



**Jackson**  
HEALTH SYSTEM

Hurricane Evacuation Plan  
Jackson Memorial Long-Term Care  
Center  
Miami, FL

Michelle Bandel and Yining Liu  
New York University  
GPH-GU 5210: Global Health Disaster Preparedness and Response  
29 April 2022

## II. Table of Contents

Cover page .....	1
Table of Contents .....	2
Preface.....	3
Signatures Page.....	4
Mission Statement.....	5
Statement of Purpose .....	5
Authorities .....	5-6
Definitions.....	6-7
Communications Plan .....	7-8
Mutual Aid Agreement.....	8
Public Health Concept of Operations.....	8-13
Annex 1– THIRA.....	13-14
Annex 2 – Drills and Exercises.....	14-15
Annex 3 – Short term Recovery .....	15-16
References .....	17

### III. Preface

The threat of hurricanes along Florida's coastline is real, especially during Hurricane season (June 1-November 30). In fact, since 1850, every part of Florida's coastline has been impacted by at least one hurricane.<sup>1</sup> While southern areas of Florida's coast are at an increased risk of a land-falling hurricane, followed by the panhandle, northern areas, while less susceptible, are still at risk.

Although every hurricane season is different, studies to-date reveal interesting trends. Over the past one hundred years, Florida was directly impacted 21 times by Category 1 hurricanes, 17 times by Category 2's, 18 times by Category 3's, 6 times by Category 4's, and twice by Category 5's.<sup>2</sup> Although the most frequent hurricanes that have impacted Florida are Category 1's, major hurricanes have struck Miami-Dade county more frequently than any other county in the US coastline.<sup>2</sup> It has also been reported that in the past one hundred years, twenty-six major hurricanes of categories 3, 4, and 5, have struck the state of Florida, the most devastating one being Hurricane Andrew (category 5) in 1992.<sup>2</sup> Of the twenty six major hurricanes, four of them hit Miami-Dade county, which is the same county where Jackson Memorial Long-Term Care Center is located.

Given that the Jackson Memorial Long-Term Care Center is located within an evacuation zone, this plan will outline information necessary for a safe response to hurricanes that could affect the center. The water and strong winds that accompany and characterize hurricanes can damage facilities, disrupting utilities, causing personal injury, as well as causing other incidents that could potentially impact day-to-day functioning depending on the hurricane's category and/or intensity. Jackson Health System has an Emergency Department responsible for monitoring weather service advisories and this department will provide updates to Patient Care Services on weather conditions and forecasts while maintaining constant communication with Miami-Dade County's Emergency Operations Center.

The fact that Florida is near the tropics and westerly winds blow off the African coasts along the equator, makes the state much more vulnerable to hurricanes.<sup>1</sup> In fact, Hurricanes usually start as storms in the Caribbean and off the west coast of Africa, and as they become more intense and turn into severe tropical storms, they drift westward while simultaneously gathering heat and energy through their direct contact with warm ocean waters. Given Florida's location as well as its minimal elevation above sea level (or low-lying topography), the state has a long and significant history of hurricanes.<sup>3</sup>

Due to Florida's increased vulnerability to hurricanes, it is critical that Miami-Dade County, as well as Florida's Department of Health and the Patient Care Services at Jackson Memorial Long Term Care Center, develop and enforce an evacuation plan for hurricanes. This Hurricane Evacuation Plan will provide some effective guidelines and measures that should be taken in the event of a hurricane. More specifically, it will provide an effective plan of evacuation after a storm warning or hurricane watch announcement is made and before a storm hits the coast of Florida.

#### **IV. Signatures Page**

We the undersigned have reviewed and support this disaster play for the Jackson Memorial Long-Term Care Center.

\_\_\_\_\_  
Cassandra Pasley, JD  
Chief of Staff for the Florida Department of Health

\_\_\_\_\_  
Date

\_\_\_\_\_  
Mark Lander  
Deputy Secretary for County Health Systems

\_\_\_\_\_  
Date

\_\_\_\_\_  
Kenneth A. Schepke, MD, FAEMS  
Deputy Secretary for Health

\_\_\_\_\_  
Date

\_\_\_\_\_  
Idel Benjamin RNC MSN  
Director of Patient Care Services at Jackson Memorial Long Term Care Center

\_\_\_\_\_  
Date

\_\_\_\_\_  
Maxine Austin  
Director of Patient Care Services at Jackson Memorial Long Term Care Center

