# Disaster Preparedness Guide: Plan, Prepare, Practice and Protect

Zelde Espinel, MD, MPH Raquel Cohen, MD, MPH Alvaro Patiño James M. Shultz, PhD

Center for Disaster Epidemiology & Emergency Preparedness (DEEP Center)
Miami Center for Public Health Preparedness (Miami CPHP)
University of Miami Miller School of Medicine
Miami, Florida



# Why is it necessary for you to prepare for disasters?

- To reduce the impact of disasters on you and your family. Being prepared
  means taking active steps to reduce the impact of disasters on you and your
  family. Individuals and families have the capacity to act before, during, and
  after a disaster.
- To reduce the risks for death, injury, psychological distress, property damage and loss of possessions during a disaster. Conversely, lack of preparedness elevates each of these risks for you and your family.
- To be self-sufficient while waiting for help to arrive. Immediately following the impact of disaster, assistance from the government and voluntary agencies may be delayed. While waiting for help to arrive, you will be better able to care for yourself if you are well prepared.
- To make recovery faster and easier. Preparedness is the foundation for rapid and healthy recovery.



# The 4 P's of Family Disaster Planning

Family disaster planning and preparedness has four components, "the 4 P's":

Plan
Prepare
Practice
Protect

**Plan.** Before disaster strikes, develop a family disaster plan for common types of disasters that may affect your family. Plan to stockpile disaster supplies, protect your home, keep in touch with family members, and make decisions for when you will shelter at home or evacuate.

**Prepare.** Gather necessary disaster supplies for sheltering at home and prepare a portable disaster supply "go-kit" in case your family needs to evacuate.

**Practice.** Train your family to manage disasters by practicing and conducting family disaster drills. This will help you know what to do during difficult times.

**Protect.** Protect yourself, your home and possessions when a disaster warning is issued.



Plan



**Prepare** 



**Practice** 



**Protect** 



**Special Populations** 



Resources



# What is a Disaster?



A disaster is an event in which forces of harm impact human populations in harm's way, causing destruction and disruption on a scale where the demands exceed the community's capacity to cope. Disasters cause human suffering, death, injury, and disease. Disasters may also damage property and the environment and create large-scale economic losses. The impact of disasters is greatest for vulnerable populations.



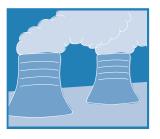
# **Classification of Disasters**

Disasters frequently occur as "acts of nature" and are referred to as "natural disasters". Other disasters occur because of human actions—either accidental or intentional.



### **Natural Disasters**

- Hurricanes
- Tornadoes
- Floods
- Wildfires
- Earthquakes
- Volcanoes
- Tsunamis
- Epidemics



### **Human-Caused Disasters**

- Transportation accidents
- Hazardous materials spills
- Industrial accidents
- Wars
- Terrorist acts



# **Disaster Consequences**

# Effects on physical health

- Injuries
- Disease
- Death

# Effects on emotional well-being

- Distress
- Fear and anxiety
- · High-risk behaviors like drinking
- Psychological illness like depression

# Damage to property and services

Damage, destruction, or service disruption:

- Homes
- Schools
- Businesses, factories, workplaces
- Hospitals
- Government offices and services
- Gas stations
- Utilities (power, water, television, telephone, Internet)

# Effects on the community

- Interruption of activities
- Closure of schools, workplaces, and government offices
- Unemployment
- Displacement of people whose homes are damaged
- Economic losses
- Transportation



Plan



**Prepare** 



**Practice** 



**Protect** 



**Special Populations** 



Resources







Prepare

**Practice** 

# Is your family prepared?

No







Resources

# Plan

# A. Identify potential threats in your community.

Learn about the types of disasters that threaten your community, the risks you face from these threats, and your community's plans for warning and evacuation.

Hurricanes	Epidemics	
Floods	Aircraft Accident	
Wildfires	Chemical Spills	
Tornadoes	Terrorism	
Thunderstorms	Others	
B. Discuss how natural your family:	and human-generated disasters could affect you and	
Effects on		
Physical Health		
Physical Health  Effects on Emotional Well-being		
Effects on Emotional		
Effects on Emotional		
Effects on Emotional Well-being		
Effects on Emotional Well-being  Damage to Property		
Effects on Emotional Well-being  Damage to Property and Services  Effects on the		
Effects on Emotional Well-being  Damage to Property and Services		

# Plan

**Plan:** Before disaster strikes, develop a family disaster plan for common types of disasters that may affect your family. Plan to stockpile disaster supplies, protect your home, keep in touch with family members, and make decisions for when to shelter at home or evacuate.

### **Develop a family disaster plan:**

- Use this booklet as a guide to develop your family disaster plan.
- Make a hurricane plan with your family.
- Learn about the potential threats in your community.
- Learn about your community's plans for warning and evacuation.

### Develop a communications plan:

- Use this booklet to develop your communication plan.
- Fill out the information and keep a copy available.

### Prepare and maintain a disaster supply kit:

- Identify and gather items to assemble a disaster supply kit for your home.
- If you have children or a person with special needs (like an older adult) in your household, prepare a disaster supply kit for them.
- Prepare a disaster supply kit for your pets.

### Secure your property:

- Inspect the structure of your home, including the roof. Make necessary repairs.
- Make sure that trees and shrubs around your home are well trimmed.
- Install shutters or other protection on all windows and doors.
- Tape does not prevent windows from breaking.

### Make an evacuation plan:

- How do you decide whether to evacuate (leave home)? You should evacuate if one or more of the following conditions apply (this guidance applies to hurricanes):
- You believe that the structure of your home may be severely damaged or destroyed, making it unsafe as a shelter.
- You don't have shutters for the windows and doors.
- You live in an evacuation zone.
- You live in a high-rise building and your building's systems will not be operating (such as power, elevators, light, and utilities).

