# FLORIDA HURRICANE GUIDE

Make a Plan
Build a Disaster Supply Kit
Know Your Home, Know Your Zone
Stay Safe Before, During, & After a Storm

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DIVISION OF EMERGENCY MANAGEMENT
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# TABLE OF CONTENTS


What is a Hurricane? 01

Saffir Simpson Hurricane Wind Scale 02

Hurricane Formation and Frequency 03

What Type of Weather Will I See During a Hurricane? 04

Watches and Warnings 05

How to Prepare For Hurricane Season 06

Planning For Your Home 09

Access and Functional Needs Planning 15

Pet Planning 20

Evacuation Protocols 23

Build a Kit 28

Disaster Supply Kit Checklist 30

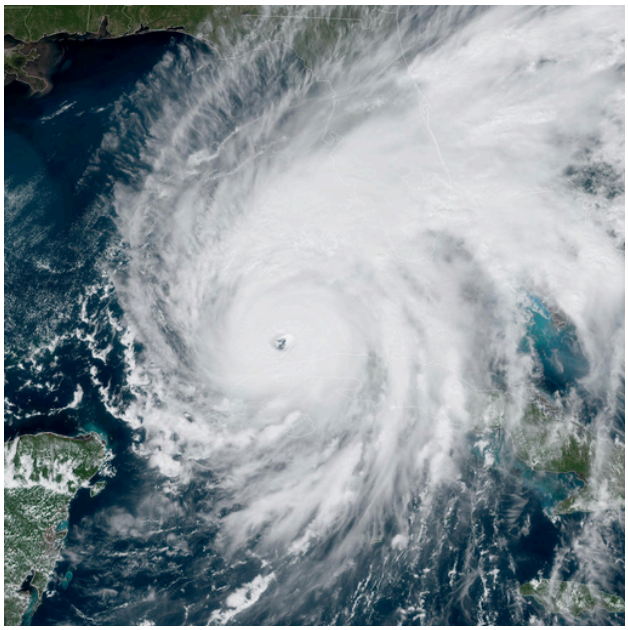
What to Do After a Hurricane 31

Apply for FEMA Assistance 38

Preparedness Checklist 39

# WHAT IS A HURRICANE?

A hurricane is a type of storm called a tropical cyclone, which forms over tropical or subtropical waters. A tropical cyclone is a rotating low-pressure weather system that has organized thunderstorms but no fronts (a boundary separating two air masses of different densities). Tropical cyclones with maximum sustained surface winds of less than 39 miles per hour (mph) are called tropical depressions. Those with maximum sustained winds of 39 mph or higher are called tropical storms. When a storm's maximum sustained winds reach 74 mph, it is called a hurricane.



**Hurricane Ian , September 2022**

Hurricanes originate in the Atlantic basin, which includes the Atlantic Ocean, Caribbean Sea, and Gulf of Mexico, the eastern North Pacific Ocean, and, less frequently, the central North Pacific Ocean. A six-year rotating list of names, updated and maintained by the World Meteorological Organization, is used to identify these storms.

Hurricane Season begins on June 1, and ends on November 30, although hurricanes can, and have, occurred outside of this time frame. The National Oceanic and Atmospheric Administration's (NOAA) National Hurricane Center predicts and tracks these massive storm systems, which occur, on average, 12 times a year in the Atlantic basin.[1]

## Tropical Weather Terms to Know:

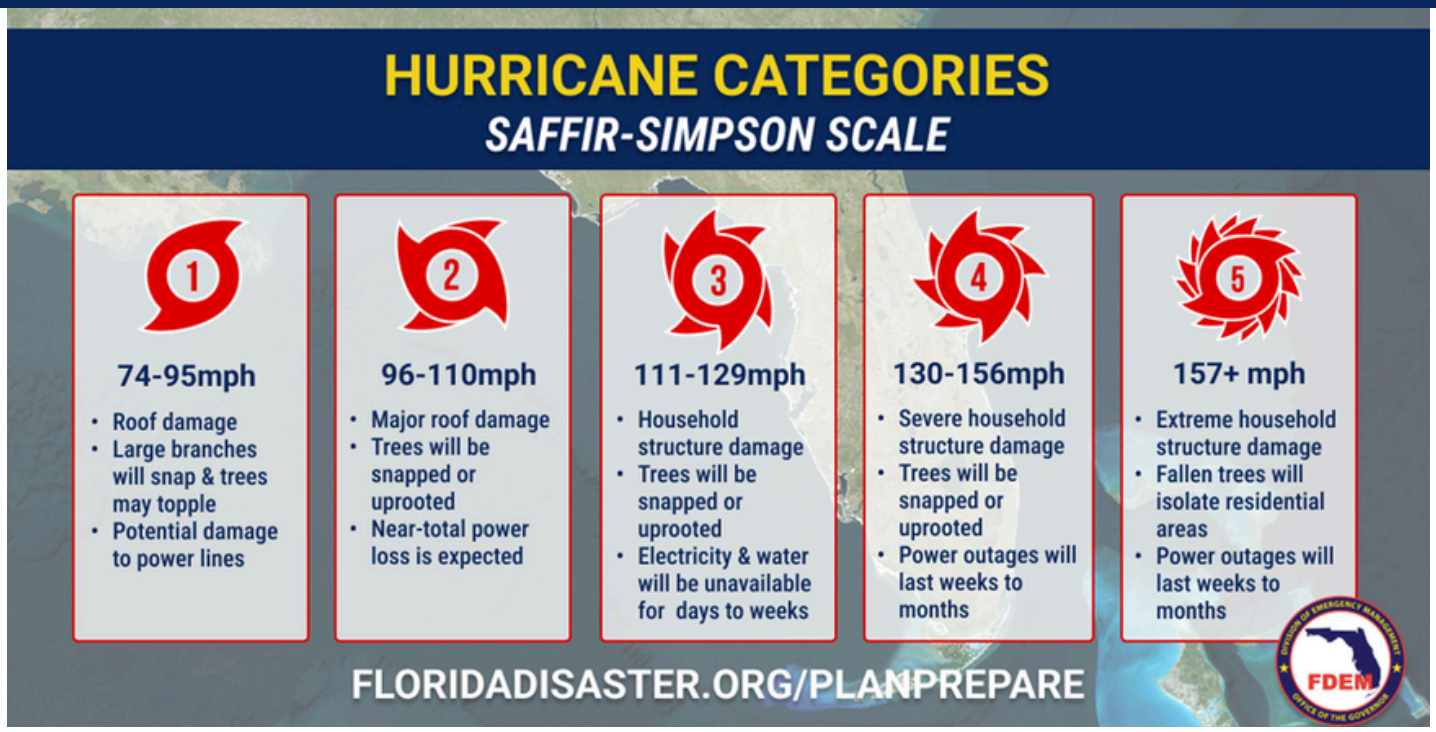
- Tropical Disturbance – A tropical weather system with organized convection (generally 100-300 miles in diameter) originating in the tropics or subtropics.
- Invest – A weather system for which a tropical cyclone forecast center is interested in collecting specialized data sets and/or running model guidance.
- Potential Tropical Cyclone – A disturbance that is not yet a tropical cyclone, but poses the threat of tropical storm or hurricane conditions to land areas within 48 hours.
- Tropical Cyclone – A rapidly rotating storm system characterized by a low-pressure center, a closed low-level atmospheric circulation, strong winds, and a spiral arrangement of thunderstorms that produce heavy rain and squalls.
- Tropical Depression – A tropical cyclone with maximum sustained winds of 38 mph or less.
- Tropical Storm – A tropical cyclone with maximum sustained winds of 39-73 mph.
- Hurricane - A tropical cyclone with maximum sustained winds of 74 mph, or greater.

[1] NOAA. What is a Hurricane? National Ocean Service Website,

# SAFFIR-SIMPSON HURRICANE WIND SCALE

The Saffir-Simpson Hurricane Wind Scale is a 1 to 5 rating, or category, based on a hurricane's maximum sustained winds. The higher the category, the greater the hurricane's potential for property damage.

| Category | Sustained Winds | Types of Damage Due to Hurricane Winds |
|---|---|---|
| 1 | 74-95 mph | **Very dangerous winds will produce some damage:** Well-constructed frame homes could have damage to roof, shingles, vinyl siding and gutters. Large branches of trees will snap and shallowly rooted trees may be toppled. Extensive damage to power lines and poles will likely result in power outages that could last a few to several days. |
| 2 | 96-110 mph | **Extremely dangerous winds will cause extensive damage:** Well-constructed frame homes could sustain major roof and siding damage. Many shallowly rooted trees will be snapped or uprooted and block numerous roads. Near-total power loss is expected with outages that could last from several days to weeks. |
| 3 (Major) | 111-129 mph | Devastating damage will occur: Well-built framed homes may incur major damage or removal of roof decking and gable ends. Many trees will be snapped or uprooted, blocking numerous roads. Electricity and water will be unavailable for several days to weeks after the storm passes. |
| 4 (Major) | 130-156 mph | Catastrophic damage will occur: Well-built framed homes can sustain severe damage with loss of most of the roof structure and/or some exterior walls. Most trees will be snapped or uprooted and power poles downed. Fallen trees and power poles will isolate residential areas. Power outages will last weeks to possibly months. Most of the area will be uninhabitable for weeks or months. |
| 5 (Major) | 157 mph or higher | Catastrophic damage will occur: A high percentage of framed homes will be destroyed, with total roof failure and wall collapse. Fallen trees and power poles will isolate residential areas. Power outages will last for weeks to possibly months. Most of the area will be uninhabitable for weeks or months. |




The scale does not address the potential for other hurricane-related impacts, such as storm surge, rainfall-induced floods and tornadoes. It should also be noted that these wind-caused damage descriptions are dependent upon the local building codes in effect and how well and how long they have been enforced. For example, building codes enacted during the 2000s in Florida are likely to reduce the damage to newer structures. Hurricane wind damage is also very dependent upon other factors, such as duration of high winds, change of wind direction and age of structures.

## Hurricane Formation & Frequency

The Atlantic Hurricane Season, which includes the Caribbean Sea, runs from June 1 – November 30 each year. This does not mean that tropical cyclones are unable to affect the U.S. in months outside of hurricane season, but it is extremely unlikely. Based on the last 100 years, tropical cyclones affect Florida with greater frequency than any other location in the U.S.

Tropical cyclones in the North Atlantic develop from tropical waves which most often originate over the tropical regions of continental Africa. These waves travel from east to west in the tropical easterlies and if conditions are favorable, they may develop into a tropical cyclone. It is estimated that there are over 100 tropical waves each year that move through the North Atlantic Ocean.

The necessary conditions for tropical cyclone development from an existing tropical wave are:

- Water temperatures must be 80 F or greater, the warmer the water the better potential for development and;
- Winds at the mid and upper levels (10 to 50 thousand feet AGL) need to be weak, 20 knots or less, and rotating clockwise (anticyclonic). The direction of the upper-level winds is important also. Upper-level winds from the east favor tropical cyclone development while west winds do not.