\_\_\_\_\_  
Date

## **V. Jackson Memorial Long-Term Care Center Response Overview**

### **Mission Statement**

The mission of the Florida Department of Health is to support local and state response to public health needs resulting from hurricanes, tropical storms, and other severe weather conditions. However, the overarching mission is to build the health of the community by providing a single, high standard of quality care for the residents of Miami-Dade County.<sup>4</sup>

The mission of the Jackson Memorial Long-Term Care Center is to assist Jackson Memorial Hospital with the timely discharge of patients who cannot be discharged home or to other nursing homes due to complicated and/or underlying medical conditions. Additionally, the center aims to rehabilitate each patient and restore them within a friendly atmosphere.<sup>5</sup>

### **Statement of Purpose**

The purpose of this disaster plan is to provide the necessary guidelines for effective communication among staff and residents of the Jackson Memorial Long-Term Care Center. This plan will pay particular attention to emergency evacuation in response to potential threats of hurricanes. This plan will also focus on providing guidelines for communication of staff in the event of an emergency, provide policy and procedures for addressing administrative support for Jackson Health System, and provide guidelines for communication among residents to assist and act as quickly as possible.

### **Authorities**

The *Agency for Healthcare Administration* has established Emergency Management Planning Criteria for all nursing home facilities and long-term care facilities (AHCA 3110-6006), this plan incorporates all relevant criteria described in the Emergency Management Planning Criteria.<sup>6</sup>

The *Division of Emergency Management* part of the County Emergency Management Agency will review the present plan submitted on behalf of the Jackson Memorial Long-Term Care Center. The plan includes appropriate procedures to follow if the facility is not able to fulfill its day-to-day functions due to a hurricane, severe storm, or other natural disaster. While Jackson Memorial Long-Term Care Center will ensure that this plan is implemented, the Division of Emergency Management will ensure that the plan is all-encompassing/appropriate.<sup>7</sup>

The *Florida Building Commission*, part of the Department of Community Affairs, assesses and manages Florida's code, flood issues, and other community planning responsibilities. The building code is enforced primarily at the city and county level, thus mandating state codes for both residential and commercial buildings for all municipalities, with specific requirements for counties or parishes on the coast and in high wind hazard areas.<sup>8</sup>

The *Hurricane Loss Mitigation Program*, established by Florida's Division of Emergency Management, is a specialized, state-funded mitigation program which aims to minimize hurricane-related damage. The program began as a response to Hurricane Andrew's devastation and damages, specifically to the insurance market in the state. Additionally, the

program has a \$7 million annual budget provided by the *Florida Hurricane Catastrophe Trust Fund*, which funds activities that promote property resiliency through retrofits to properties (residential, commercial, mobile home), public education, public information, and hurricane research.<sup>9</sup>

The *National Hurricane Center (NHC)* is part of the National Centers for Environmental Prediction (NCEP), which is based in Florida International University (Miami, FL). Their mission is to save lives, reduce property loss, and improve economic efficiency by issuing the best watches, warnings, forecasts, and analyses of hazardous tropical weather. Their overarching goal is to be America's calm, clear, and trusted voice in the eye of the storm to enable communities to be safe from tropical weather threats in collaboration with its partners.<sup>10</sup>

*Florida Insurance Council Hurricane Central* provides value to consumers through education, research, and representation before consumer, legislative, regulatory, and judicial organizations. Among their many goals, they are committed to the highest standards of business ethics and professionalism, they promote and protect the viability of the insurance market, they yearn consumer confidence and trust, and they cultivate a positive public image for the community.<sup>11</sup>

The *Florida Disaster Fund* is the official private fund established by the State of Florida to assist Florida's communities in responding to and recovering from disasters. The Florida Disaster Fund supports response and recovery activities in collaboration with all sectors (governmental and non-governmental, private and public).<sup>12</sup>

## **Definitions**

**Advisory:** official information issued by tropical cyclone warning centers describing tropical cyclone watches and warnings; advisories describe tropical cyclones and subtropical cyclones.<sup>10</sup>

**Center:** location of minimum wind or minimum pressure; position varies with altitude.<sup>10</sup>

**Cyclone:** closed circulation rotating counterclockwise in the Northern hemisphere and clockwise in the Southern hemisphere.<sup>10</sup>

**Disaster:** natural or man-made event(s) causing significant alterations to residency experience and potentially threatening the safety of patients and employees; this event (or set of events) may overwhelm available resources needed to cope with resulting consequences.<sup>10</sup>