- Identify evacuation zones and evacuation routes.
   Identify your evacuation zoneand safe evacuation routes for your area.
  - Use evacuation routes that have been pre-selected by local authorities. Using shortcuts may cause evacuation delays due to roads that are impassable, dangerous, or closed.
  - Identify evacuation sites. Identify where you will stay in the event of an evacuation. Identify available evacuation sites: the home of a family member or friend, hotels, and community shelters. Select family or friends who live in areas that are unlikely to be evacuated. Obtain their commitment for you to stay with them.
  - Have transportation available for evacuation.
    Keep vehicle fuel tanks full. Make arrangements
    for transportation in the event of evacuation, if you
    do not have a vehicle, evacuation will require special
    planning. Identify transportation options: travel with
    friends or family or use transportation arranged by
    your local government. If you choose friends or family,
    confirm your plan to travel with them.

### Identify a secure area in your home:

- If it is safe for you to stay home, identify a safe room to ride out the storm.
- The safe room should be located in a central, interior, ground-floor area of the home for additional protection, as well as accessibility.
- Options for a safe room are: an interior hallway or bedroom with no windows. If you go into this room, you will have to bring your disaster supply kit and a fire extinguisher.



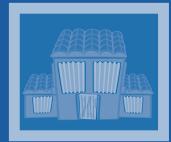
Plan



**Prepare** 



**Practice** 



**Protect** 



**Special Populations** 



Resources

### Protect your important documents and valuables:

- Use this booklet as a guide to identify your important documents and valuables.
- Make a visual or written record of all of your household possessions. Record model and serial numbers of your automobiles, electronics, appliances, and other types of equipment and valuables. Take photographs of each room from several angles to document the condition of all possessions before disaster strikes.

### **Review your insurance policies:**

Review your windstorm, flood and homeowner's insurance policies.

### Know the terms:

 Know the terms to help identify the conditions of a hurricane hazard (see next section).

### Make plans for persons with special needs in your household:

Make a plan for persons with special needs: make an evacuation plan, identify
medical needs. If a special care shelter is available, register well in advance and
make arrangements for transportation.

# Be active in your community efforts to prepare for disasters if you have time available:

- Volunteer to participate in disaster preparedness activities available in the community sponsored by faith-based organizations, American Red Cross, and the Office of Emergency Management.
- Take First Aid, CPR and disaster preparedness classes.

### Plan for Children Before the Disaster

- Develop a family disaster plan so that all members know what to do in case of a hurricane or other type of disaster. Involve children in all aspects of the family plan: planning, preparing, practicing, and protecting.
- Talk with your children. Explain to children what a disaster is and how your family can be prepared. Talk with children in a manner that is factual, calming and appropriate for their age.
- Develop a communications plan. Children should memorize important family information, such as their family name, address and phone number. Have each child carry a card with this important emergency information. Teach your children where they should meet in case of an emergency, especially if they become separated.
- Learn about your child's school emergency plans.

# **Ideas for Your Family Disaster Plan**



Plan



Prepare



Practice



Protect



Special Populations



Resources







Plan

**Practice** 

# **Know the Terms**

**Prepare** 

When is Hurricane Season? June 1 - November 30
What Is A Hurricane? A hurricane is a tropical cyclone, which generally forms in the tropics and is accompanied by thunderstorms and a counterclockwise circulation of strong winds.

# Tropical cyclones are classified as follows:

TROPICAL DEPRESSION

An organized system of clouds and thunderstorms with a defined surface circulation and maximum sustained winds of **38 mph or less**.

TROPICAL STORM

An organized system of strong thunderstorms with a defined surface circulation and maximum sustained winds of **39-73 mph**.

HURRICANE

An intense spiraling tropical weather system of strong thunderstorms with sustained winds higher than **74 mph**.

### What Are the Hurricane Hazards?

**STORM SURGE** 

A dome of water pushed onshore by hurricane and tropical storm winds. Storm surges can reach 25 feet high and be 50–1,000 miles wide. The water is pushed toward the shore by the force of the winds swirling around the storm.

INLAND FLOODING In the last 30 years, inland flooding has been responsible for more than half of the deaths associated with tropical cyclones in the United States.

**HIGH WINDS** 

Hurricane-force winds can destroy poorly-constructed buildings and mobile homes. Debris such as signs, roofing material, and small items left outside become flying missiles in hurricanes.

**TORNADOES** 

Hurricanes can produce tornadoes that add to the storm's destructive power. Tornadoes are most likely to occur in the right-front quadrant of the hurricane.







**Special Populations** 

Resources

# **Know the Terms**

**HURRICANE WATCH** 

Hurricane/tropical storm conditions are possible in the specified area, usually within 36 hours. This is the time for the first preparatory actions.

**HURRICANE WARNING** 

Hurricane/tropical storm conditions are expected in the specified area, usually within 24 hours. This is the time for the last preparatory actions.