Tropical cyclones weaken and/or dissipate when they encounter water cooler than 80 F or strong mid and upper-level westerly winds or when they move over or come close to land.

The Keys and the surrounding coastal waters are most often affected by tropical cyclones during September and October with June having a secondary peak in frequency. The least likely time for tropical cyclones to affect the Keys is during July and early August. Most of the tropical cyclones that affect the Keys form in the Caribbean Sea and move north. Some develop in the south central Atlantic and only a few of the "Cape Verde" type cyclones (those that develop in the far eastern Atlantic near the coast of Africa) have impacted the Keys.[1]

## What Type of Weather Will I See During a Hurricane?

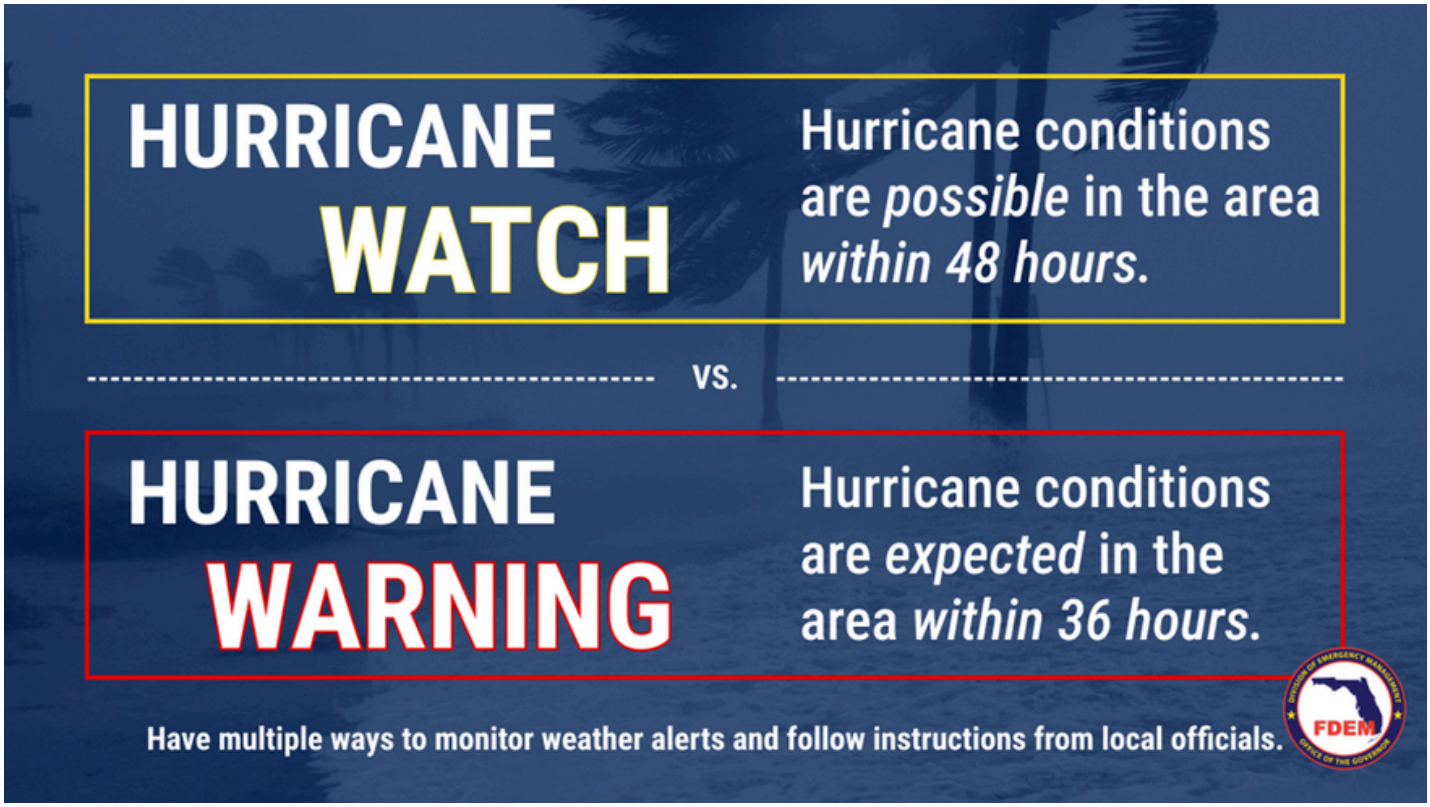
Hurricanes and Tropical Storms develop in many shapes and sizes and pose many different threats. The slower a storm is moving, the greater the potential for extremely heavy rains and flooding. Mountainous terrain also enhances the rainfall potential of a tropical cyclone. It is important to remember that tropical cyclones produce tremendous amounts of rain over inland areas and people need to prepare for this danger.

Outside of strong damaging winds and heavy rain, tropical cyclones can produce other types of severe weather. Most landfalling tropical cyclones produce tornadoes. Tropical Storm Mitch produced 3 tornadoes on the upper Keys in November 1998 causing significant damage and injuring 20 people.

### Common Weather Threats from Tropical Cyclones:

- Storm Surge - A hurricane can produce destructive storm surge, which is water that is pushed toward the shore by the force of the winds. This advancing surge combines with the normal tides to inundate normally dry land in feet of water. The stronger the storm, the higher the storm surge.
- Inland Flooding - In the last 30 years, inland flooding has been responsible for more than half the deaths associated with tropical cyclones in the United States.
- High Winds - Hurricane-force winds can destroy poorly constructed buildings and manufactured 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.

1] National Weather Service. All About Hurricanes. National Ocean Service Website, www.weather.gov/key/hurrweb.




The National Hurricane Center, NHC, in Miami, Florida, issues all watches/warnings and advisories for landfalling tropical cyclones in the U.S., and for all of the countries in the Caribbean and Atlantic Ocean including Cuba and the Virgin Islands. For more information on the NHC go to www.nhc.noaa.gov.

The best way to receive these and any NWS products is through NOAA Weather Radio (NWR) broadcasts. The broadcasts originate from the NWS office in Key West, FL.Other media sources such as TV, radio and newspapers are good ways to keep updated on tropical cyclone information as well.

## Watches and Warnings to Expect

When a **HURRICANE WATCH** is issued, it means that hurricane conditions are possible within the watch area. The hurricane watch is issued 48 hours in advance of the anticipated onset of tropical-storm-force winds. This watch should trigger your family's disaster plan, and proactive measures should be initiated especially those actions that require extra time such as securing a boat, leaving a barrier island, etc.

When a **HURRICANE WARNING** is issued, it means that hurricane conditions are expected within the warning area. The hurricane warning is issued 36 hours in advance of the anticipated onset of tropical-storm-force winds. Once this warning has been issued, your family should be in the process of completing proactive actions and deciding the safest location to be during the storm.

# HOW TO PREPARE FOR HURRICANE SEASON

## MAKE A PLAN

During the past four years, four hurricanes have made landfall in Florida, including Hurricane Michael, the first hurricane to make landfall in the U.S. as a Category 5 since Hurricane Andrew in 1992. If you are unsure of what to do when disaster strikes, make a plan today.

After assessing damages done from hurricanes in the past few years, Floridians are encouraged to have at least 7 days of supplies. These supplies include food, water, medicine, batteries, etc. A full list of supplies is available on page 27.

All Floridians and visitors need to take a few basic steps to plan for their personal/family needs and protection in the event of a disaster or emergency. The below checklist can help as you begin your planning efforts.

### Complete a Personal Assessment

- Make a list of your personal needs and your resources for meeting them in a disaster environment.

### Get Educated, Get Informed

- Know the specific hazards that threaten your community (hurricanes, tornadoes, wildfires, etc.)
- Learn about community disaster plans and community warning systems.
- Learn your community's evacuation routes.

## Prepare an Emergency Kit

- Stock enough supplies to last every individual in your home at least 7 days
- Include items for your pets in your emergency kit
- Dont forget to include nonperishable food, water, batteries, and medications

## Know Your Home, Know Your Zone

- Visit FloridaDisaster.org/Know to learn what evacuation zone you live in
- Know your home's ability to withstand hurricane-force winds

## Make a Plan for Your Pets

- Include medications, vet paperwork, collars with ID tags, and sturdy leashes in your kit
- Don't forget to pack your pet's favorite toys and comfort items
- NEVER leave your pets behind

## Utilities

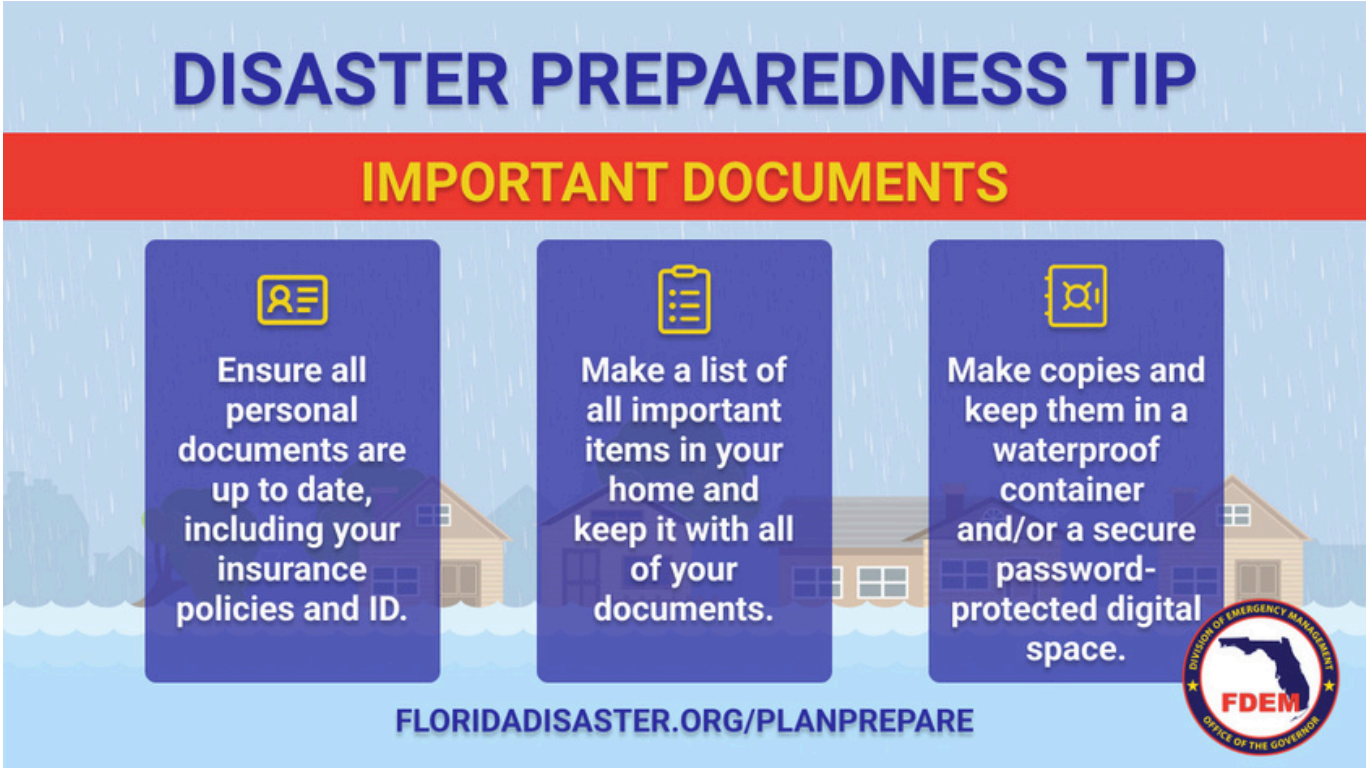
- Know how and when to turn off water, gas and electricity at the main switches and valves
- Keep any tools you will need near gas and water shut-off valves
- Turn off utilities only if you suspect lines are damaged or if local officials instruct you to do so

## Safety Devices

- Be sure you know where your fire extinguishers are located and how to use them
- Install smoke alarms on every level of your home, especially near the bedrooms
- Several times a year, test your smoke alarms to ensure they are working properly

## Insurance Coverage

- Check with your insurance agent or carrier to make sure you have the level of coverage you desire




## Important Records & Documents

- Keep copies of important family records and other documents (birth and marriage certificates, Social Security cards, passports, wills, deeds, financial, insurance, medical/immunization records, and copies of current bills) in a safe deposit box or other safe location.