**Evacuation:** Leaving an affected building or facility when conditions inside pose a threat to one's health and safety; occurs through the nearest exit, but varies depending on the circumstances because an alternate evacuation exit way may be used.<sup>10</sup>

**Eye:** circular area of lighter winds that encompass the center of a severe cyclone.<sup>10</sup>

Hurricane: large tropical storm/cyclone with sustained winds of 74 mph or greater, moving counterclockwise and usually accompanied by heavy rains, flooding, and tornadoes.<sup>1</sup>

Hurricane Watch: Official announcement made by authorities that winds of 74 mph or greater are possible within the area at risk; usually issued about 48 hours in advance of the anticipated onset of the storm force winds.<sup>10</sup>

Hurricane Season: Time of the year with a relatively high incidence of hurricanes; in the area of interest (Florida), this season runs from May 15 to November 30.<sup>10</sup>

Landfall: Intersection of center of a cyclone with coastline.<sup>10</sup>

Saffir-Simpson Hurricane Scale: one-to-five rating based on the hurricane's intensity (wind speed); used to give an estimate of the potential damage and expected flooding.<sup>1</sup>

Category	Wind Speed (mph)	Damage
1	74-95	Very dangerous, some damage
2	96-110	Extremely dangerous, extensive damage
3	111-129	Devastating damage
4	130-156	Catastrophic damage
5	> 156	Catastrophic damage

Shelter-in-place: take immediate shelter where you are; protection from elements outside such as debris and/or chemical release would be provided to residents.<sup>10</sup>

Storm Warning: warning of 1-minute sustained surface winds of 55 mph or greater; may be directly or indirectly associated with tropical cyclones.<sup>10</sup>

Tropical Depression: cluster of storms organized around a central circulation with surface wind speeds of 38 mph (miles per hour) or less.<sup>1</sup>

Tropical Disturbance: cluster of thunderstorms poorly organized.<sup>10</sup>

Tropical Storm: cluster of smaller storms with substantial circular rotation and sustained surface winds of 39-73 mph.<sup>1</sup>

## Communications Plan

In the event of a hurricane and/or tropical storm, Florida County Office of Emergency Services is responsible for both overall internal and external communications:

Internal communications: If conditions are safe (pre-disaster), the Dispatch Center of the Florida Police Department will relay information to and dispatch the Fire Department and Police to the scene of the incident. Employees of the center or facility will be contacted primarily by phone, first at their landline number, then at their cellphone number. Every employee must confirm receipt of the message and those who do not respond will be left with a voice message. The pager, which uses radio frequency, will be the secondary mode of internal communication. Check-in will be required for all contacted personnel and handheld radio units will be used for tertiary communications.

External communications: The Florida Division of Emergency Management (FDEM) unit is responsible for disseminating messages, communication and education of the public, and public health guidance through news reports, social media (Twitter, Facebook, etc.), hospitals, clinics, businesses, and other partners in order to raise public awareness, disaster preparedness, and risk perception of hurricanes/tropical storms. In the event of a hurricane or tropical storm, the center is responsible for sending out public emergency warning messages via the Emergency Alert System. The country Public Information Team is responsible for public communications during an emergency, which can be achieved through their website, mobile apps, and social media.

## **Mutual Aid Agreement**

In the event of a hurricane, Jackson Memorial Long-Term Care Center has partnered and signed off agreements with the following agencies and/or organizations:

- Genesis Assisted Living Facility
- The Palace Renaissance & Royal
- Humble Care Inc.
- Kendall Lakes Health and Rehabilitation Center
- Palmetto Subacute Care Center

If additional residents must be evacuated and none of the above agencies are able to take them, then a Jackson Memorial employee must report the number of residents evacuated and transported to the Agency's Long Term Care Unit in Tallahassee, FL.<sup>6</sup>

## **VI. Public Health Concepts of Operations**

### **Overview**

Generally, when a community experiences a disaster or hurricane requiring sheltering or evacuation, local jurisdictions are generally sufficiently able to respond without additional resources. However, some large-scale hurricanes may require mass evacuation, which will require additional assistance from other entities. The Concept of Operations (CONOPS) below will provide the framework for management of public health and medical responses to possible hurricanes directly affecting Jackson Memorial Long-term Care Center. This CONOPS aims to prevent and mitigate threats and impacts of catastrophic events (i.e., major flooding, electricity outage) resulting from



hurricanes. These events are common in Florida and have a greater impact on coastal communities, thus potentially adversely affecting vulnerable residents of the Jackson Memorial Long-term Care Center. The following emergency operation phases in response to hurricanes in Florida are considered: Mitigation, Preparedness, Response, and Recovery.

