battery-powered radio and follow any local evacuation instructions, and sign up for alerts from your local emergency management agencies including the National Weather Service and/or the [FEMA app](#) or [website](#).

After An Emergency

Emergencies and disasters can be extremely stressful for anyone, but with an added layer of challenge if you have a neurological condition or disability. After an emergency, it is normal to be stressed, and it's okay to ask for help.

Once you and your loved ones are safe, it's important to try and get back into your usual routine (where possible), get good sleep, eat nourishing food, focus on things that keep you calm to manage any stress or emotional changes you've experienced, and connect with others.

If you are experiencing a mental health emergency, call or text 988 or call/text SAMHSA's [Disaster Distress Helpline](#) (1-800-985-5990). If you are experiencing any physical changes or new illness after an emergency, check-in with your medical providers, even if it's just a telemedicine visit or over the phone if you are unable to get there in-person.

References

Camacho, Francisco & E&E News (2024). *This Is Your Brain on Climate Change*. Scientific American. <https://www.scientificamerican.com/article/extreme-heat-exacerbates-brain-conditions-from-alzheimers-to-migraines-to/>

CDC (2024). *Emergency Preparedness for People with Disabilities*. CDC. <https://www.cdc.gov/disability-emergency-preparedness/people-with-disabilities/index.html>

Hanc, John (2025). *How to Stay Hydrated and Safe in the Heat—Especially If You Have Multiple Sclerosis*. Brain & Life.

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Levine, Hallie (2025). *Natural Disasters Can Be More Dangerous for People with Neurological Conditions—Here's How You Can Prepare*. Brain & Life.

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Ready (2025). *People with Disabilities*. Ready. <https://www.ready.gov/people-disabilities#plan>

Resources

- ❖ PA Emergency Management Agency: <https://www.pa.gov/agencies/pema/contact>
- ❖ Allegheny County Special Needs Registry:
<https://www.alleghenycounty.us/Government/Police-and-Emergency-Services/911-Communications/Special-Needs-Registry>
- ❖ Find open shelters through the Red Cross:
<https://www.redcross.org/get-help/disaster-relief-and-recovery-services/find-an-open-shelter.html>
- ❖ FEMA resources
 - Website for general information: <https://www.fema.gov/locations/pennsylvania>
 - Mobile app to stay up-to-date on weather conditions:
<https://www.fema.gov/about/news-multimedia/mobile-products>
 - Apply for disaster aid: <https://www.disasterassistance.gov/>
- ❖ For mental health emergencies after a disaster
 - Call or text 988 or call/text SAMHSA's [Disaster Distress Helpline](#) (1-800-985-5990)
- ❖ Home repair after a disaster: <https://rebuildingtogether.org/>
- ❖ The Salvation Army can help provide disaster relief including food services, emergency communications, and social services: <https://salarmyeds.org/>