## First Aid/CPR & AED

- Take first aid and CPR/AED classes (American Red Cross courses can accommodate people with disabilities - just discuss your needs when registering for the classes.)

## Inventory Home Possessions

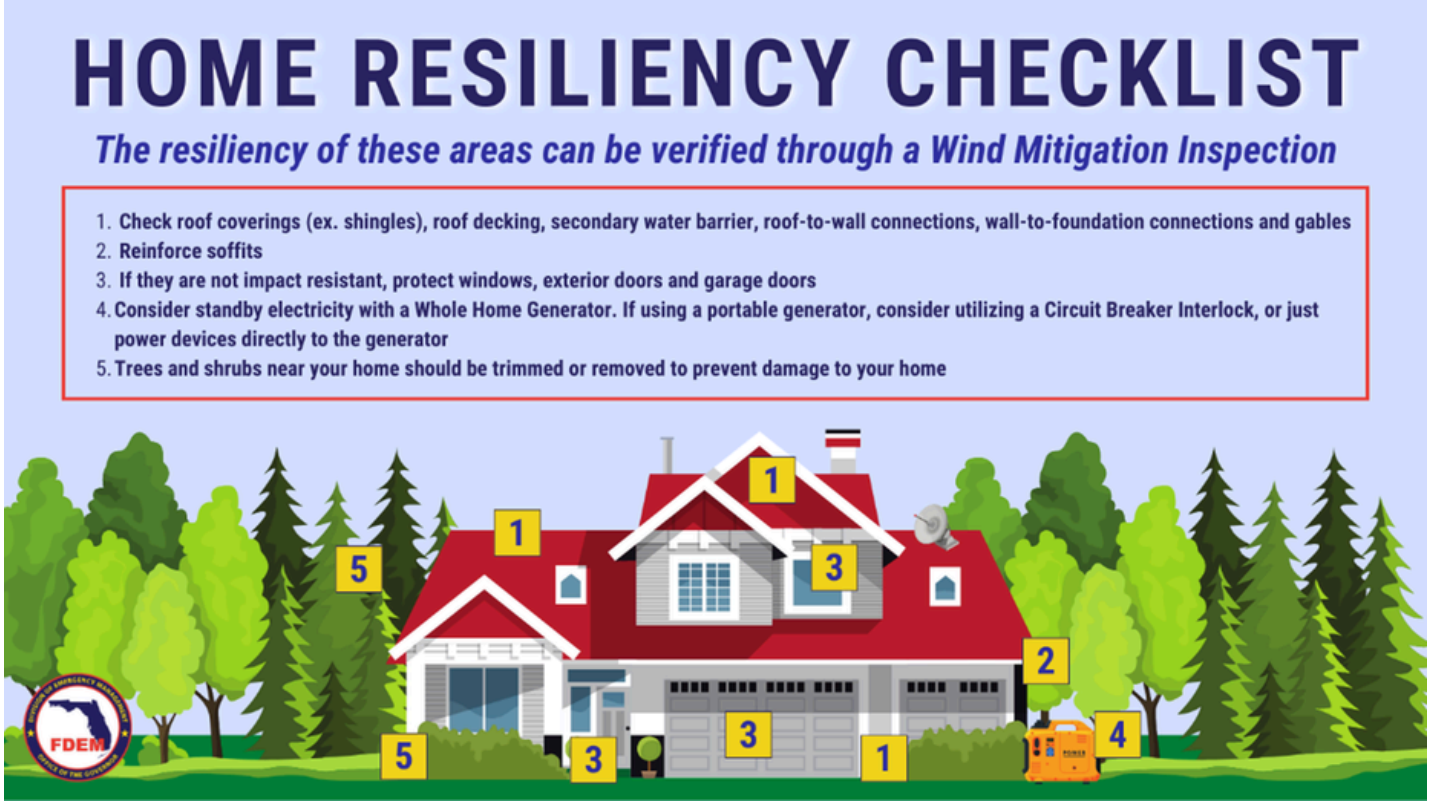
- Make a record of your possessions - in writing or video - to help you claim reimbursement in case of loss or damage.

## Reduce Home Hazards

- Have defective electrical wiring and leaky gas connections repaired.
- Place large, heavy objects on lower shelves.
- Hang pictures and mirrors away from beds.
- Have cracks in ceilings and foundations repaired.

## Retrofitting Your Home

The most important precaution you can take to reduce damage to your home and property is to protect the areas where wind can enter. According to recent wind technology research, it's important to strengthen the exterior of your house so wind and debris do not tear large openings in it. You can do this by protecting and reinforcing these five critical areas:




A great time to start securing - or retrofitting - your house is when you are making other improvements or adding an addition.

Remember: building codes reflect the lessons experts have learned from past catastrophes. Contact the local building code official to find out what requirements are necessary for your home improvement projects.

# Strengthen Your Garage Door

More than 90% of damage to homes during hurricanes begins when garage doors fail. Garage doors are typically the largest and weakest openings in a home.

## What makes a garage door stronger than another?

- Metal thickness (gauge) of the door to resist pressure and windborne debris impacts.
- Number and strength of mounting brackets and connectors holding the track to the wall and the ceiling.
- Strength of the horizontal reinforcements on the door to resist buckling.

## What type of doors are best for high-wind locations?

- Wind and impact-rated doors that are tested and approved. Wind-rated is good. Impact-rated is better.
- Single-car garage doors usually resist wind forces better than two-car garage doors.
- Doors without glass, or glazing, are better than those with glass or windows (unless the glass is impact-resistant).

## How do you know if your garage door is impact-rated or wind-rated?

- It can be difficult to determine if garage doors are impact- or wind-rated without proof of compliance labeling (typically yellow or white sticker listing pounds per square foot, or PSF).
- If you do not have a sticker, contact your builder or manufacturer.

## How can you strengthen your existing garage door?

- Check the mounting brackets and connectors and ensure the screws are tight and the track is not loose.
- Add mounting brackets and connectors if you only have three or four on each side.
- Replace rusted pins or worn-out rollers, and make sure they are balanced.
- Consider a bracing kit if the door is weak. If it is, it may fail and wrap around the bracket

# Strengthen Your Soffits

A residential soffit is a horizontal surface outside on the underside of the eaves. The eave is an area of the roof which overhangs the exterior walls.  Properly installed and braced soffits resist wind forces and keep water out when the wind drives rain against the outside walls and up into the attic of your home. Soffits are a common failure point in high winds, especially hurricanes, so take these affordable DIY steps to ensure that soffits stay in place when it matters most.

**Materials Needed:**

- Caulking/sealant material
- Caulking applicator (gun)

## Instructions for Strengthening Your Soffits

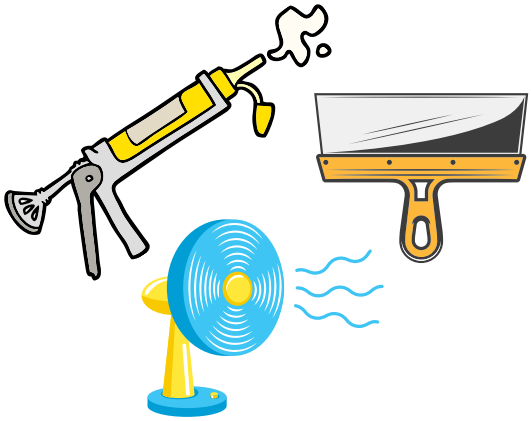
1. Caulk the bottom of the trim piece at the intersection of the soffit and wall to strengthen the connection to the house and prevent the trim piece from moving.
2. To hold the soffit panels in place, squirt a marble-sized dab of caulk into the V-shaped hole formed by the intersection of the soffit panels and the trim. This will tie the soffit panels to each other, as well as the trim.
3. To ensure that the marble-sized dab forms an adhesive contact with both the soffit panels and the trim, push the point of the caulk tube into the joint until you hit the back of the trim.
4. Squirt sealant into the opening until it nearly starts falling out of the opening. Slowly continue inserting sealant while simultaneously withdrawing the tip.
5. Once you are finished inserting the sealant, quickly remove the tube.

# Strengthen Your Roof

You can affordably improve your roof's resistance to wind from inside the attic without removing your shingles or other coverings. Keeping the roof on in high winds is essential: research shows that the correct application of the right adhesive or caulk will increase the resistance of your roof decking by as much as three times.