# Saffir-Simpson Hurricane Scale

Scale Number (Category)	Sustained Winds (MPH)	Damage	Storm Surge
1	74-95	Minimal: Unanchored mobile homes, vegetation and signs.	4-5 feet
2	96-110	Moderate: All mobile homes, roofs, small watercraft, flooding.	6-8 feet
3	111-130	Extensive: Small buildings, low-lying roads cut off.	9-12 feet
4	131-155	Extreme: Roofs destroyed, trees down, roads cut off, mobile homes destroyed. Beach homes flooded.	13-18 feet
5	More than 155	Catastrophic: Most buildings destroyed. Vegetation destroyed. Major roads cut off. Homes flooded.	Greater than 18 feet

Source: FLORIDA DISASTER.ORG http://www.floridadisaster.org/bpr/EMTOOLS/Severe/hurricanes.htm

Source: FEMA.GOV http://www.fema.gov/areyouready/hurricanes.shtm





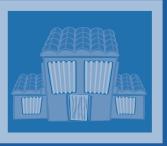


n Prepare

**Practice** 

# **Communications Plan**

- Plan ahead. Your family may not be together when a disaster occurs, so you should plan ahead and choose a place where you can meet after a disaster and plan how you will contact one another if you are separated.
- **Identify meeting places.** Select places where you will meet, such as a neighbor's home, public place or school.
- Identify an out-of-town contact person. Identify an out-of-state relative or friend as
  a family contact so that all family members have a single point of contact should a
  disaster occur. Identify two methods for making contact (for example, a phone number
  and email address). This person should be informed that he/she has been chosen as
  the contact. This person should live sufficiently far away that they would be unlikely to
  be directly affected by the same event.
- Have a shared game plan. Before disaster strikes, make sure that every family member has a card with the emergency contact person's name and telephone number in their personal go-kit. Remind each family member to call the contact person before the disaster to tell the contact 1) where you are and 2) what you will do during the disaster. Remind each family member to call the contact person if 1) they become lost or separated from loved ones, 2) change plans or location, or 3) experience something unexpected or urgent.
- Make emergency telephone numbers easily available. Post emergency telephone
  numbers by your telephones and on the refrigerator. Keep them in your wallet or
  purse, and in children's backpacks. Make sure children know how and when to call
  911. Carry a copy of your communications plan. Make a card and copy it for each
  family member.
- Have a back-up plan if phone lines are busy. Options include 1) being patient and trying to call family or contact persons several times until a line becomes available or 2) sending an email.







Protect Special Populat

Resources

	Meet	cing	Places	
In Home Town			Out-o	of-Town
			Name:	
Address:	Phone:		Address: Meeting Place Pho	ne.
Weeting Flace			ency Numbers	
Police Emerger		ı ge	ancy Manibers	
Police Non-Em	•			
	gency Management			
Local Red Cros				
Fire Departmen	nt			
Ambulance				
Local Shelter				
	Fami	ly N	lembers	
Name	Phone Number #1	Pi	none Number #2	E-Mail
	Friends, Neigh	bor	s, and Co-wor	kers
Name	Phone Number #1	Pi	hone Number #2	E-Mail







Plan

Prepare

P)		cti		
	ıa		1 -7 -	•

	Out-of-Town Co	ntact Name	
Name:		Name:	<del> </del>
		Phone Number:	<del></del>
E-Mail:		E-Mail:	
	Medical Info	ormation	
	Name	Phone Number	E-Mail
Doctor			
Doctor			
Clinic/Hospital			
Dentist			
Pharmacy			
Veterinarian			
	Children's In	formation	
	Name	Phone Number	E-Mail
Child's School			
Child's School			
Child Care			
Child Care			
Friend			
Friend			
	Other Info	rmation	
	Name	Phone Number	E-Mail
Insurance agent			
Insurance agent			
Plumber			
Electrician			
Contractor			
Other			







Protect Speci

Resources

Other Contacts			
Name	Phone Number	E-Mail	
	17		

# **Disaster Supply Kit for Home**

Water - at least 1 gallon daily per person for 3 to 10 days Vehicle fuel tanks filled (be sure you have at least one vehicle with a full tank of gas at all
times)
Cash (with some small bills) - Banks may not be open or available for extended periods.  ATMs will not work, if electrical power is off in the area.
Food - 3 to 7 days supply of non-perishable food
□ Ready-to-eat canned meats, fish, fruits, vegetables, beans, and soups
□ Protein or fruit bars
□ Dry cereal or granola
□ Peanut butter or nuts
□ Dried fruit
□ Crackers
□ Canned juices
Foods for infants or the elderly
Kitchen accessories and cooking utensils (paper plates / plastic utensils, etc.)
Cooler
Non-electric can opener
Portable, battery-powered radio or television and extra batteries
Flashlight and extra batteries
Whistle
Swiss army knife
Important documents - in a waterproof container or watertight resealable plastic bag
Personal identification
First aid kit and manual
Tools - keep a set with you during the storm (hammers, screwdrivers, pliers, adjustable wrench tool)
Garbage bags (in several sizes – bags will be used for waste and garbage but also for storage and protection of possessions)
Keys
Blankets, pillows
Clothing - several changes of seasonal clothing/ rain gear/ sturdy shoes/ several socks
Sunscreen and insect repellent
Toiletries / Hygiene items / Moisture wipes
Special needs items, such as prescription medications, eye glasses, contact lens solutions, and hearing aid batteries
Special Items for babies (such as formula, diapers, bottles, and pacifiers) and the elderly
Blue tarp and roll of heavy plastic to cover indoor furniture and appliances.
Basic "landline" phone that requires no electricity

# **Disaster Supply Kit for Home**



Plan



Prepare



**Practice** 



Protect



**Special Populations** 



Resources





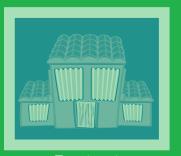


Plan

Prepare

**Practice** 

Disaster Supply Ki	t for Shelter
□ Food - 3 to 7 days supply of	
non-perishable food	
□ Snacks	
□ Can opener	
□ Cash (bills and coins)	
□ Flashlight and extra batteries	
□ Portable, battery-powered radio or	
television and extra batteries	
□ Toiletries / Hygiene items / Moisture	
wipes	
□ Clothing	
□ Blankets, pillows, and bedding	
□ Important documents - in a waterproof	
container or watertight resealable	
plastic bag	
□ Personal identification	
□ Vehicle fuel tanks filled	
□ Games, books or puzzles for children	
□ Special Items for babies (such as	
formula, diapers, bottles, and pacifiers)	
and the elderly	
□ Special needs items, such as	
prescription medications, eye glasses,	
contact lens solutions, and hearing aid	
batteries	







