Hurricane Preparedness for Persons Living with Spinal Cord Injury

(An electronic version of this booklet, along with associated hyperlinks, can be found at: scimiami.med.miami.edu/hurricane_preparation)
# TABLE OF CONTENTS

I. General Checklist 3

II. Universal & State-Wide Resources 4

- Step 1: Register for the State of Florida and your county’s special needs services. 4
- Step 2: Determine if you should shelter-in-place or evacuate. 5
- Step 3: Create an emergency kit. 8
- Step 4: Build a support network. 9
- Step 5: Practice the skills required for you to execute your plan. 10

III. Broward County Materials 11

IV. Miami-Dade County Materials 12

V. Palm Beach County Materials 13

VI. Appendix 14
I. GENERAL CHECKLIST

The team here at UHealth/Jackson Rehabilitation understands the additional challenges that people living with spinal cord injury (SCI) may face when ensuring their safety during and after a hurricane. The goal of this packet is to help you and your family better prepare for this type of emergency. This checklist will lay out the basis for things that we feel should be at the forefront of your mind as you brace for the hurricane season.

(adapted from Figure 1, Shapiro et al. 2020)

- Register for evacuation assistance through state and local government in advance of a storm.
- Develop a comprehensive evacuation plan for yourself and caregivers, including transportation and a meeting place.
- Maintain a 7-day supply of essentials, including food, water, catheters, and medications.
- Ensure that you are able to manage or direct your own care. This includes being able to verbally direct an untrained caregiver in the event of an emergency.
- Develop a local personal support network of at least three people who are willing and able to assist with your care needs in an emergency.
- Submit physician certificates to utility companies for priority turn-on service if you are dependent on electricity for life or function.
- If you are dependent upon a ventilator, ensure you have a generator and bag-mask equipment.
- Have cooling and heating methods readily available if you have impaired thermoregulation.
- If you live or work in a high-rise building, order an escape chair in the event of elevator shutdown.

When assessing hurricane preparedness for persons living with SCI, we encourage revisiting this checklist and consulting a physician and other healthcare workers with any further questions.
II. UNIVERSAL & STATE-WIDE RESOURCES

This section includes materials that will enable you to develop a comprehensive emergency preparedness plan that incorporates critical elements specific to people living with SCI. We review special considerations that should be made when preparing emergency kits, transportation arrangements, evacuation plans, and more. Later, we provide resources specific to Broward, Miami-Dade, and Palm Beach counties.

General Tips:
- Start planning as early as possible.
- Practice evacuation plans with yourself, your caregiver, and/or family members.
- Stay informed. Find out if you live in an evacuation zone and keep up with real time updates during an emergency event.
- Communication is key. It is highly encouraged that you consult with your physician, caregiver, and/or family members to develop the best plan in the case of an emergency.

Below are some helpful phone Apps that will help you stay prepared and informed during an emergency event. All apps are free to download from the Apple store (iPhone) or Google Play Store (Android).

Federal Emergency Management Agency (FEMA)  
NOAA Weather Radar Live  
Code RED (Local Public Safety alerts)

**Step 1: Register for the Florida state and county’s special needs services.**

In addition to local government, you should register with the Florida Special Needs Registry. This will help you to receive important information from local emergency management officials about evacuation and sheltering options available to you. It also enables government officials to plan better for all of those who need special services. **Click here to register with the Florida Special Needs Registry.** (URL: [https://snr.floridadisaster.org/Signin?ReturnUrl=%2f](https://snr.floridadisaster.org/Signin?ReturnUrl=%2f))

Each county has established their own emergency programs for residents with special medical needs, such as SCI, amongst many others. These programs may include services such as special needs sheltering, transportation, and assistance programs. Importantly, not all programs operate at the same level of capacity as others. Please make sure to reference the later chapters in this packet to learn more about our recommendations, terms of eligibility, the application process, and what services are specifically offered by your county.

- Broward
- Miami-Dade
- Palm Beach (Link pages here)
**Electricity and Power Needs:** If you receive services by Florida Power & Light (FPL), consider applying for their Medically Essential Service.

*Terms of Eligibility:* Any FPL residential customer whose electric service is medically essential and if that medical condition has been certified by a physician licensed to practice in Florida.

- Electric service is considered essential if you are dependent on electric-powered equipment as specified by a physician to avoid: Loss of life and/or serious medical complications requiring immediate hospitalization.