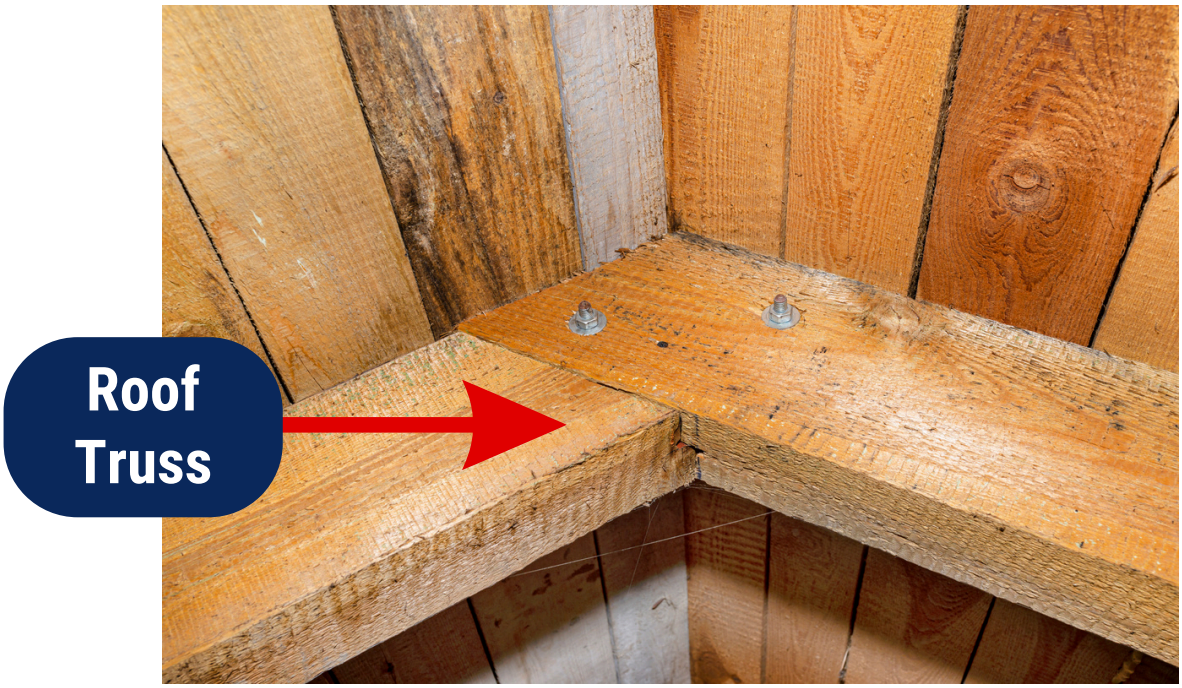
**Materials Needed:**

- Premium flooring adhesive
- Caulk applicator or gun
- Putty and utility knives
- Mask or other protection
- Portable fan
- Ladder



## Instructions for Reinforcing Your Roof

1. Plan to do this project on a cool day or early morning before it gets too hot.
2. Most attics are enclosed, tight spaces with poor ventilation. Choose an adhesive or caulk that is rated for the lowest fume emission. Wear a mask, and use a portable fan to ensure proper ventilation.
3. Apply a 1/4-inch bead of APA AFG-01 certified wood adhesive along the intersection of the roof deck and the roof support element (rafter or truss chord) on both sides with a caulking gun.
4. Make sure that the adhesive is in contact with the deck and roof support elements and that you cover every joint.



# Make Your Landscaping Hurricane Resistant

### *If you can pick it up, put it up!*

Nearly any object can become a dangerous, flying missile in a high-wind event like a hurricane or tornado. Inspect your property and use this checklist to identify ways to make your landscape more high-wind resistant.

While you can do many of these projects yourself, consult a professional when projects require the use of chainsaws or any unfamiliar or dangerous equipment.

## Evaluate Your Trees

Check around your house for a weakened tree that could fall or lose limbs during a hurricane. Look for:

- Cracks in the trunk or major limbs
- Trees that lean or look one-sided
- Branches that hang over the house or near the roof
- Tree limbs that touch power lines
- Obvious decay or mushrooms growing from the bark
- Insect infestations

## Care for Your Trees

- Regular and proper pruning can improve the health and vitality of your trees.
- Remove dead, diseased, or damaged parts of the tree to stop the spread of disease and harmful insects that weaken or destroy the tree.
- Never prune branches flush to the tree as doing so removes not only the limb but part of the trunk. Improper pruning can make the tree susceptible to decay or insect damage.

## Plant #HurricaneStrong Trees

- Some tree varieties are more prone to storm damage than others. City foresters, government extension offices, home improvement garden centers, nurseries, and landscape firms can provide advice on smart tree selection for your area and soil conditions.

## Use Safe Landscaping Materials

Rock and gravel landscaping swiftly turn into projectiles in high-wind events. Consider replacing these types of landscaping materials with fire-treated mulch to reduce the risk of damage when severe weather begins.

## Flood Insurance

The National Flood Insurance Program is a pre-disaster flood mitigation and insurance protection program designed to reduce the escalating cost of disasters. The National Flood Insurance Program makes federally-backed flood insurance available to residents and business owners.

Flood damage is not usually covered by homeowners' insurance. Do not make assumptions. Check your policy.

# ACCESS AND FUNCTIONAL NEEDS PLANNING

It is important for every Floridian, especially citizens with disabilities and other special needs, to plan ahead for an emergency situation and know what to do in the event of an emergency.

The best time to prepare for an emergency is well ahead of time. When you prepare from a position of safety and calm, you and your caregivers can better cope with an emergency or disaster situation when it happens. An emergency or disaster may present unique challenges for people with disabilities and special needs. If you or someone you care for has a disability or special need, you may have to take additional steps to prepare yourself and your family.

***Here's what you need to get ready for an emergency or disaster:***

## Form a Personal Support Network

These are the people you should involve in your emergency planning and can help you in an emergency situation. They include your nearby family, friends, caregivers, neighbors and co-workers. Be sure to give at least one trusted member of your support network a key to your house or apartment. Also, let members of your support group know where you store your emergency kit. Most importantly, you should not rely on just one person, but have at least three or more people you can call on for help.

## Complete a Personal Assessment

Make a list of your personal needs and your resources for meeting them in a disaster environment. You need to take into account what you will be able to do for yourself and what assistance you may need before, during and after a disaster such as a hurricane. This should include daily living needs (personal care/personal care equipment, adaptive feeding devices and electricity-dependent equipment), your ability to get around before, during and after a disaster (cleaning up disaster debris, transportation and blocked roads) and evacuating if necessary.

## Get Informed

Know about the specific hazards that threaten your community (hurricanes, tornadoes, wildfires, etc.), learn about community disaster plans and community warning systems and find out more about special assistance programs. Florida citizens with disabilities and special needs should register with their local emergency management office.

## Write It Down

Keep a copy of important phone numbers and other contact information for loved ones, medical providers and emergency services as part of your emergency communications plan.

## Create an Emergency Kit

Your emergency kit should have supplies specific to your special needs. A complete list of suggested items can be found at our Disaster Supply Kit Checklist page.

## Other Helpful Tips

- Wear medical alert tags/bracelets to help identify your disability/special need.
- Practice how to quickly explain your condition and your adaptive equipment to someone who is helping you.
- Wheelchair users need to have more than one exit from their residence that is wheelchair accessible. Practice how to escape from your home.
- Know the size and weight of your wheelchair, in addition to whether or not it is collapsible, in case it has to be transported.
- If you are dependent on dialysis or other life sustaining treatment or equipment, know the locations and availability of more than one facility in your area.
- All Florida emergency management offices keep a current list of people within a community who have a disability/special need so you can be quickly located and assisted in the event of an emergency. It is important that you contact your local emergency management office and notify them of your disability/special needs.
- If you haven't already done so, you should also register in advance with your local emergency management office. Registering with your local emergency management office not only provides vital information to the county should you need assistance in an emergency, but may also qualify you for special sheltering or transportation programs. This is strictly voluntary.
- Each county has their own process and forms for registering. Be prepared to provide your contact with medical information to complete county forms. A full list of every county emergency management office can be found here. Many of these counties have a special needs registration form downloadable from their website.
- Don't forget to update these forms annually and make sure your information is always current.

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## Medication Requirements

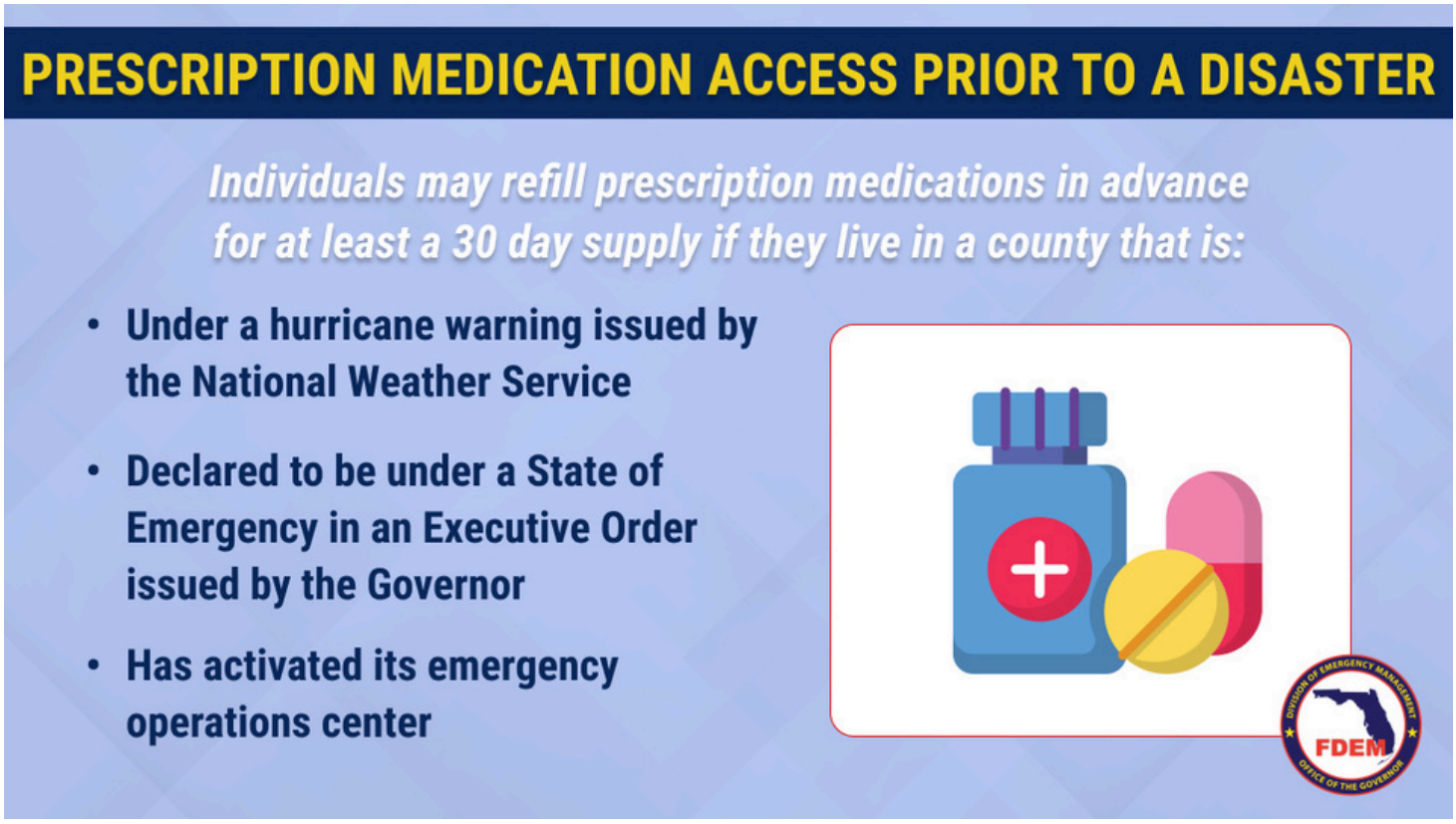
One of the most critical preparation steps you can take is ensuring you have enough of your required prescription medications available should the aftermath of a disaster prevent you from getting a refill. It is recommended that you have a minimum two-week supply of all your prescription medications. Be sure your extra supply is kept current and has not expired. It is also recommended that you keep a list of all your prescription medications, dosages and any other special instructions with your emergency medication supply.