Protect

**Special Populations** 

**Resources** 

First Aid K	it
□ First aid manual	
□ Scissors/Tweezers	
□ Latex gloves	
□ Band-aids	
□ Gauze pads	
□ Hypoallergenic adhesive tape	
□ Thermometer	
□ Petroleum jelly	
□ Assorted sizes of safety pins	
□ Cleaning soap	
□ Cotton balls	
□ Mosquito repellent, with DEET when	
appropriate	
□ Sunscreen	
□ Stretch roller gauze	
□ Sterile roller bandages	
□ Nonprescription Drugs	
□ Topical antibiotic cream	
□ Pain reliever such as acetaminophen,	
Ibuprofen, or aspirin.	
□ Antihistamine	
□ Antacid	
□ Antidiarrheal	Refill prescription drugs. Obtain
□ Laxative	an extra supply of special medication. Maintain an 8-
□ Vitamins	day supply of prescription
□ Prescription medications (keep at least an 8-	medications at all times (a month
day supply)	if possible).

# **Important Documents**

(as it applies for you and your family)

- Organize important documents and make an inventory of possessions before hurricane season begins.
- Store your documents in a waterproof container or plastic bag.
- If possible, store another set of these documents outside your home (with a trusted friend or relative).
- Keep photographic records (photos or videos) of personal belongings along with an estimate of the personal or monetary value for items such as jewelry, furniture, computer and stereo equipment, etc.
- Store photos in a secure, dry place where you can get them after the storm.

# Tips for storing and using water

- **Drinking water: 1 gallon** of water per person per day (more may be required depending on age, physical condition, activity, diet, and climate).
- Commercially bottled water: can be stored for a long time if not opened.
- You may freeze water in plastic containers. Do not fill to top before freezing - allow for expansion. Make extra ice.
- If power goes out, keep ice in a cooler.

### • If you are preparing your own containers of water:

- Avoid using containers that will decompose or break, such as milk cartons or glass bottles.
- Avoid using containers that had milk or juice in them.
   They are difficult to clean and residue may provide an environment for bacteria to grow when water is stored in them.
- Use plastic containers such as soft drink bottles.

### Clean the bottles in the following way:

- Clean with dishwashing soap and water. Rinse well.
- Add a solution of 1 teaspoon of non-scented liquid household chlorine bleach to a quart of water.
- Shake the solution in the bottle so that it touches all surfaces.
- After sanitizing the bottle, thoroughly rinse out the solution with clean water.

# • If you are unsure about the quality of the water, purify it:

- 1 gallon of water + 16 drops of unscented household liquid chlorine bleach
- After adding bleach, shake or stir the water container and let it stand for 30 minutes before drinking.



Plan



**Prepare** 



**Practice** 



**Protect** 



**Special Populations** 



Resources



Don't wait until the last minute to get your supplies.

# Tips for storing and buying food

### Store foods that:

- Require little or no water so you can conserve water for drinking.
- Can be stored for a long time (non-perishable) and don't require refrigeration.
- Are easy to prepare in case you are unable to cook.
- Are low in salt. Avoid foods that will make you thirsty.
- Are compact and lightweight.

### **Examples:**

- ☐ Ready-to-eat canned meats, fish, fruits, vegetables, beans, and soups
- □ Protein or fruit bars
- ☐ Staples sugar, salt, pepper
- □ Dry cereal or granola
- □ Peanut butter or nuts
- □ Dried fruit
- □ Crackers
- □ Canned juices
- ☐ Canned or jarred baby food and formula
- □ Other non-perishable items
- ☐ Manual can opener
- ☐ Comfort foods cookies, hard candy, sweetened cereals, lollipops, instant coffee, tea bags
- ☐ Foods for infants, elderly persons, or persons on special diets
- Keep food in a dry, cool location.
- Stockpile paper plates, plastic utensils, plastic cups, and paper towels.









Plan



**Prepare** 



**Practice** 



**Protect** 



**Special Populations** 



Resources







Prepare



**Practice** 

# **Practice**

**Practice:** Train your family to manage disasters by practicing and conducting family disaster drills.

- Once you have developed your plan, you need to practice and maintain it.
- Practicing your disaster plan improves your skills, increases your speed, and puts you in control of your preparedness.
- Revise your family disaster plan once in a while and review it with your family.
- Conduct drills with your family (fire and emergency evacuation drills, evacuation, sheltering-in-place).
- Test fire alarms. Test and recharge your fire extinguisher according to manufacturer's instructions.
- Replace and update disaster supplies.
- Quiz your kids every six months so they remember what to do. For example, ask
  questions to make sure your family remembers meeting places, phone numbers, and
  safety rules.



26









Resources

Practice Notes

# Before the storm

### When a Hurricane Watch\* is issued:

\*A Hurricane Watch indicates the possibility of experiencing hurricane conditions within 36 hours.

### **General Protection Measures**

- Review your family disaster plan with household members.
- Get cash. ATM's will not work after the storm.
- Get gas.
- Make sure you disaster supply kit is ready. If not, finish stocking additional supplies of canned foods and water.

### Secure your home and possessions:

- Clear the yard, pool deck, and/or balcony of all loose objects that may become airborne in strong winds and damage property. Ask neighbors to do the same.
- Put shutters, window and door protection in place if instructed by local officials.
- Place a call to your designated contact person, friends and family members to let them know about your immediate plans.
- Listen to the radio or TV for storm updates. If possible, keep up to date with storm advisories on the National Hurricane Center website: www.nhc.noaa.gov.

## If you stay at home:

- Follow the measures listed above.
- Ensure a supply of water for sanitary purposes such as cleaning and flushing toilets.
- Place water in the freezer to make ice.
- Prepare for a hurricane warning that may follow the hurricane watch.