**Services provided:**
- Special notices before and after a hurricane
- Special notices before electrical service is disconnected for non-payment
- Referrals to social-service agencies that provide financial assistance
- Note that this does not guarantee uninterrupted service or provide an exemption from paying electric bills. You will still be responsible for backup equipment and power supply in the event of power outages.

**APPLICATION HERE:**
- Be sure to have your physician complete the Physician’s Certificate included in the application.
- Visit [https://www.fpl.com](https://www.fpl.com) for more information.

---

**Step 2: Determine if you should shelter-in-place or evacuate.**

- Things to consider:
  - **Know your zone.** Find out which evacuation zone you live in by searching your address on the Florida Disaster Know Your Zone website. Be sure that all options are selected under the “Layers” tab, found in the upper right-hand corner of the screen (see Figure 1 below). Select the “Legend” tab to determine which zone corresponds to the color surrounding your address (see Figure 2 below).

---

![Figure 1: Florida Know Your Zone website, highlighted Layers tab.](image-url)
You can also visit the following website for more information on evacuation zones and routes according to your county: Florida Disaster County Evacuation Information (https://www.floridadisaster.org/planprepare/disaster-preparedness-maps/).

- **Mandatory Evacuation Homes.** All residents in a manufactured/mobile home or sub-standard housing must evacuate in a hurricane warning. (*Source from the Official Palm Beach County Hurricane Planning Guide)*

Sub-standard housing criteria include buildings that do NOT meet one of the following requirements:

1. Permitted and inspected after March 1, 2002 under the Florida Building Code, or;
2. Permitted and inspected under prior codes, constructed of solidly filled reinforced masonry; or of wood frame construction that has been evaluated and retrofitted as needed to resist hurricane force winds; in either case, such structures must also have been retrofitted with impact protection on all glazed openings.

For more information, visit FEMA Manufactured (Mobile) Home (https://www.fema.gov/manufactured-mobile-home).
In general, official recommendations suggest that evacuation should be a last resort option. If you live in a structurally sound home and are not located in a mandatory evacuation zone, hurricane experts will generally suggest shelter-in-place. However, please understand that these recommendations are for the general population and do not necessarily take into account the unique needs of persons with disability.

- Evacuation area options – make sure to investigate these options well ahead of hurricane season, if possible.
  - Consider if a family member is capable of hosting you while also meeting your appropriate medical needs during an emergency evacuation (Is their home wheelchair accessible? Is there reliable electricity?).
  - Hotels?
  - County Special Needs Shelters. Visit your county’s dedicated chapter to learn about how to apply for their special needs shelter programs. Terms of eligibility, pet policies, and offered services vary by county.

(*Source from the Official Palm Beach County Hurricane Planning Guide)

<table>
<thead>
<tr>
<th>If You Can Shelter-in-Place</th>
<th>If You Must Evacuate</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Prepare your Emergency Kit (Step 3).</td>
<td>☐ Prepare and pack your Emergency Kit (Step 3).</td>
</tr>
<tr>
<td>☐ Build a support network (Step 4).</td>
<td>☐ Build a support network (Step 4).</td>
</tr>
<tr>
<td>☐ Freeze water jugs</td>
<td>☐ Communicate your evacuation plans to your caregiver, family members, etc.</td>
</tr>
<tr>
<td>☐ Place flashlights and batteries throughout the house and keep one with you (Do NOT use candles).</td>
<td>☐ Secure all doors, windows, and patio/yard furniture.</td>
</tr>
<tr>
<td>☐ Turn the refrigerator to the lowest setting and lower A/C.</td>
<td>☐ Allow at least twice the usual travel time.</td>
</tr>
<tr>
<td></td>
<td>☐ Go to your predetermined host home or risk/special needs shelter, if applicable.</td>
</tr>
<tr>
<td></td>
<td>☐ Notify your pre-arranged contact when you arrive at your storm-safe location.</td>
</tr>
</tbody>
</table>
### Step 3: Create an emergency kit