## **Initial Response**

### *Identify the hurricane and potential threat*

Hurricane season which usually lasts from June to November is characterized by an increase in high winds, storm surges, heavy rainfall, tornadoes, and potentially flooding. All of the aforementioned threats may lead to loss of life and severe damage to the built and natural environments. These may threaten the region and state, and the city's long-term care centers and similar facilities. In fact, they may lead to the evacuation of these centers, putting them at an increased risk. In fact, large-scale hurricanes and their accompanying winds have a significant impact on buildings and structures.

### *Release information to residents of the center, employees, and authorities*

Given that storm-related injuries, structural damage, power and water outages, severe flooding, and debris-laden streets will burden the city's resources, Jackson Long-Term Care Center will also be at an increased risk. For this reason, as soon as the hurricane or tropical storm and its potential threat is known to authorities, the primary goal will be the safety and well-being of the Center's residents and employees. After authorities are notified, to ensure that residents remain informed, residents and their families, to the extent possible, will be kept up-to-date and informed of the storm and the steps the Center is taking to protect them. This information includes a brief explanation of the threat(s), alterations, and modifications to normal day-to-day functioning of the Center, as well as appropriate evacuation procedures just in case an evacuation will be needed.

### *Prepare for the hurricane*

In general, the initial response begins with the city. Therefore, all city departments will participate in the City's Emergency Management Program, maintain the Comprehensive Emergency Management Plan (CEMP), and assign designated personnel with decision-making authority to their department to staff EOC positions during an emergency event. In pre- and post-responses to hurricane emergencies, city departments will develop and maintain a hurricane plan as approved by the City Emergency Manager, release information to residents, employees, authorities, distribute immediate and necessary equipment and resources to residents, and manage the centers space and resources.

## **Assessing the needs of the affected population**

### *Needs of residents of the long-term care center*

In the event of an impending large-scale hurricane or tropical storm that threatens to hit the state of Florida and evacuation of the Jackson Memorial Long-Term Care Center is needed, employees and evacuees may require and seek assistance from the agencies and/or organizations listed in the mutual aid agreement. Aid from other organizations includes but is not limited to shelter, housing, medical support, social services, and financial assistance. The Jackson Memorial Long-Term Care may also request assistance from FEMA who may provide support from other governmental agencies.

#### *Needs of workers in the center*

Among the workers, there will be an emergency preparation team as well as an emergency response team. While the preparation team will monitor the situation and provide guidance for the protection and safety of the residents, the response team will provide the preparation team with awareness and important information that will help in the preparation, response, and recovery phases that take place before, during, and after the hurricane hits the coast of Florida.

## **Preparation**

#### *Communication between all parties involved*

Planning and preparedness are critical components in developing operating procedures for responding to a hurricane disaster. Changes in organization, finances, and staff assignments require city agencies to revise their hurricane plans on a regular basis. To maximize the state of preparedness, preparation activities must be conducted in a timely and effective manner. Prior to June and the beginning of the hurricane season all departments should have completed all pre-season hurricane preparedness activities outlined by the superior organizations. During the preparation phase, public health officials and local departments will lead community preparedness programs implemented through school systems, faith-based organizations, immigrant outreach organizations, networks of food pantries, soup kitchens, and other community channels. This plan provides a general overview of those programs as well as their purposes.

#### *Hurricane watch*

A “hurricane watch” signifies that the hurricane conditions are expected to worsen within the next 48 hours. All city departments will begin and finish their watch tasks before the end of the day once a “watch” is issued. By the end of the day, all departments will provide a status report to the EOC detailing the completion of their watch tasks.

#### *Hurricane warning*

A “hurricane warning” signifies that the hurricane conditions are expected to strike the area in 36 hours or less. All city departments will begin and finish their warning tasks

before the end of the day once a “warning” is issued. By the end of the day, each department will provide a report to the EOC detailing the completion of their tasks.

### *State of Emergency*

When a state of emergency is proclaimed in the Miami area, the City Manager must declare the closure of the City of Miami administrative offices. Only those offices with designated roles in this plan will remain open. All city employees within their respective departments will be required to leave their workstations once the plan is disclosed, however, those pre-identified as necessary staff and personnel will remain in their position and fulfill their duties. Those who are sent home, should leave the city property if conducted to do so and should seek protective shelter after completing their assigned duties to protect city property.