# If you are going to evacuate:

Note: Evacuation advisories are likely to begin during a hurricane watch.

- Listen to the radio or TV for instructions.
- Fill your gas tank. If you do not own a vehicle, arrange transportation.
- Take final measures to secure your home.
- Place your disaster supply "go-kit" in your vehicle. Take cash and important documents.
- · Turn off utilities.
- · Follow evacuation instructions.

# Before the storm

# When a Hurricane Warning\* is issued:

\*A Hurricane Warning indicates the possibility of experiencing hurricane conditions within 24 hours.

- Listen to the radio or TV for storm updates.
- Call your designated contact person if you have made any changes to your plan.
- · Avoid driving.

# If you stay at home:

- Fill the bathtub and several large containers with water. This is in addition to the supply of drinking water.
- Do not turn your refrigerator to the coldest setting (this won't make the freezer any colder). Get what you need for your coolers before the power goes out or you turn it off, then avoid opening the refrigerator door.
- Cover indoor furniture and appliances with plastic.
- Turn off utilities if instructed to do so.
- Close all interior doors—secure and brace external doors.
   Keep all windows closed during the storm.
- Stay indoors during the hurricane and away from windows and glass doors.
- Take refuge in the area of your home that you have designated as safe (small interior room, closet, or hallway on the lowest level).
- · Carry your hurricane kit and stay in your safe room.
- Remember the essentials: water, food, coolers, flashlights, batteries, radio/TV, landline telephone, chairs, pillows, mattress, and sleeping bags.
- Stay indoors until you are instructed that it is safe to come outside.



29

University of Miami, Miami, Florida



Plan



**Prepare** 



**Practice** 



**Protect** 



**Special Populations** 



Resources

# After the Disaster



- Recovering from a disaster is usually a gradual process. Safety is a primary issue, as is your mental and physical well-being. If assistance is needed, knowing how to access help makes the process faster and less stressful.
- Do not leave your home until it is safe to do so. Following a hurricane: Stay in shelter until you are sure the wind has decreased. Strong bands of wind may alternate with periods of calmer winds on the back side of the storm. Use extreme caution.



- Listen to the radio or television station for instructions from local authorities.
- · Remain calm and be resourceful.
- If possible, place a call to your designated contact person, friends, and family members to let them know where you are and how you are doing.



# If You Had to Evacuate

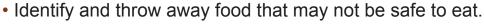
- If you had to evacuate, return only when local authorities advise that it is safe to do so.
- When you return, use caution and check the area around you for safety. The greatest danger of harm is after the hurricane has passed. Hazards include live power lines, fallen trees, unsafe structures, and uncontrolled traffic when traffic lights do not function.
- Returning home can be both physically and mentally challenging.



# If You are at Home

### **Prevent illness from food\***

- While the power is out, keep the refrigerator and freezer doors closed as much as possible.
- Add block ice or dry ice to your refrigerator if the electricity is expected to be off longer than 4 hours. Wear heavy gloves when handling dry ice.



- Throw away perishable foods (including meat, poultry, fish, eggs and leftovers) that have been above 40°F for 2 hours or more.
- Throw away food that may have come in contact with flood or storm water.
- Throw away food that has an unusual odor, color, or texture.



# After the Disaster

### **Prevent illness from water\***

- During and after a disaster, water can become contaminated.
- Water may not be safe for drinking, cleaning, or bathing.
- Listen to and follow public announcements.
- Local authorities will tell you if water is safe for drinking, cooking, or bathing.
- Follow local instructions to use bottled water or to boil or disinfect water for cooking, cleaning, or bathing.

### Prevent accidents and injuries\*

- Stay away from damaged buildings or structures until they have been examined and certified as safe by a building inspector or other government authority.
- Follow all warnings about water on roadways. Avoid driving through water, especially when it is fast moving.
- If you are working at home, wear the appropriate protective equipment, such as safety glasses or heavy work gloves,
- Use teams of two or more people to move bulky objects.
   Avoid lifting any material that weighs more than 50 pounds (per person).
- Wash your hands often with soap and clean water, or use a hand-cleaning gel with alcohol in it.
- Stop lights and street signs may be missing or not working. Treat intersections where lights are out as a four-way stop.

### Prevent carbon monoxide poisoning\*

- Carbon monoxide (CO) is an odorless, colorless gas that can cause sudden illness and death if you breathe it.
- Never use generators, grills, camp stoves, or other gasoline, propane, natural gas, or charcoal-burning devices inside your home, basement, garage, or camper or even outside near an open window.
- Install a carbon monoxide detector in your house, and check its battery every time you check your smoke detector batteries.
- Seek prompt medical attention if you suspect carbon monoxide poisoning and are feeling dizzy, light-headed, or nauseated.



Plan



**Prepare** 



**Practice** 



**Protect** 



**Special Populations** 



Resources

# After the Disaster



### Beware of electrical and fire hazards\*

- NEVER touch a fallen power line.
- Do not turn the power back on until electrical equipment has been inspected by a qualified electrician.
- Do not burn candles near flammable items or leave the candle unattended.
- If possible, use flashlights or other battery-operated lights instead of candles.



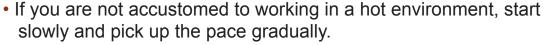
### **Avoid mosquitoes\***

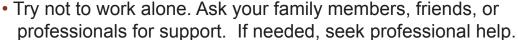
- Rain and flooding in a hurricane area may lead to an increase in mosquitoes, which can carry diseases like West Nile virus.
- Prevent mosquito bites by wearing long pants, socks, and longsleeved shirts and by using insect repellents that contain DEET or Picaridin.