<table>
<thead>
<tr>
<th>Food and Water:</th>
<th>Medical Supplies:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- 1 gallon of water per person per day for at least 3 days</td>
<td>- A list of all medications, dosages, and any allergies</td>
</tr>
<tr>
<td>- At least 3-day supply of non-perishable food, for example:</td>
<td>- Contact information for doctors, relatives or friends who should be notified if you are hurt (<a href="#">Important Contacts Template</a>)</td>
</tr>
<tr>
<td>➢ Ready-to-eat canned meats, fruits, vegetables</td>
<td>- First aid kit</td>
</tr>
<tr>
<td>➢ Dry cereal or granola</td>
<td>- Surgical face mask (or the equivalent)</td>
</tr>
<tr>
<td>➢ Peanut butter</td>
<td>- At least 7-day supply of prescription medications</td>
</tr>
<tr>
<td>➢ Dried fruit</td>
<td>- At least 7-day supply of catheters</td>
</tr>
<tr>
<td>- Canned juices</td>
<td>- Gloves and arm/leg sleeves or coverings</td>
</tr>
<tr>
<td>- Ice or frozen bags of water</td>
<td>- Adult suppositories (Ducolax) and/or stool softeners</td>
</tr>
<tr>
<td>- Can opener</td>
<td>- Adult briefs (Depends)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Basic Supplies:</th>
<th>Important Documents:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Flashlights</td>
<td>- A list of all medications, dosages, and any allergies</td>
</tr>
<tr>
<td>- Extra batteries</td>
<td>- Contact information for doctors, relatives or friends who should be notified if you are hurt (<a href="#">Important Contacts Template</a>)</td>
</tr>
<tr>
<td>- Whistle</td>
<td>- Waterproof storage of materials</td>
</tr>
<tr>
<td>- Backup generators</td>
<td>- Hand sanitizer</td>
</tr>
<tr>
<td>- Hand sanitizer</td>
<td>- Cash or traveler’s checks</td>
</tr>
<tr>
<td>- Cash or traveler’s checks</td>
<td>- Matches in a waterproof container</td>
</tr>
<tr>
<td>- Matches in a waterproof container</td>
<td>- Feminine supplies and personal hygiene items</td>
</tr>
<tr>
<td>- Feminine supplies and personal hygiene items</td>
<td>- Type ABC fire extinguisher</td>
</tr>
<tr>
<td>- Type ABC fire extinguisher</td>
<td>- Sunscreen</td>
</tr>
<tr>
<td>- Sunscreen</td>
<td>- Mosquito repellent</td>
</tr>
<tr>
<td>- Mosquito repellent</td>
<td></td>
</tr>
</tbody>
</table>

### If you are evacuating, be sure to also pack:
- Sleeping arrangements (blankets, sleeping bags, pillows, bed sheets)
- Cushions, splints, braces

Check with your county’s shelter program for any specific items you are expected to supply.

### Other tips:
- Know the size and weight of your wheelchair in addition to whether it is collapsible, in case it has to be transported.
- Show others how to operate your wheelchair sleeping bags, pillows, bed sheets

### If you have a pet:
- Collar with ID tag, rabies tag, and a leash
- Medical records, proof of vaccinations, registration, and adoption documents
- At least 3-day supply of food (in an airtight, waterproof container)
- At least 3-day supply of water specifically for your pets
- First aid kit (cotton bandage rolls, bandage tape and scissors, antibiotic ointment, flea and tick prevention, pet first aid reference book)
- Sanitation needs (litter box and litter, newspapers, plastic trash bags)
- Treats, toys and bedding

For more information: [Pet Emergency Kit](#)
• Medical Records/Keeping and Accessing
  ○ Make sure you have important medical information with you in case they need to be referenced
  ○ You may want to keep these organized in a folder, or know how to locate them electronically (ie: Epic and Cerner Portal access)
  ○ Make sure your caregiver or significant other knows how to access your records if needed in an emergency.

**Step 4: Build a Support Network**

**Family**
- Use the [FEMA Family Emergency Communication Plan Guide](https://www.fema.gov/family-emergency-communication-plan-guide) as a way to keep record of important phone numbers, family information, and meeting places in case of an emergency. This form provides cutout wallet emergency cards to give to family members as reminders.

**Questions for your doctor**
- Make sure you ask how to obtain additional medications immediately after a storm and how to contact your health provider to obtain and fill prescriptions.
- Ask how you can access telehealth options and other means of communication with your physician and other health care providers for care guidance.
- Ask if you would benefit from a physician certificate with utility companies for priority service.
- Discuss cooling and heating methods if you have impaired thermoregulation.
- Review your emergency supplies list with your physician and add any other necessary supplies.