## Emergency 30-Day Refills

According to Florida law, you can obtain a 30-day refill of your prescription medication - even if you have just refilled it - ONLY if you reside in a county that:

- Is under a hurricane warning issued by the National Weather Service; or
- Is under a state of emergency executive order declared by the Governor; or
- Has activated its emergency operations center/emergency management plan

Under these specific circumstances listed above, any health insurer, managed care organization or other entities licensed by the Office of Insurance Regulation must waive the "refill too soon" restrictions on prescriptions.



# Special Needs Registry

The Florida Department of Health, in coordination with its county health departments and each local emergency management agency in the state, developed a registry for persons with special needs to register with their local emergency management agency to receive assistance during a disaster. The statewide registry provides first responders with valuable information to prepare for disasters or other emergencies.

Providing as much information as possible will allow emergency management officials to plan accordingly for future disasters. You will be emailed periodically to verify the information provided is correct and to make any necessary changes.

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# PET PLANNING

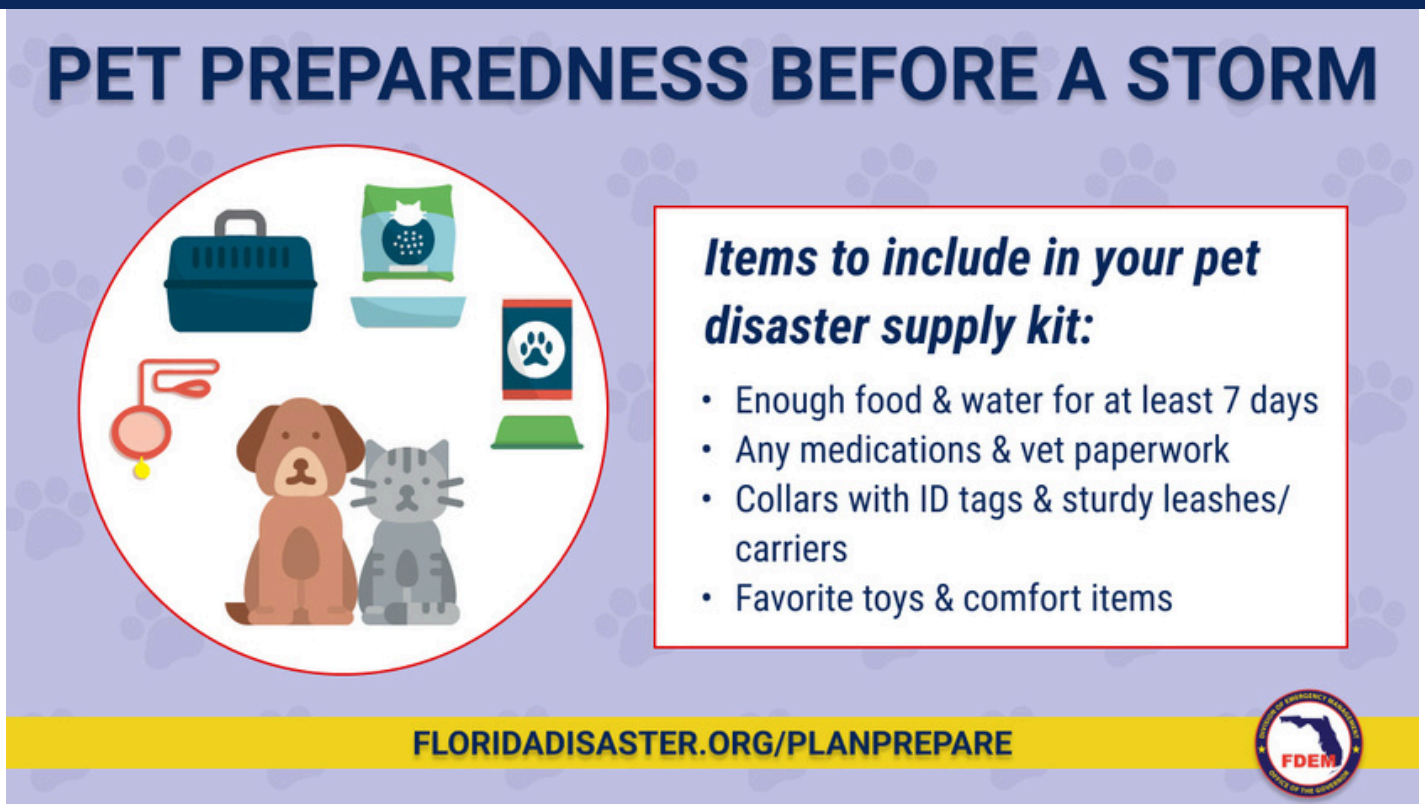
The best way to protect your family from the effects of a disaster is to have a disaster plan. If you are a pet owner or have larger animals (i.e. livestock), it is important that you also consider their needs when developing your disaster plan.

If you evacuate your home, **DO NOT LEAVE YOUR PETS OR ANIMALS BEHIND**. It is unlikely for pets or larger animals to survive on their own. If by some chance they do, you may not be able to find them when you return.

Prepare now and protect your family and pets before the next disaster strikes.
Service animals who assist people with disabilities are allowed in Red Cross shelters. It may be difficult, to find shelter for your animals in the midst of a disaster, so plan ahead. Do not wait until disaster strikes to do your research.

Many communities are developing pet friendly shelter plans, check to see if your local emergency shelter plan includes pets.

- Contact hotels and motels outside your immediate area (outside of an evacuation zone) to check policies on accepting pets and restrictions on number, size and species. Ask if "no pet" policies could be waived in an emergency. Keep a list of "pet friendly" places, including phone numbers, with other disaster information and supplies. If you have notice of an impending disaster, call ahead for reservations. Go to Pet's Welcome to search pet friendly hotels and motels.
- Ask friends, relatives or others outside the affected area whether they could shelter your animals. If you have more than one pet, they may be more comfortable if kept together, but be prepared to house them separately.
- Prepare a list of boarding facilities and veterinarians who could shelter animals in an emergency; include 24-hour phone numbers.
- Ask local animal shelters if they provide emergency shelter or foster care for pets in a disaster. Animal shelters may be overburdened caring for the animals they already have as well as those displaced by a disaster, so this should be your last resort.



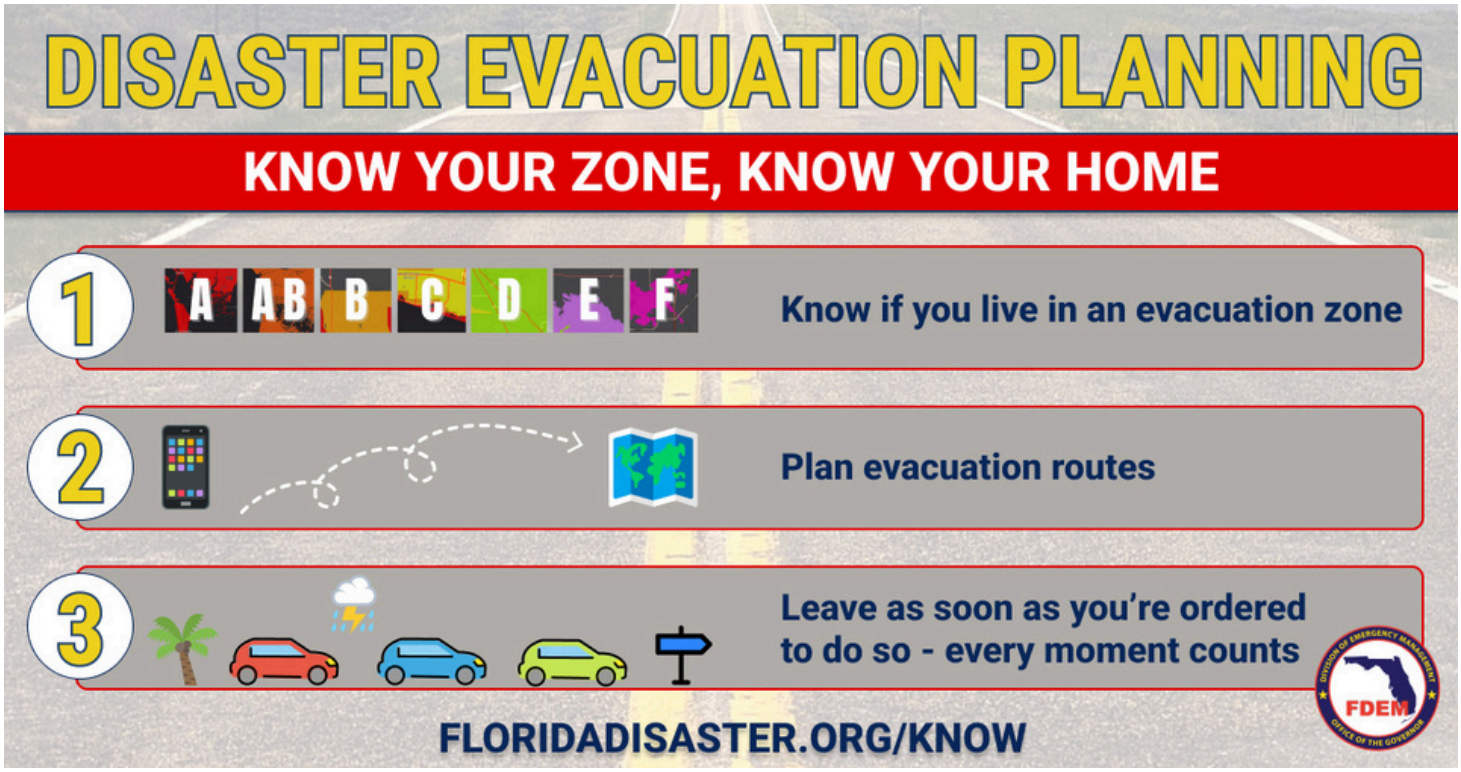

Whether you are away from home for a day or a week, you will need essential supplies to care for your pet. Keep items in an accessible place and store them in sturdy containers that can be carried easily (duffle bags, covered trash containers, etc.). Your pet disaster supply kit should include:

- Medications and medical records (stored in a waterproof container) and a first aid kit.
- Sturdy leashes, harnesses and/or carriers to transport pets safely and ensure that your animals cannot escape.
- Photo of you and your pet(s) – in the event you are separated from your pet, having an updated photo with your pet will help validate pet ownership.
- Food, potable water, bowls, cat litter/pan, and can opener.
- Information on feeding schedules, medical conditions, behavior problems, and the name and number of your veterinarian in case you have to foster or board your pets.
- Pet beds and toys, if easily transportable.
- You may not be home when the evacuation order comes. Find out if a trusted neighbor would be willing to take your pets and meet you at a prearranged location. This person should be comfortable with your pets, know where your animals are likely to be, know where your pet disaster supplies kit is kept, and have a key to your home. If you use a pet sitting service, they may be available to help, but discuss the possibility well in advance.
- Planning and preparation will enable you to evacuate with your pets quickly and safely. However, bear in mind that animals react differently under stress. Outside your home and in the car, keep dogs securely leashed. Transport cats in carriers. Do not leave animals unattended anywhere they can run off. The most trustworthy pets may panic, hide, try to escape, or even bite or scratch. When you return home, give your pets time to settle back into their routines. Consult your veterinarian if any behavior problems persist.