### *Federal assistance (SNS)*

Following a storm or hurricane watch, it may be necessary for Florida’s governmental offices to request federal assistance from the Strategic National Stockpiles (SNS). The stockpile has responded to multiple large-scale emergencies including floods, hurricanes, and pandemics.<sup>14</sup> Through this stockpile, the city and local communities will be able to receive necessary supplies and resources if local ones are at limited stock or have been depleted. Items that may be received from the SNS include ventilator kids, medications, beds, vaccines, and other medical supplies and equipment.<sup>14</sup> All other resources that the SNS cannot provide will be requested elsewhere.

## **Disaster Plan - Response**

### *Activation*

The activation phase will begin when a tropical storm system forms in the Gulf. The entering of this system is followed by heavy rain and flooding across parts of the Florida panhandle. Based on the storm’s strength, this plan will be implemented accordingly.

### *Phase 1 - Alert*

The alert phase will commence once a declared tropical storm system enters the gulf. Members of the emergency preparation team and emergency response team will be notified by their superiors and placed on alert while the threat level is monitored. The threat level will depend on the predicted path of the storm, size, and speed of its winds.

These alerts will also contain a link with shelter locations nearby that could be occupied by residents of the Jackson Memorial Long-Term Care Center who have to evacuate. Those who receive the alerts will receive a map so that they can view exact locations of shelters and receive detailed instructions on how these shelters operate.

### *Phase 2 - Preparation*

The preparation phase will commence soon after the tropical storm has moved closer to the coast of Florida, heavy rainfall has begun, and the state has been placed on a storm or hurricane watch. The beginning of this phase will also depend on whether the Jackson Memorial Long-Term Care center is within the predicted landfall zone. If the center is in the zone, employees will be told to notify all departments who will consequently implement the preparation phase presented in the plan.

### *Phase 3*

This phase will be initiated if the center experiences direct effects of the tropical storm system or hurricane, however, the system is not as strong thus not expected to cause major damage to the facilities. Although the center may close for a given period, evacuation is not expected.

### *Phase 4*

This phase will only be enacted in the event that the tropical storm or hurricane is likely to make direct landfall in Florida and near the Long-Term Care Center. Additionally, this phase will only be needed if the hurricane is expected to cause major and sustained damages to the facility. If this occurs, all operations will be canceled, the center will be closed and secured, an evacuation of residents to safer and nearby facilities will be likely to take place. Residents will be advised to evacuate, the police department will aid in the evacuation, and employees of the center (including the preparation and response teams) will ensure that the evacuation runs smoothly.

### *Recovery*

After the storm/hurricane has made landfall and speeds have significantly decreased, employees will re-open the center. Some employees will begin the damage assessment, others will oversee clean-up efforts, and remaining employees will be in close communication with superiors to begin the safe return of residents and normal functioning of the facility.

## **Evaluating Effectiveness of Response**

Evidence to date reveals the widespread impact that hurricanes in 2005 and 2008 had. In fact, response efforts overtaxed assistance capacity in those states directly impacted and this resulted in the need for Federal assistance. Based on past hurricanes, many states have learned, adjusted, and expanded their planning and operational responses. Just as states have adapted their responses, following Hurricane Andrew and Hurricane Irma, both of which greatly impacted Florida, the Jackson Memorial Long-Term Care Center also adjusted its response plan. This plan incorporates recommendations based on past events to ensure the safety of residents and employees, encourage a safe and

proper evacuation, if needed, and coordinates with authorities and local departments in the event that an evacuation is needed in response to hurricanes and/or strong tropical storms.