**Questions for your peers**
- If you know someone with SCI characteristics similar to yours, ask them about their strategies and experiences with hurricanes.
- If you don’t know someone with similar abilities and needs as yourself, then join a local SCI Support Group ([https://unitedspinal.org/peer-groups/](https://unitedspinal.org/peer-groups/)) and/or seek a Peer Mentor ([https://unitedspinal.org/peer-mentoring/](https://unitedspinal.org/peer-mentoring/)).
  - Local Broward and Miami SCI support groups can be found at [https://scisg.org](https://scisg.org).

**Discussion questions for your caregiver** (*Source from Broward.org*)
- Discuss ways to prepare a written, detailed description of the kind of care you are accustomed to receiving, including information such as:
  - Special supplies that you may need such as medication, incontinence products, low-air mattress, spare wheelchair cushion, accessories, etc.
  - The location of equipment and supplies required to meet your needs.
  - How you spend your time and what you need at specific times during the day and night.
  - Tips on how to help you reduce stress and remain calm.
- Discuss the possibility of a substitute caregiver in case your primary caregiver is unavailable or unable to provide care for an extended period of time. Identify and make arrangements with this caregiver ahead of time.
Step 5: Practice the Skills required for you to execute your plan.

- The following is a suggested list of some of the skills you may consider in case of an emergency. Please note that this list is not exhaustive.
- Giving instructions to new caregivers for assists that are unique to your needs.
- Using a manual chair instead of a powered chair due to anticipated power outages. For example, transferring to/from manual chair or pushing manual chair.
- Setting up a wheelchair into “sleeping mode” in case you evacuate and have limited or insufficient access to a bed and/or to more safely transfer into a bed.
- Self-care routines in your normal chair without normal bathroom accessories.
- Unique transfer techniques in the event you must enter a new vehicle, bed, toilet, etc.

More Resources
Use this online Florida Disaster Get A Plan (https://apps.floridadisaster.org/getaplan/) website to build your disaster emergency plan. This website will help you create a plan based on your residing county. Be sure to select the “Special Needs” category before proceeding.
IV. BROWARD COUNTY MATERIALS

If you live in Broward County, refer to the listed resources below to learn about specific evacuation, transportation, and shelter services that are offered during an emergency event. Take careful note of each program’s application process, terms of eligibility, and offered services and expectations.

**Broward Vulnerable Populations Registry**

The Vulnerable Populations Registry is a tool that the county uses to help evaluate resident needs in their communities and assist in planning a response in an emergency. This registry is for those who **elect to stay home** during an emergency. Note that this registry does not guarantee that you will be placed on a priority list for first responders, but it does ensure they are prepared to accommodate you.

- Register **HERE!** ([https://webapps2.broward.org/VulnerableRegistry/Welcome.aspx](https://webapps2.broward.org/VulnerableRegistry/Welcome.aspx))

**Broward Special Needs Emergency Sheltering and Transportation Assistance Program**

Terms of eligibility: *if you have a medical condition that requires greater level of care than can be provided at a General Population shelter, but don't require placement at a hospital or other medical institution.*

These shelters offer basic medical assistance and monitoring. They are staffed by qualified medical personnel and have back-up electricity.

- Must bring your own medications
- Family members and caregivers are encouraged to accompany residents with special needs
- Service animals are permitted
- It is recommended that you pre-register to ensure staff is prepared to accommodate you
- Caregivers/companions should bring their own sleeping arrangements
- While basic services such as food, electricity, and medical supervision will be provided, clients and caregivers must provide supplemental food and all medications for the first five days.

**Application instructions**

- **APPLICATION HERE:** English Spanish Creole
- **PEDIATRIC APPLICATION:** English Spanish Creole
  (Full links in Appendix)
V. MIAMI-DADE COUNTY MATERIALS

If you live in Miami-Dade County, refer to the listed resources below to learn about specific evacuation, transportation, and shelter services that are offered during an emergency event. Take careful note of each program’s application process, terms of eligibility, and offered services and expectations.

Miami-Dade Emergency and Evacuation Assistance Program (EEAP):

**Terms of Eligibility:** If any one of the conditions apply

- You are unable to evacuate on your own due to a specialized transportation need.
- You are homebound and unable to walk to a bus pickup point and do not have anyone who can provide transportation.
- You have medical needs that prevent you from evacuating on your own.
- You are bedbound.
- You are on life-sustaining medical equipment that requires electricity.
- You require assistance with daily living activities.

The EEAP is designed for individuals living at home who need assistance with evacuation and sheltering. Click here to visit the EEAP website for more information (https://www.miamidade.gov/global/service.page?Mduid_service=ser1470238193996672).