### Take care of your health\*

- Pace yourself try to rest and relax, between periods of clean-up and work.
- Set priorities for cleanup tasks.
- Be alert to physical and emotional exhaustion or strain encourage family members to rest.
- Drink plenty of fluids.
- Wear appropriate clothing and sunscreen.
- If you must be outdoors, try to limit your outdoor activity to morning and evening hours.







\*Source: Centers For Disease Control and Prevention http://www.bt.cdc.gov/disasters/hurricanes/recovery.asp FEMA http://www.fema.gov/areyouready/recovering\_from\_disaster.shtm





Plan



Prepare



**Practice** 



Protect



Special Populations



Resources







Plan I

**Practice** 

# Plan for Children

### **Before the Disaster**

- Develop a family disaster plan so that all members know what to do in case of a hurricane or other disasters.
- Involve children in all aspects of the family plan: planning, preparing, practicing, and protecting.
- Talk with children about disaster preparedness in an age-appropriate and factual way.
- Children should memorize important family information, such as their family name, address and phone number.
- If your child cannot memorize these facts, have him/her carry a card with this key emergency information.
- Teach your children where you should meet in case of an emergency.
- Learn about your child's school emergency plans.

### **After the Disaster**

The National Child Traumatic Stress Network provides useful advice on how to help children and adolescents during disasters (http://www.nctsn.org):

To help children's recovery, caretakers should:

- Be a role model. Try to remain calm so your child can learn from you how to handle stressful situations.
- Monitor adult conversations. Be aware of what adults are saying about the hurricane or the storm damage. Children may misinterpret what they hear and be unnecessarily frightened.
- Limit media exposure. Protect your child from viewing too many images of the hurricane, including those on television, the Internet, or in the newspaper.
- Reassure children that they are safe. You may need to repeat this frequently even after the hurricane passes. Spend extra time with them, playing games outside, reading together indoors, or just cuddling. Be sure to tell them you love them.







Protect

**Special Populations** 

Resources

- Calm children's worries about their friends' safety. Even though phones may not be working, reassure your children that their friends' parents are taking care of them, just the way they are being taken care of by you.
- Tell children about community recovery. Reassure children that things are being done to restore electricity, phones, water, and gas. Tell them that the town or city will be removing debris and helping families find housing.
- Replace lost or damaged toys as soon as you are able.
- Take care of your children's health. Help them get enough rest, exercise, and healthy food. Be sure they have a balance of quiet time and physical activities.
- Maintain regular daily life. Even in the midst of disruption and change, children feel more secure with structure and routine. As much as possible, maintain regular mealtimes and bedtimes.
- Maintain expectations. Stick to your family rules about good behavior and respect for others. Continue family chores, but keep in mind that children may need more reminding than usual.
- Encourage children to help. Children cope better and recover sooner if they feel
  they are helping out. Give them small clean-up tasks or other ways to contribute.
  Afterward, provide activities that are not related to the hurricane, such as playing
  cards or reading.
- Be extra patient once children have returned to school. They may be more distracted and need extra help with homework for a while.
- Give support at bedtime. Children may be more anxious at times of separation from parents. Spend a little more time talking, cuddling, or reading than usual. (You'll want to start the bedtime routine earlier so children get the sleep they need). If younger children need to sleep with you, let them know it is a temporary plan, and that soon they will go back to sleeping in their own beds.

# Plan for Children







- Help with boredom. Daily activities, such as watching television, playing on the computer, and having friends over, may have been disrupted. Extracurricular activities, like sports or dance classes, may have been suspended. Help children think of alternative activities to do, such as board games, card games, and arts and crafts. Try to find community programs (at the library, a park program, or a local youth progran) with child-friendly activities your child can attend.
- Keep things hopeful. Even in the most difficult situation, it
  is important to remain optimistic about the future. Your positive
  outlook will help your children be able to see good things in the
  world around them. This will help get them through even the
  most challenging times.
- Seek professional help if your child still has difficulties more than six weeks after the hurricane.

Source: National Child Stress Traumatic Network (www.nctsn.org)

# **Children's Disaster Supply Kit**

Select favorite games or toys that can comfort or entertain children at home or in a shelter. Select items that are appropriate for a shelter (safe, inexpensive, usable in a small space, not disruptive.)

- A few favorite toys such as a doll or action figure
- Battery-operated toys
- Books
- Crayons, pencils or marking pens and plenty of paper

- A deck of cards
- Favorite stuffed animal or puppet
- Favorite blanket or pillow
- One or two board games, puzzles
- Pictures of the family and pet
- Extra batteries

Source: FEMA for Kids http://www.fema.gov/kids/ready.htm

Notes	



Plan



Prepare



Practice



Protect



**Special Populations** 



Resources

### Plan for Older Adults

- Remember to plan, prepare, protect and practice at their own pace.
- Plan Ahead. Develop an evacuation and communication plan according to their functional needs.
- Older adults have different levels of function. Realize that many older adults are
  perfectly functional in their own environments and do not currently have special
  needs. However, do not assume that older adults who are functional in familiar
  settings will be functional during a disaster. Particularly if older adults are evacuated
  before a disaster strikes, or relocated following a disaster, they may become
  disoriented, confused and irritable.
- Remember that preparedness is the key. During a disaster, older adults may become forgetful (about names, addresses, phone numbers, medications, or about packing essentials during an evacuation).
- Plan emergency procedures with home health care agencies or workers.
- Plan for evacuation to a shelter.
  - Register in plenty of time.
  - Prearrange transportation with neighbors, friends, family or local officials.

 Have disaster supplies and first aid kits ready at all times.