## Annex 1- THIRA

Natural	Technological	Human-caused
Resulting from acts of nature	Involves accidents or the failure of systems and structures	Caused by the intentional actions of an adversary
<ul style="list-style-type: none"> <li>● <b>Flood:</b> Eastern Florida has an annual dry cycle from Nov to mid-May where monthly rainfall rarely exceeds 2.5-4 in/month, a wet season from mid-May to late-Oct where monthly rainfall is 6-8.5 in, and the heaviest rainfall is from June to Sept.</li> <li>● <b>Hurricanes/Tropical Storm:</b> FL is the most vulnerable state in the US to the impacts of hurricanes &amp; tropical storms due to its topography (flat and low-lying plain). The potential for property damage and human casualties has increased over the last decades. Since 1886, there have been 9 cat. 1 storm, 3 cat. 2 storms, 17 cat. 3 storms, 16 cat. 4 storms, and 9 cat. 5 storms.</li> <li>● <b>Tornadoes:</b> FL ranks third in the US in the average # of tornado strikes. FL tornadoes are weaker than those striking the plains and southern states. From 1950-2016, there had been 169 tornadoes, one death, and 102 injuries reported with estimated damages/incurred costs of 150 million dollars.</li> <li>● <b>Severe thunderstorms:</b> FL has more thunderstorms than any other state and these come with lightning and severe weather. As a thunderstorm grows, electrical charges build up, and charged particles gather at the ground.</li> </ul>	<ul style="list-style-type: none"> <li>● <b>Hazardous Materials Accident:</b> Coastal oil spill is considered a type of hazardous material accident; most of these accidents can occur anywhere there is road, rail line, or pipelines so the entire state is at risk. Most of these are small spills and leaks but some may result in injuries, property damage, contamination, etc. Materials can be poisonous, corrosive, flammable, radioactive, or pose other hazards.</li> <li>● <b>Radiological Accidents:</b> Release of radioactive material is unlikely and the threat to life is low but vulnerability to a nuclear plant can consist of long-range health effects with displacement of populations from affected areas. The potential danger from an accident at a nuclear plant is exposure to radiation and the area of release is determined by the amount released from the plant, wind, and weather conditions.</li> <li>● <b>Communication Failure:</b> Most common cause is the physical damage to devices or components that make up a network infrastructure. Hurricane winds, floodwaters, terroristic attacks can all create disturbances that have the power to do significant damage to FL and its cities.</li> <li>● <b>Hazardous Material Release:</b> Hazardous materials are</li> </ul>	<ul style="list-style-type: none"> <li>● <b>Civil Disturbance:</b> As in any other area, civil disturbances (riots, mobs, breakdown of law and order) are possible. These can occur at any time and usually occur after periods of increased tension, social and political events, within others. Follow Presidents Trump election, his properties in FL (Palm Beach) were marked by violent protests and civil disturbances.</li> <li>● <b>Domestic Security (Terrorism, sabotage, and cyberattack):</b> FL has critical and high-profile facilities, and some extremist groups are present within FL. Terrorism can have many effects including injury, illness, fear, anxiety, stress, as well as economic, political, and social impacts.</li> <li>● <b>Mass Migration Crisis:</b> FL's location (near the Caribbean basin) makes it a point of entry for many illegal migrants. This may disrupt routine functioning, increased expenditures. In 1994, there was an unexpected migration of Haitian refugees and later than year one of Cubans. These events are preceded by periods of tension.</li> <li>● <b>Workplace/school violence:</b> These could occur without warning anywhere. One of these events is the Marjory Stoneman Douglas High School in Parkland, FL in 2018 which resulted in 17 deaths</li> </ul>

<ul style="list-style-type: none"> <li>● <b>Drought:</b> Although annual rainfall is ~60 inches, FL also experiences drought. Drought reduces crops, increases fire hazards, reduces water levels, increases livestock and wildlife mortality, impacts public safety, and leads to income loss. The worst reported drought was from Nov 2000 - Feb 2001 when one of the major sources of water (Okeechobee) dropped from 18 feet to 9 feet.</li> <li>● <b>Extreme Temperatures:</b> Moderate freeze may be expected in FL every 1-2 years on average and severe freezes every 15-20 years. FL has experienced severe freezes which lead to the loss of crops. The state has also experienced extreme heat with humidity which affect those who work outdoors.</li> <li>● <b>Agricultural Pest/Disease:</b> FL agriculture generates about 8 billion dollars a year but FL is susceptible to many hazards such as freezes and droughts as well as pests or diseases putting crops at risk of exotic pest/infestation.</li> <li>● <b>Sea levels rise:</b> Levels have risen globally and at an increasing rate, as a coastal population, the vulnerability of such has increased as well. These increases may lead to socio-economic impacts (displacement, decrease in property value, increase in insurance costs, and impaired infrastructure).</li> </ul>	<p>transported by railroad, highway, air, water, and pipelines. In FL there are public and private fixed facilities which produce and use hazardous materials and improper handling, disposal, &amp; storage may be hazardous.</p> <ul style="list-style-type: none"> <li>● <b>Transportation Accidents:</b> FL has a large transportation network (highways, airports, marine ports, passenger railroads) and the heavily populated areas are particularly vulnerable to serious accidents capable of producing mass casualties.</li> <li>● <b>Power Failure (Outages):</b> Widespread power outages affect customers and result from a variety of causes (hot weather, flashovers from transmission lines, incorrect relay settings); FL is vulnerable to outages because of the mentioned factors and the potential of these disturbances is expected to increase with the changes to the electric industry.</li> </ul>	<p>and 14 injuries. This event emphasized the importance of planning for these incidents.</p>
---	--	---