When planning for larger animals (i.e. livestock), take the following into consideration when developing your disaster plan:

- Disaster supply kit that includes, but is not limited to the following items:
- Form of identification for each animal
- Food and water
- Medications
- Handling equipment
- Dry bedding
- Windbreaks
- Develop an evacuation plan to include different routes and possible shelter sites suitable for your animal
- Ensure you have the necessary resources to transport your animals – vehicles, trailers and experienced drivers and handlers
- Animal-Related Emergency Response

The Florida Department of Agriculture and Consumer Services (FDACS) serves as the lead agency for the State Emergency Response Team Emergency Support Function 17 (Animal and Agricultural Issues). Please click here to view additional information and resources to help you prepare a disaster plan for your animals.




## How Do I Know to Evacuate or Stay?

One of the most important decisions made during an emergency situation is whether to evacuate or stay in your home or current location. Determining factors such as your unique circumstances and the nature of the emergency should be carefully evaluated before either option is decided upon. As a person with disabilities/special needs or a caretaker of individuals with special needs, your disaster plan should consider and have options for both situations. It is also important to use all the information you can from local officials or the news to determine if there is immediate danger. Use your best judgment as no one knows your needs as well as you do.

However, certain emergency and disaster situations require immediate evacuation. If you are specifically ordered to evacuate, it is vital you do so immediately. If your daily activities require additional travel time or transportation assistance, your emergency plan should include prior travel arrangements.

Many times evacuations are ordered at the last minute, leaving little to no time to prepare. As part of your emergency plan, you and your family should have several evacuation routes and options that can help get you out of harm's way regardless of the potential hazard. Below is a list of tips to help you determine what evacuation route(s) suits you best.

## Determining Your Evacuation Options

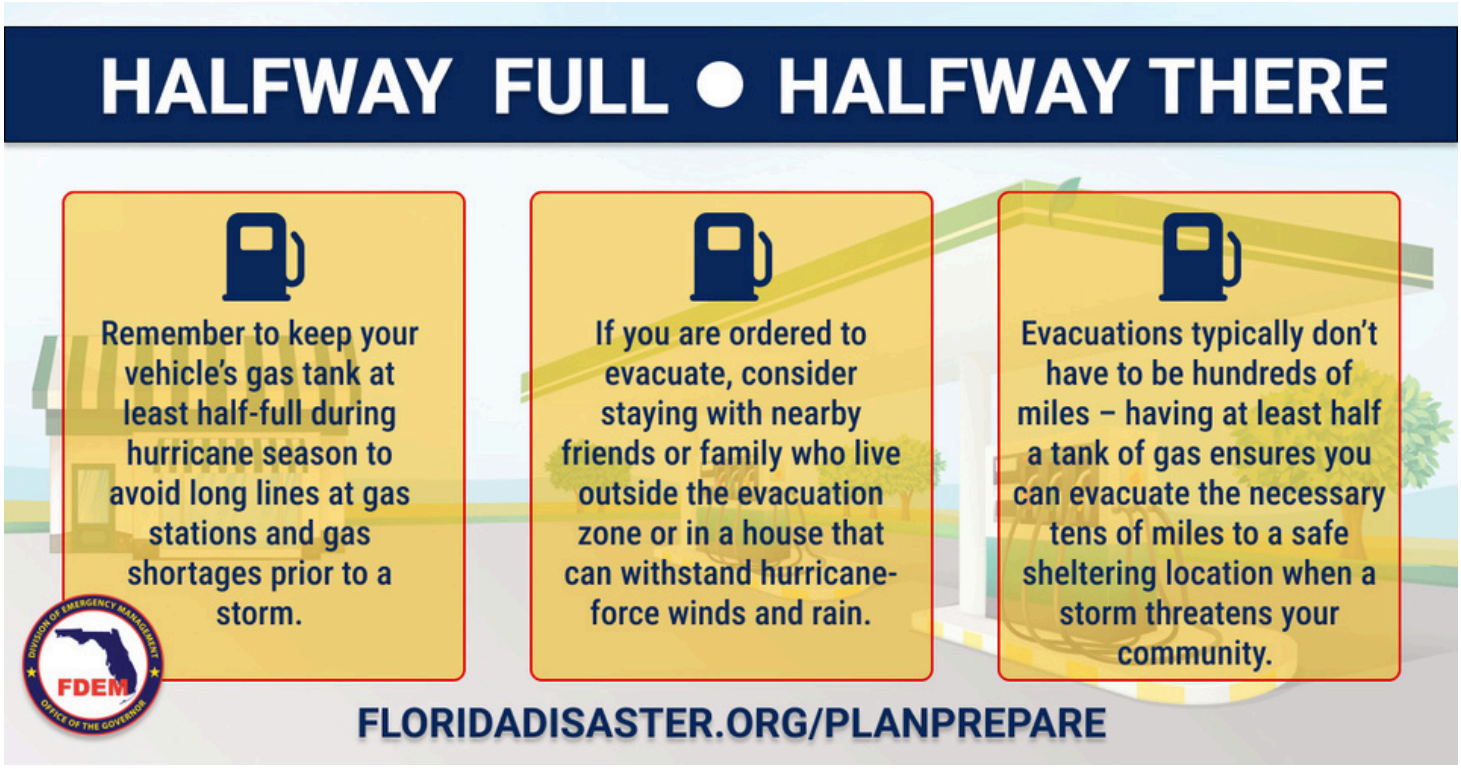
If an evacuation is ordered make sure you have several options and different locations you can seek refuge. Your evacuation options should include a number of different places you could stay that are located throughout the region and even out of state. Should a natural disaster suddenly turn for the worst, putting one of your evacuation options in harm's way, you could still have a safe place to go. Be sure to make a list of general population shelters, homes of friends, family or even a private caregiver whose facility you could use in case of an mandatory evacuation. Reach out to family or friends who are unlikely to be evacuated from their homes and obtain their commitment to share their homes with you. This list should also include the emergency contact numbers and addresses for all your evacuation options for easy reference when you need the information most.

## Map Your Evacuation Routes

Once you have determined your geographically varied evacuation locations, map out how you or your agreed transporter could get to each location. Keep in mind all of the obstacles that might come along with travel during an emergency such as traffic, weather conditions, road closures, down power lines and other obstructions. While you cannot predict where these incidents or travel hazards might occur, your evacuation routes should provide several other options should your evacuation be jeopardized.

## If You're Halfway Full, You're Halfway There

Residents and visitors should keep their gas tanks at least half full during hurricane season to ensure they have enough fuel to evacuate as soon as possible without worrying about long lines at gas stations and to avoid gas shortages prior to a storm.



For Floridians with electric vehicles, it's recommended that the battery be maintained between 50% - 80% capacity at all times, depending on the type of vehicle and what the vehicle's manual recommends. This does not require charging every night but will still ensure that individuals and families have enough charge in their vehicles to evacuate safely and quickly when needed.

Additionally, individuals should always keep an emergency kit in their vehicles in case a storm threatens the area and causes hazardous driving conditions.

Vehicle emergency supply kits can include items such as jumper cables, a spare tire, a flashlight with extra batteries, reflective triangles, a first aid kit, electronic device chargers, blankets, and rain ponchos. More information can be found at Ready.gov/Car.

## Share Your Evacuation Plans

Whether it be a family member, friend, caregiver or doctor, make sure several people are aware of your evacuation plans should an emergency happen. Give these plans to your Personal Support network and those who would be assisting you or concerned for your safety.

## Will You Need Special Assistance to Evacuate?

As part of your emergency preparation, all Floridians with disabilities/special needs should consider conducting a personal assessment of their daily activities to determine if special assistance to evacuate their homes is necessary. Do you need assistance leaving your home or office? Will you be able to evacuate independently without relying on an auditory alert? Are there other options for you to leave your home or office if the elevator no longer is in service? Would you be able to relocate if your mobility aid suddenly malfunctions?

If you are uncertain about answers to any of these questions, it is vital you call your local emergency management office and see if you are eligible to sign-up for the special needs registry. Preregistration to this service is invaluable. Do not wait until a disaster is imminent to find out what your options are - even if you think you would only use it as a last resort.

## Transportation Arrangements

If you are not capable of driving yourself, it is necessary that you make arrangements for transportation well in advance of a disaster situation. If family, friends, neighbors or other caregivers agree to transport you, make sure they can accommodate any supplies you might need to take with you.