- Prepare a disaster supplies kit and first aid kit.
- Include all medical items, medications, and glasses. Label any equipment, such as wheelchairs, canes or walkers, with the person's name.
- Try to have a month's supply of their prescription medications on hand. Many businesses, including pharmacies, may be closed during or after a hurricane.
- When buying food, consider special dietary needs or restrictions.
- Create a support network to help older adults in an emergency:
  - Find two people who will check on them.
  - Tell them about their special needs.
  - Show them how to operate any equipment
  - Let them know where emergency supplies are kept.
  - Give them a spare key.
- Have the older adults in your household wear medical alert tags or bracelets to help identify any special medical condition.



# Disaster Supply Kit for Older Adults

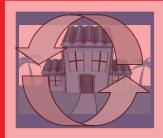
- □ Names, addresses and phone numbers of family and friends. This should include people to contact in case of an emergency.
- Medical history
- □ Prescription medicines, list of medications including dosage, directions, interactions, refill dates, and list of any allergies.
- ☐ Minimum 2 week supply of all essential medications
- ☐ Extra eyeglasses and hearing-aid batteries.
- □ Extra wheelchair batteries or other special equipment in your supply kit.
- □ Copies of medical insurance and Medicare cards
- ☐ List of doctors and emergency contacts.
- □ ID tag on your disaster supply and first aid kits
- ☐ Important documents in waterproof container
- ☐ Extra warm clothing and blankets for shelters
- □ A list of models and serial numbers as well as suppliers for medical equipment such as pacemakers, feeding pumps, home IV units, suction machines, wheelchairs,
   Braille or lower vision equipment, etc.



Plan



**Prepare** 



**Practice** 



**Protect** 



**Special Populations** 



Resources

## Plan for People with Disabilities

#### **Be Informed**

- 1. Identify major types of disasters that may occur in your area.
- 2. Familiarize yourself with emergency preparedness plans in your community and worksite and verify that these plans provide for your needs during a disaster.
- 3. Familiarize yourself about disaster warning systems and messages.
- 4. Identify your specific needs during each disaster phase.

#### Create a resource and support network.

Identify key people who can participate in your plan and serve as a support system during disasters. Include persons from home and workplace. Include people who are local and outside your area.

- Talk with these people and obtain their agreement to provide support in time of disaster.
- 2. Educate your support persons about your specific disability needs such as:
  - Communication devices
  - Accessible transportation
  - Special medical treatments
  - Personal care assistance
  - Electrically dependent equipment
  - Oxygen and respiratory support
  - Mobility aids such as a walker, cane, or a wheelchair
  - Service animal

#### Plan, Prepare, Practice, and Protect

Adapt the teachings of this booklet to your specific needs. Make a plan and prepare actively with assistance from persons in your support network.

- 1. Include home, work, school, or any place you spend time regularly.
- 2. Plan communications that include your support persons.
- 3. Prioritize your special needs.
- 4. Consider options for sheltering-in-place that meet your specific needs.
- **5.** Investigate the use of public shelters to verify that your needs will be met.
- **6.** Consider options for evacuation, including necessary assistance from your support network members.
- **7.** Plan for continuation of regular services (home health care, transportation, medical treatments) and identify sources of back-up services during a disaster.

Source: National Organization on Disability. Available at http://www.nod.org/index.cfm?fuseaction=page.viewPage&pageID=1430&nodeID=1&FeatureID=1539&redirected=1&CFID=8814171&CFTOKEN=73062330

Notes



Plan



Prepare



Practice



Protect



**Special Populations** 



Resources

## Plan for your pets

- It may be difficult to find shelter for your pets during a disaster. Therefore, plan, prepare, protect and practice for pet safety during disasters.
- Develop an evacuation plan for all of your animals.
  - Locate and prearrange several locations where you can take your animals should you need to evacuate.
  - Possible evacuation sites: home of friend/relative, pet-friendly hotel, veterinary hospital, boarding kennel, or animal shelter. Contact these evacuation sites to check on policies for accepting your pets.

#### Prepare a pet disaster supply kit.

- Have at least a one week supply of food and water in storage at all times for your animals.
- If your animal is taking medication, keep a long-term supply on hand.
   Veterinary offices may not be open for some time following a disaster.
- Have identification on your animals, including rabies and license tags.
  - Include: your name, home address, a phone number where you can be reached, and a phone number for an out-of-area person who you will contact after the disaster/evacuation.
  - Identification options: collar tag, microchip, tattoo, or temporary neckband.
  - Take several photographs of all the animals and keep these pictures with your important insurance papers that you take with you if you have to evacuate.
- Review and practice your evacuation plan.
- Start a buddy system with someone in your neighborhood so that they will check on your animals during a disaster in case you are not home.
- Comfort your animals during a disaster.

#### After a disaster:

- Release cats, dogs, and other small animals indoors only. They could encounter dangerous wildlife and debris if they are allowed outside unsupervised and unrestrained.
- Allow uninterrupted rest/sleep for all animals to recover from the trauma and stress.
- If your pet is lost, check animal control and animal shelters daily. Be sure to have a picture of your pet available.

## Pet Disaster Supplies Kit organize according to need

- □ 2-week supply of food (dry & canned)
- □ 2-week supply of water in plastic gallon jugs
- □ Cage/carrier (for each animal, labeled with your contact information)
- □ Can opener (manual)
- □ Cat/wildlife gloves
- □ Emergency contact list
- ☐ Familiar items to make pets feel comfortable (favorite toys, treats, blankets)
- □ Leash, collar, harness (for each animal)
- □ Litter, litter pan, litter scoop
- Muzzles (dog or cat)
- Current photos of pets
- ☐ First aid kit
- □ Bowls (for food and water)
- □ Paper towels
- □ Spoon (canned food)
- □ Newspaper (bedding, litter)
- □ Trash bags
- □ Copies of veterinary records and proof of ownership
- Information on:
  - □ Diet: Record the diet for each individual animal, including what not to feed in case of allergies.
  - □ Medications: List each animal separately, including dose and frequency for each medication.