## Annex 2 - Drills and Exercises

<b>Training Seminar Title:</b> Hurricane Preparedness and Evacuation Seminar	
<b>Objectives of your Training Seminar (What mitigation strategy are you</b>	Hurricane and flooding preparedness and mitigation seminar for Jackson Memorial Long-Term Care Center (JMLTCC) residents and employees

advocating?)	
<b>Estimate Length of Training</b>	1.5 hours
<b>Target Audience and max size.</b>	JMLTCC residents and employees; 20 residents and 5 employees per session
<b>Who would be a good candidate (e.g., structural engineer, health dept. official, first responder?) as Facilitator of this session? Why?</b>	<ul style="list-style-type: none"> <li>• Agency for Healthcare Administration representative: this agency established Emergency Management Planning Criteria for all nursing home facilities and long-term care facilities, thus they are aware of potential issues and effects</li> <li>• Division of Emergency Management part of the County Emergency Management Agency representative: this division will ensure that residents and employees are appropriately trained and follow the correct procedures in the event that the facility is not able to fulfill its day-to-day functions due to a hurricane or severe storm</li> <li>• Hurricane Loss Mitigation Program representative: this program is a state-funded mitigation program; thus, they know how to handle the aftereffects of disasters and how to minimize any and all hurricane-related damages.</li> <li>• Florida Disaster Fund representative: in charge of response and recovery activities (assist JMLTCC's communities respond and recover from disasters)</li> </ul>
<b>What do you want community members to do as a result of their attending this session?</b>	<ol style="list-style-type: none"> <li>1. Sign up for the Emergency Alert system in their area.</li> <li>2. Know what the different alerts mean, which one signals that they have to evacuate, and how much time they have to evacuate.</li> <li>3. Know where the nearest evacuation center is just in case JMLTCC has to be evacuated.</li> <li>4. Learn which supplies are necessary to stock up on (e.g., water, canned and/or non-perishable foods, medicines, flashlights) when they receive an alert.</li> <li>5. Create a family disaster plan</li> <li>6. Take precautions before, during, and after a flood.</li> <li>7. Ensure that when a flood alert is sent that they should remain in the place where they are at; never walk outside when flooded and never drive through floods.</li> <li>8. Ensure their CO detector has working batteries.</li> <li>9. Have an emergency contact list available and know where to store all important personal belongings and documents (know what they should/shouldn't take with them).</li> </ol>
<b>Strategies to increase community uptake of your mitigation</b>	<ol style="list-style-type: none"> <li>1. Help JMLTCC residents and employees sign up for the alert system while in the session (show step-by-step directions with images so that it is easy for them to do).</li> <li>2. Give out coupons to nearby stores so that residents and employees have discounts on CO detectors, batteries, and any supplies that may be necessary.</li> <li>3. Distribute a checklist for hurricane preparedness</li> <li>4. Provide a printout of all emergency contact numbers with specific extensions to hurricane departments.</li> <li>5. Improve the home delivery service, which will allow people to store supplies quickly and efficiently without having to go last minute to get something.</li> <li>6. Provide free informational sessions with potential insurance plans so that residents and employees can choose and purchase flood and storm insurances.</li> <li>7. Provide free informational sessions about how to download the necessary applications such as the alert system app, weather apps, and the disaster preparedness app.</li> </ol>

### Annex 3 - Short-Term Recovery

Necessities	Possible Resources	Distribution Strategies
Water	<ul style="list-style-type: none"> <li>• Donation of water from</li> </ul>	<ul style="list-style-type: none"> <li>• Water will be distributed in the</li> </ul>