## When to Safely Shelter in Place

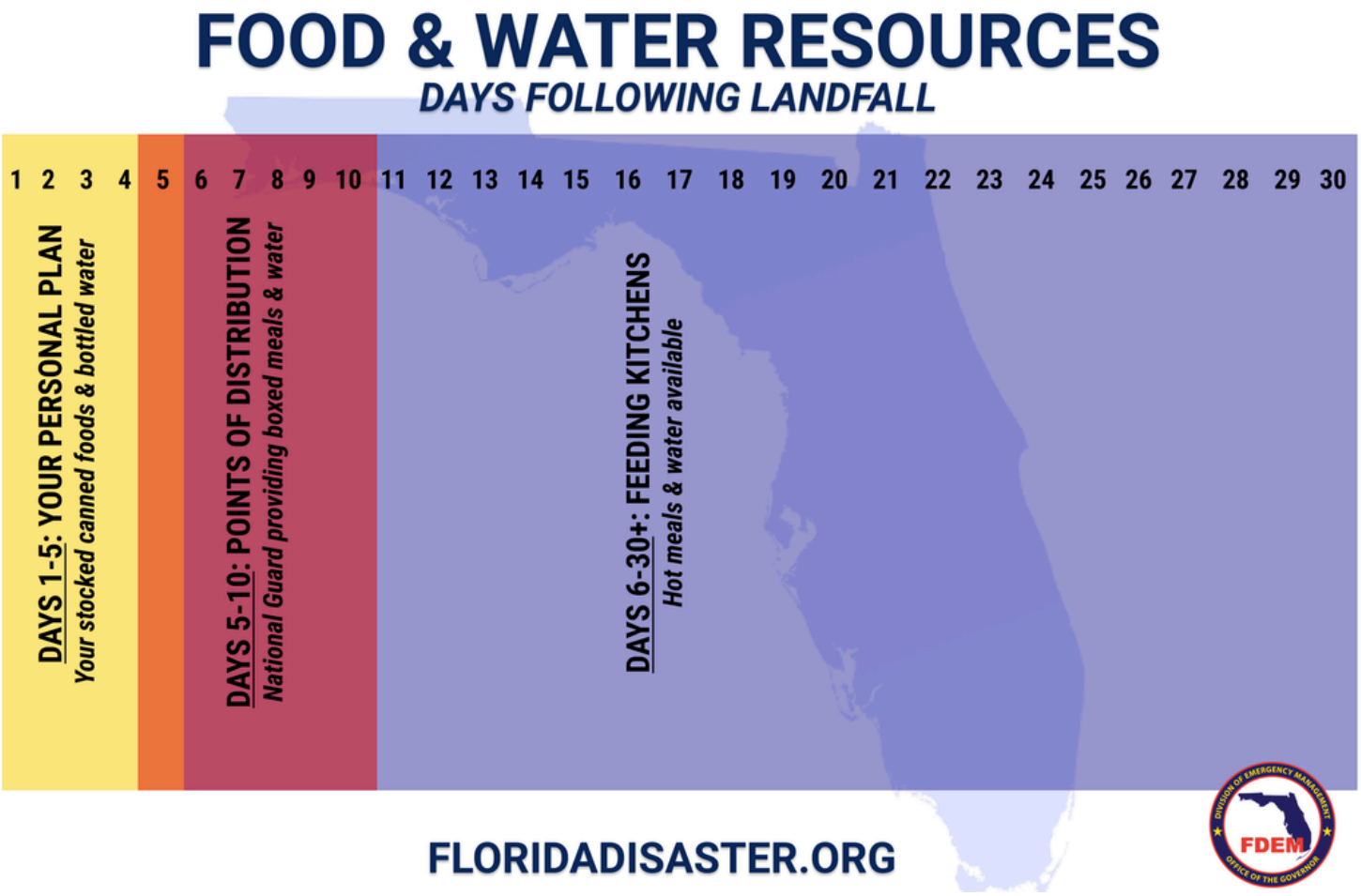
If your home is not located in an evacuation zone, you may be able to shelter at home during a storm. The newer the home is in relation to Florida Building Code (2002 or newer), the more resistant the home may be to hurricanes – as long as the exterior systems (Roof, Hurricane Straps, Windows, Doors, Garage Door) are in proper condition.
Additionally, it very important that windows, doors and garage doors be impact resistant or have a protective covering (rated hurricane shutters, or properly secured 5/8" inch plywood) properly secured to the opening.

Oftentimes, emergencies or natural disasters can go from bad to worse very quickly. It is important to monitor the situation on radio or television news reports in the event an evacuation is ordered. If local authorities do order an evacuation, remember it is in your best interest to do so immediately. Visit the Evacuation and Shelters section of the website for important evacuation information.

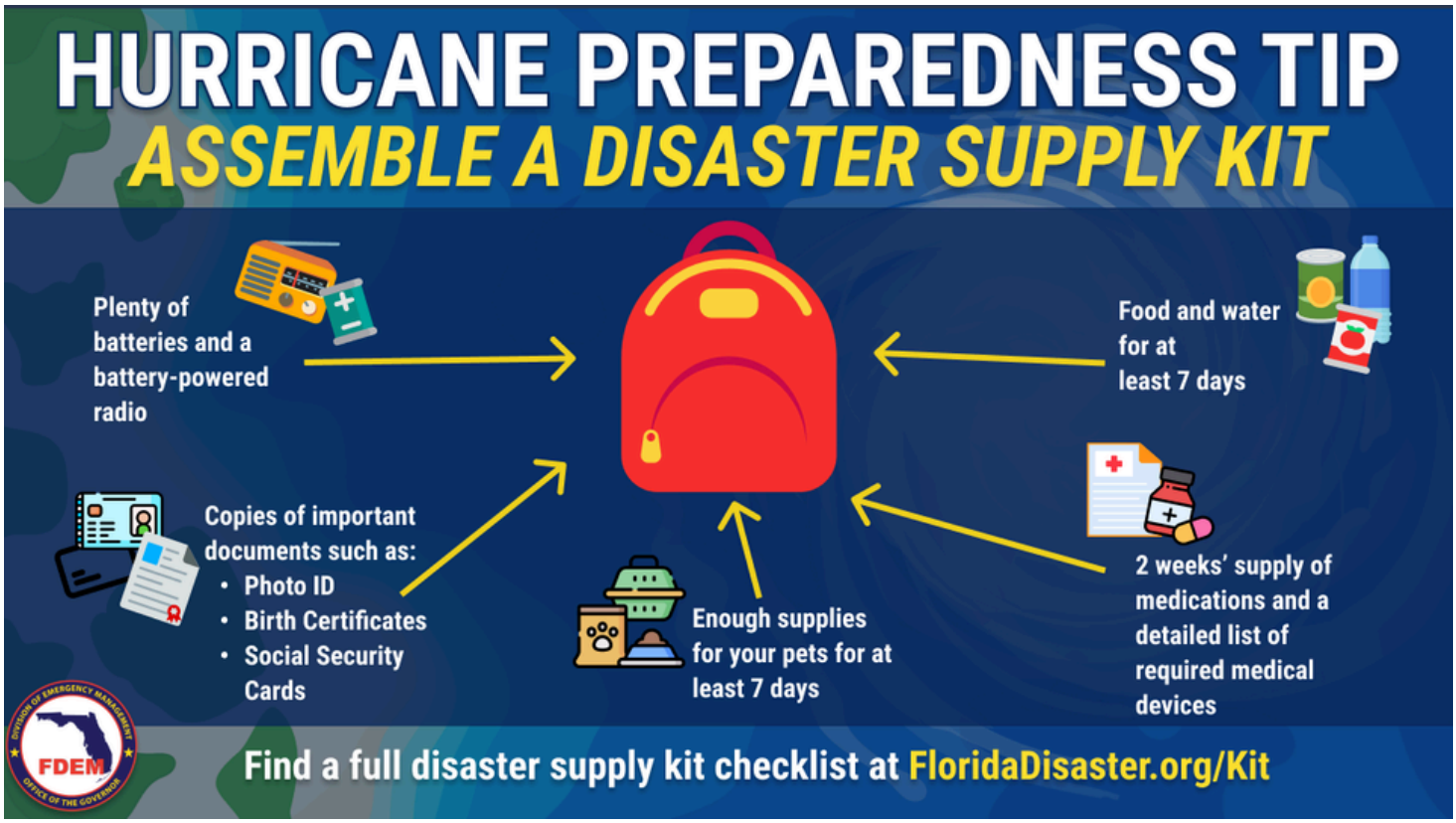
## Safety Tips

- Although your home can be a safe place to ride out an emergency, there are potential hidden dangers that may not be obvious on first glance
- If necessary, take refuge in an interior hallway or smaller room with no windows, such as a closet near load-bearing walls
- Keep a fire extinguisher nearby and only use hand cranked, solar powered or battery-operated lamps or flashlights
- Be sure to leave a clear path to exit in case of a fire
- If you need assistance getting out of your building and rely on an elevator, make sure you have a way to leave your home before you decide to shelter in-place
- Make sure there are other exits such as stairs, windows or ramps that you could use if the electricity goes out and the elevator does not work
- Have a list of personal contacts you could call on a cell phone that could help you evacuate if you need to leave your home or building and need assistance
- Prepare for several different types of disasters (fire, floods, hurricanes, acts of terrorism, etc.) and determine the safest place in your home for each emergency

Your Emergency Kit should be compatible for both in-place sheltering and evacuation. At a minimum, your kit should include all your daily necessities and basic resources that would allow you to live on your own for 3 to 7 days, until Points of Distribution and feeding partners are able to be set up.




In addition to basic items, residents should consider including various comfort items to make this time more comfortable for all members of your household, including children and pets. Consider items such as battery-operated fans, battery-operated forms of entertainment with pre-downloaded movies and shows, books, and pet-comfort items and toys. Residents should also ensure their supply kit includes not only non-perishable foods, but non-perishable foods and snacks enjoyed by all members of your household.


HURRICANE PREPAREDNESS TIP
ASSEMBLE A DISASTER SUPPLY KIT
Plenty of batteries and a battery-powered radio
Food and water for at least 7 days
Copies of important documents such as:
• Photo ID
• Birth Certificates
• Social Security Cards
Enough supplies for your pets for at least 7 days
2 weeks' supply of medications and a detailed list of required medical devices
FDEM
Find a full disaster supply kit checklist at FloridaDisaster.org/Kit

BUILD YOUR OWN EMERGENCY BACKPACK
Change of clothes
Water Bottle
Book or Puzzle
Energy Bars
Toothbrush & Toothpaste
Sturdy shoes
Mobile phone & charger
Extra batteries
Flashlight
Electronic Devices
Small toy or stuffed animal
FDEM
FLORIDADISASTER.ORG/PLANPREPARE

# DISASTER SUPPLY KIT CHECKLIST

## General

- ☐ Two week minimum supply of medication, regularly used medical supplies, and a list of allergies
- ☐ A list of the style, serial number, and manufacturer information of required medical devices
- ☐ Batteries
- ☐ Flashlights
  *Do not use candles*
- ☐ NOAA Weather Radio
  *Battery operated or hand cranked*
- ☐ Cash
  *Banks and ATMs may not be available after a storm*
- ☐ Cell phone chargers
- ☐ Books, games, puzzles or other activities for children

## Phone Numbers

- ☐ Maintain a list of important phone numbers including:
  *County emergency management office, evacuation sites, doctors, banks, schools, veterinarian, a number for out of town contacts, friends and family*

## Clothing

- ☐ Rain gear such as jackets, hats, umbrellas and rain boots
- ☐ Sturdy shoes or boots and work gloves

## Special Needs Items

- ☐ Specialty items for infants, small children, the elderly, and family members with disabilities

## First Aid

- ☐ First Aid Manual
- ☐ Sterile adhesive bandages of different sizes
- ☐ Sterile gauze pads
- ☐ Hypoallergenic adhesive tape
- ☐ Triangular bandages
- ☐ Scissors
- ☐ Tweezers
- ☐ Sewing needle
- ☐ Moistened towellettes
- ☐ Antiseptic
- ☐ Disinfectant wipes
- ☐ Hand sanitizer
- ☐ Thermometer
- ☐ Tube of petroleum jelly
- ☐ Safety pins
- ☐ Soap
- ☐ Latex gloves
- ☐ Sunscreen
- ☐ Aspirin or other pain reliever
- ☐ Anti-diarrheal medicine
- ☐ Antacid
- ☐ Laxative
- ☐ Cotton balls
- ☐ Q-tips

## Food and Water

- ☐ Food
  *Nonperishable packaged or canned food and beverages, snack foods, juices, baby food, and any special dietary items to last at least 7 days*
- ☐ Water
  *1 gallon per person per day*
- ☐ Non-electric can opener
- ☐ Paper plates
- ☐ Napkins
- ☐ Plastic cups
- ☐ Utensils

## Important Documents

- ☐ Insurance cards
- ☐ Medical records
- ☐ Banking information
- ☐ Credit card numbers
- ☐ Copies of social security cards
- ☐ Copies of birth and/or marriage certificates
- ☐ Other personal documents
- ☐ Set of car, house, and office keys
- ☐ Service animal I.D., veterinary records, and proof of ownership
- ☐ Information about where you receive medication, the name of the drug, and dosage
- ☐ Copy of Will