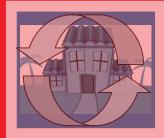
Source: http://www.avma.org/disaster/saving\_family.asp (American Veternianry Medical Association) Source: http://www.uan.org/ears/companion\_animals.html (Emergency Animal Rescue Service -EARS)



Plan



**Prepare** 



**Practice** 



**Protect** 



**Special Populations** 



Resources

## **Managing Stress during Disasters**

To assure physical and emotional health before, during, and after disasters, it is important to understand the emotional response to difficult and unfamiliar situations. A number of emotions are natural reactions to a variety of difficult and challenging situations. Stress causes the body to react in a self-protective manner, sometimes described as the "fight or flight" reaction. Stress produces strong emotions and changes in the way we think and act.

Preparing for disasters produces stressful feelings. Understand how powerful the stress response can be. It is important to take care of yourself and your family during all phases of disaster. Preparing for disasters before they strike decreases disaster stress. Anticipating the potential event lowers anxiety. When disaster strikes, the recovery period may be long and stressful. During recovery it is especially important to eat healthfully and get plenty of restful sleep to help cope with the stress.

The following reactions may occur with minimal to moderate intensity while anticipating a potential hurricane landfall. They will become more intense after the impact. On the other hand, these reactions may be moderated if you have planed for the safest method to protect your family. Practicing and reviewing your disaster plan gives you a sense of control, safety, and security.



#### **Physical reactions**

- "Fight or flight"
- Increased heart rate, blood pressure, respiration
- · Gastrointestinal distress, nausea
- Sweating, shivering
- Dizziness
- Muscle tremors, weakness

#### **Emotional reactions**

- Shock
- Numbness
- Fear
- Terror
- Rapidly shifting emotions
- Sadness
- Anger

#### **Thoughts**

- Confusion
- Difficulty making decisions
- Memory problems

#### **Behaviors**

- Change in diet or sleep
- Substance use and abuse\*
- Smoking

\*Some people increase their use of alcohol, prescription medications or other substances after a disaster. You may feel that using drugs and alcohol seems to help you escape bad feelings or physical symptoms related to stress responses. However, they can actually make these things worse in the long term because they interrupt natural sleep cycles, create health problems, interfere with relationships, and create potential dependence. If your use of alcohol or drugs has increased since the disaster or is causing problems for you, it is important for you to reduce your level of use or seek help in gaining control.

\*Source: National Child Traumatic Stress Network and National Center for PTSD, Psychological First Aid: Field Operations Guide, September, 2005.



Plan



**Prepare** 



**Practice** 



**Protect** 



**Special Populations** 



Resources







Plan

**Prepare** 

**Practice** 

## **Managing Stress during Disasters**

National Child Traumatic Stress Network and National Center for PTSD

#### WHAT HELPS

- Talking to another person for support
- Spending time with others
- Trying to maintain a normal household and daily routine
- Engaging in positive distracting activities (sports, hobbies, reading)
- Using relaxation methods (breathing exercises, meditation, calming self-talk)
- Getting adequate rest and eating healthy meals
- Participating in a support group
- Exercising in moderation
- Scheduling pleasant activities
- Keeping a journal
- Taking breaks
- Seeking counseling

#### WHAT DOESN'T HELP

- Not taking care of yourself
- Working too much
- Excessive TV or computer games
- Withdrawing from pleasant activities
- Blaming others
- Withdrawing from family or friends
- Anger or violence
- Overeating or failing to eat
- Using alcohol or drugs to cope\*
- Doing risky things
- Extreme avoidance of thinking or talking about the event

Source: National Child Traumatic Stress Network and National Center for PTSD, Psychological First Aid: Field Operations Guide, September, 2005.







Protect

**Special Populations** 

Resources

## **EMERGENCY NUMBERS**

to assist you and your family

Rumor Control	Lines
Miami-Dade County	305-468-5900
Broward County	954-831-4000
Monroe County	1-800-955-5504
Palm Beach County	561-712-6400

Emergency Management	
Miami-Dade County Emergency Management	305-468-5400
Broward County Emergency Management	954-831-3900
Monroe County Emergency Management	305-289-6018
Palm Beach County Emergency Management	561-712-6400

Evacuation Assistance People requiring special needs shelter services must	register in advance.
Miami-Dade County	305-513-7700
Broward County	954-537-2888
Monroe County	305-292-4591
Palm Beach County	561-712-6400

Utili	ty Problems	
FPL: Miami-Dade and Broward		1-800-468-8243
BellSouth Repair	611; Customer Service prior to a storm:	1-888-757-6500
TECO Peoples Gas, Miami-Dade an	nd Broward	1-877-832-6747
Florida City Gas	${\sf Miami-Dade: 305-691-8710; elsewhere:}$	1-800-993-7546







Prepare

**Practice** 

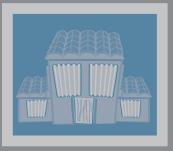
## **EMERGENCY NUMBERS**

## to assist you and your family

American Red Cross	
Miami-Dade and Monroe counties	305-644-1200
Broward County	954-763-9900
Monroe County (Upper Keys)	305-852-9612
Monroe County (Middle and Lower Keys)	305-296-4033
Palm Beach County	561-833-7711

Government Agencies	
Miami-Dade County Building Code Compliance Office	305-375-2901
Broward County Building Permitting	954-765-5075
Florida Department of Financial Services	1-800-227-8676
Federal Emergency Management Agency	1-800-462-9029

Other	
Registry in Miami Dade for special needs	311
IP Relay for people with disability	711
Voluntary Organizations Active in Disaster (VOAD)	www.miamidadevoad.org







Protect

Special Populations

Resources

Resources