	<p>neighbors, nearby facilities, and neighboring counties</p> <ul style="list-style-type: none"> <li>● Collect clean and safe drinking water from local food banks to give to residents without it.</li> <li>● The Environmental Protection Agency (EPA) assists in Florida to speed up attempts to return wastewater treatment plants to working order, thus providing residents with clean drinking water</li> </ul>	<p>following order:</p> <ul style="list-style-type: none"> <li>○ Those who are older AND have underlying conditions (or are sick)</li> <li>○ Those with underlying conditions (or are sick)</li> <li>○ Those who are older</li> <li>● All activities will be organized and directed by the emergency response team of the JMLTCC and the American Red Cross.</li> </ul>
<b>Food</b>	<ul style="list-style-type: none"> <li>● Collect non-perishable food and/or canned foods from local food banks to give to residents without it.</li> <li>● Collect non-perishable food and/or canned foods from the Salvation Army</li> <li>● Donation of non-perishable foods from neighbors, nearby facilities, and neighboring counties</li> </ul>	<p>Food will be distributed in the same order as water</p> <ul style="list-style-type: none"> <li>● All activities will be organized and directed by the emergency response team of the JMLTCC and the American Red Cross.</li> <li>● If conditions are safe, food trucks will be parked outside the JMLTCC to allow residents to get food at lower costs</li> </ul>
<b>Shelter/housing</b>	<ul style="list-style-type: none"> <li>● FEMA’s Transitional Sheltering Assistance (TSA): Short-term immediate sheltering provided to all eligible survivors who are unable to return to their pre-disaster primary home because it is uninhabitable/inaccessible.</li> <li>● FEMA Disaster Survivor Assistance Teams (DSAT): Teams will address immediate and emerging needs of disaster survivors including sheltering to all survivors who cannot return to their homes; it will also accommodate those with disabilities and will seek assistance from partners offering services alike</li> </ul>	<ul style="list-style-type: none"> <li>● On-site registration</li> <li>● If conditions are safe and residents have to be evacuated and relocated, buses and vans will be parked outside to transport residents to nearby locations/shelters</li> <li>● Additional services for emergency shelter will be available if needed; these must be requested by employees of the JMLTCC if they see that additional housing and/or services are needed/required.</li> </ul>



## References

1. Florida Climate Center Office of the State Climatologist: Hurricanes. Florida State University. <https://climatecenter.fsu.edu/topics/hurricanes>. Accessed March 5, 2022.
2. Kaye K. What 100 Years of Florida Hurricane History Reveals. Sun Sentinel. <https://www.sun-sentinel.com/news/fl-xpm-2013-05-29-fl-hurricane-season-start-20130523-story.html>. Published November 3, 2021. Accessed March 5, 2022.
3. Dempsey C. Interesting geography facts about Florida. Geography Realm. <https://www.geographyrealm.com/interesting-geography-facts-about-florida/#:~:text=Florida%20has%20the%20lowest%20average,County%20near%20the%20Alabama%20border>. Published October 3, 2020. Accessed March 5, 2022.
4. About Jackson Health System: History, Recognitions, and community. Jackson Health System. <https://jacksonhealth.org/about-us/#:~:text=Providing%20the%20best%20care%2C%20with,accountability%2C%20respect%2C%20and%20expertise>. Accessed March 5, 2022.
5. Jackson Memorial Long-Term Care Center. Jackson Health System. <https://jacksonhealth.org/locations/jackson-memorial-long-term-care-center/>. Accessed March 5, 2022.
6. Emergency Management Planning Criteria for Nursing Home Facilities, AHCA 3110-6006, March, 1994. Effective 12/21/2015. Disaster Preparedness. Florida Administrative Code and Florida Administrative Register; Agency for Healthcare Administration & Health Facility and Agency Licensing. <https://www.flrules.org/Gateway/reference.asp?No=Ref-06022>.
7. Fla. Admin. Code Ann. R. 59A-4.126; Rulemaking Authority 400.23 FS. Law Implemented 400.23 FS. New 4-1-82, Amended 4-1-84, Formerly 10D-29.126, Amended 8-15-94, Amended by Florida Register Volume 41, Number 236, December 8, 2015 effective 12-21-15.
8. State and local building codes. Coastal Resilience. <https://coastalresilience.tamu.edu/home/introduction-to-coastal-resilience/legal-framework-for-planning/stateandlocal/building-codes/>. Published December 8, 2015.
9. Hurricane Loss Mitigation Program. Florida Disaster . <https://www.floridadisaster.org/dem/mitigation/hurricane-loss-mitigation-program/>. Accessed March 6, 2022.
10. National Hurricane Center and Central Pacific Hurricane Center: National Oceanic and Atmospheric Administration. <https://www.nhc.noaa.gov/>. Published January 1, 2001. Accessed March 6, 2022.
11. The Florida Insurance Council. Florida Insurance Council. <https://flains.org/about-us/>. Accessed March 6, 2022.
12. Emergency management. Volunteer Florida. <https://www.volunteerflorida.org/emergency-management/>. Published January 14, 2022. Accessed March 6, 2022.
13. <http://archive.miamigov.com/EmergencyManagement/docs/Hurricane%20Plan%20Revised%206-9-16.pdf>
14. <https://www.phe.gov/about/sns/Pages/responses.aspx>