- Service animals are permitted
- Services offered include: Specialized transportation, safe shelter, medical monitoring, wellness checks
- A caregiver or companion should accompany the evacuee throughout the emergency period to ensure the evacuee’s needs are met in a timely manner

**APPLICATION HERE:** English  Spanish  Creole  Online (English)

(Full links in Appendix)

You do not need to complete an application every year. It is your responsibility to report any changes by calling the support line at (305) 513-7700.

More resources:

- Download the “ReadyMDC” app from the App Store (iPhone) or Play Store (Android) to receive up-to-the-minute information before, during, and after a hurricane strike.
- Watch the MDC EEAP YouTube video for more information about the program (https://www.youtube.com/watch?v=TjyderLIZf4).

VI. PALM BEACH COUNTY MATERIALS

If you live in Palm Beach County, refer to the listed resources below to learn about specific evacuation, transportation, and shelter services that are offered during an emergency event. Take careful note of each program’s application process, terms of eligibility, and offered services and expectations.

**Palm Beach County Special Needs Shelter Program**

Terms of Eligibility: Must satisfy the following

- Dependence on electric medical devices.
- Dependence on supplemental oxygen.
- Certain chronic but stable illnesses that require observation or caregivers.
- Progressive Alzheimer’s or dementia.

This program allows citizens to be able to shelter at a centrally located facility where they will be under the medical supervision of physicians and registered nurses.

- Caregivers/companions must bring their own sleeping arrangements.
- Service pets only are allowed.
- Provides three meals a day.
- Must be able to sleep on a cot.

**Application Instructions**

- [APPLICATION HERE](#): Application (English), Online Application (multiple language options)
  
  (Full links in Appendix)

For more information, call (561) 233-1266.

**Palm Trans Special Needs Transportation**

This will transport residents to a general population shelter at no charge.

Terms of Eligibility: Must satisfy the following three criteria

- Those who do not satisfy the criteria for the Special Needs Shelter.
- Live in an evacuation zone or mobile home park.
- Are disabled with no other type of transportation.

Register ahead of time by calling Palm Trans (561) 649-9839.

**Palm Beach Hurricane Notification Resources**

Sign up for [ALERT PBC](#) to receive real-time updates regarding the emergency situation. Refer to this list of [PBC Radio Stations](#) to stay up to date via radio.

Download [PBC Dart](#) available in the Apple Store and Google Play Store.
IV. APPENDIX

Broward County Resources:

Application: https://webapps2.broward.org/VulnerableRegistry/Welcome.aspx

Overview of Special Needs Emergency Sheltering and Transportation Assistance Program:
https://www.broward.org/AtRisk/Documents/SPECNEEDSHELTEROVERVIEWREV060217.pdf

Application Instructions:
https://www.broward.org/AtRisk/Documents/SPNEEDSHELTERAPPLICINSTRUCREV060217.pdf

Application by Language:
English:
Spanish:
Creole:

Pediatric Applications by Language:
English:
Spanish:
Creole:

Miami-Dade Resources:

EEAP Overview Page:

Application by Language:
English:
Spanish:
Creole:

Online Form (English): https://www8.miamidade.gov/apps/gis/eeap_publicregistration/
Emergency Planning with Pets:  

EEAP YouTube Video:  https://www.youtube.com/watch?v=TjyderLIZf4

**Palm Beach County Resources:**

Special Needs Shelter Program:  

Application Instructions:  

Application:  
English:  

Other Language:  https://secure.co.palm-beach.fl.us/PSD_EM_SpecialNeedsApplication/

Sign Up for PBC Alerts:  https://member.everbridge.net/892807736726195/login

PBC Radio Stations for Updates:  

**Universal Resources:**

Department of Homeland Security (FEMA):  
Pets:  https://www.ready.gov/pets

Mobile Homes:  https://www.fema.gov/manufactured-mobile-home

Florida Division of Emergency Management:  
https://www.floridadisaster.org/planprepare/disaster-preparedness-maps/

Florida Disaster Know Your Zone:  
https://floridadisaster.maps.arcgis.com/apps/webappviewer/index.html?id=c788060028c
b43809a25744ead39c0d6

Florida Special Needs Registry Registration:  
https://snr.floridadisaster.org/Signin?ReturnUrl=%2f

Florida Disaster Get a Plan:  
https://apps.floridadisaster.org/getaplan/

**Pdf’s to print out:**