**Items should be kept in a water proof container*

## Vehicle

- ☐ Keep your motor vehicle tanks filled with gasoline

## Pet Care Items

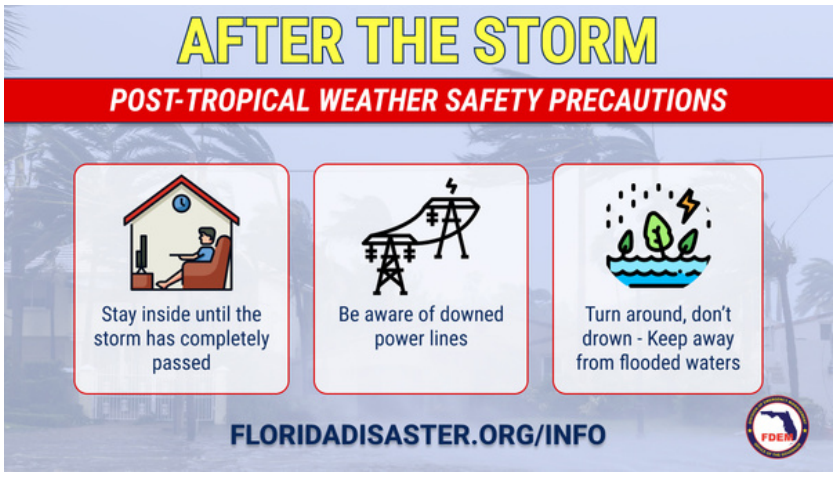
- ☐ Pet food and water to last at least 7 days
- ☐ Proper identification
- ☐ Medical records/microchip information
- ☐ A carrier or cage
- ☐ Muzzle and leash
- ☐ Water and food bowls
- ☐ Medications
- ☐ Supplies for your service animal

Find more disaster preparedness tips at FloridaDisaster.org

# WHAT TO DO AFTER A HURRICANE

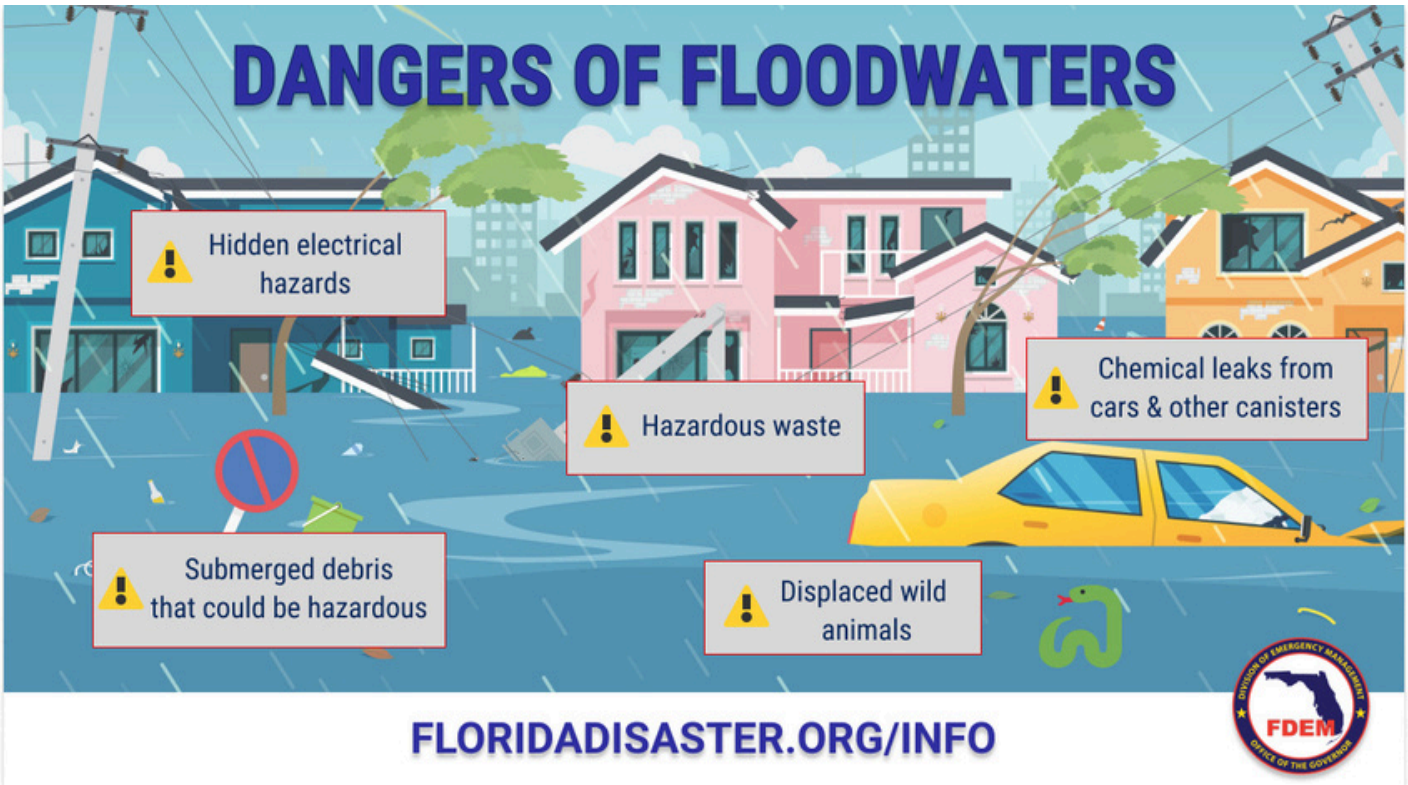
## Stay Inside Until the Storm has Completely Passed

Do not attempt to go outside until the winds have calmed and local officials have deemed that the threat has passed. There will be more debris in the area that could pose a threat if you go outside before the storm has passed.




## Stay Out of Floodwaters

- Never drive through flooded roadways. Nearly half of all people killed in floods are those who try driving through flooded areas.
- Do not drive around barricades, they are there for your protection.
- Never try to walk through or allow children to play around flood water.
- Throw out food that has come into contact with the floodwater and boil drinking water before using it.
- Stay out of buildings that remain in flood waters.
- Do not handle live electrical equipment in wet areas.
- Report broken utilities to the correct authorities.



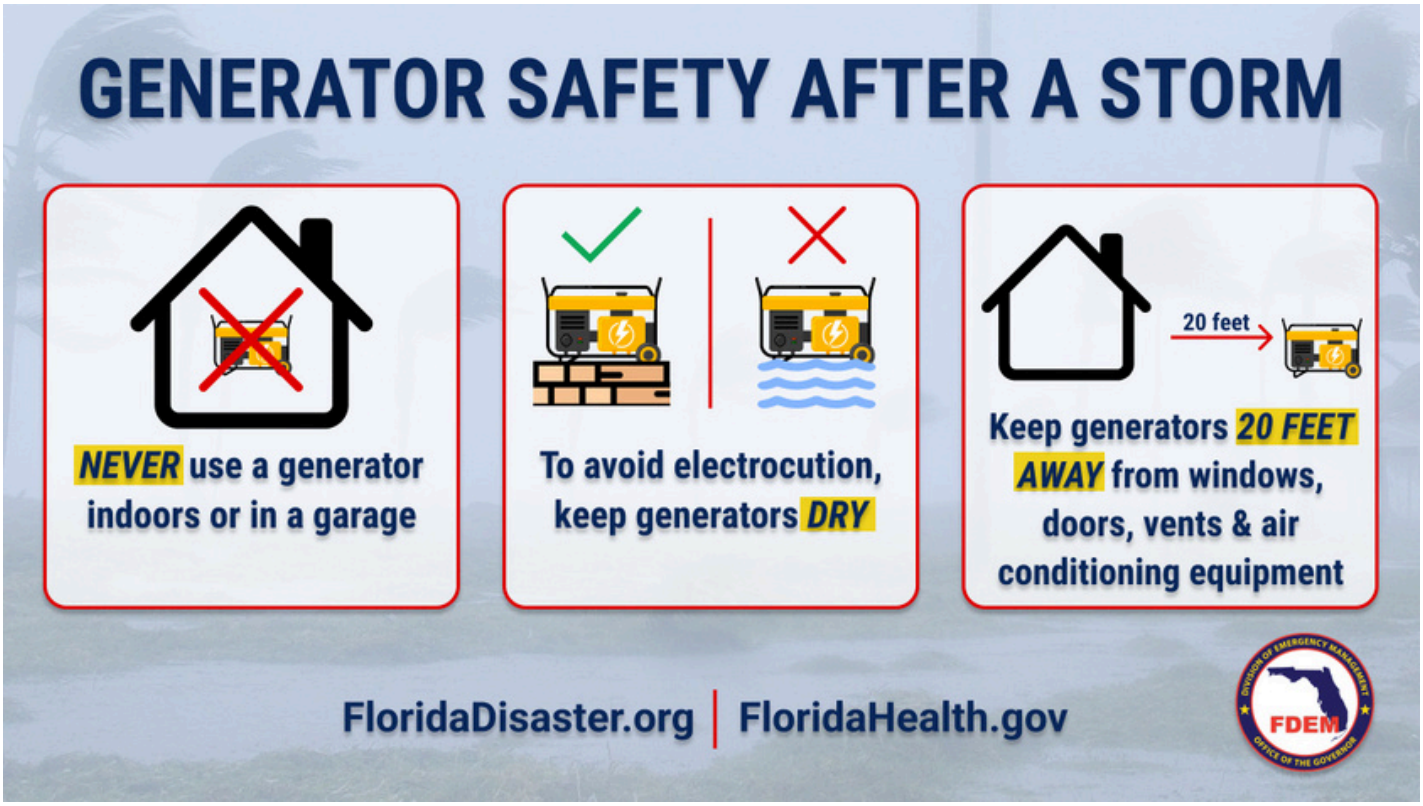
## Never Use a Wet Electrical Device

- Turn off the power at the main breaker in your house if the device is still plugged in. Wait for an electrician to check the device before using it.

## If the Power is Out, Use Flashlights Instead of Candles

- If you have to use candles, keep them away from anything that can catch fire. Always stay near lit candles.
- Keep a fire extinguisher handy, and make sure your family knows how to use it. Read the National Fire Protection Association's tips for using fire extinguishers.

## Practice Generator Safety




Fuel-burning equipment creates carbon monoxide (CO). This can include equipment like generators, pressure washers, charcoal grills, and camp stoves. You can't smell or see carbon monoxide, but if it builds up in your home, it can cause sudden illness and death.

Never use portable gasoline or coal-burning equipment or camp stoves inside your home, basement or garage. Keep it outside and at least 20 feet from any window, door or vent.

Use a battery-operated or battery-backup CO detector any time you use a generator or anything else that burns fuel. If you have a CO detector and it starts beeping, leave your home right away and call 911.

## Be Careful Near Damaged Buildings

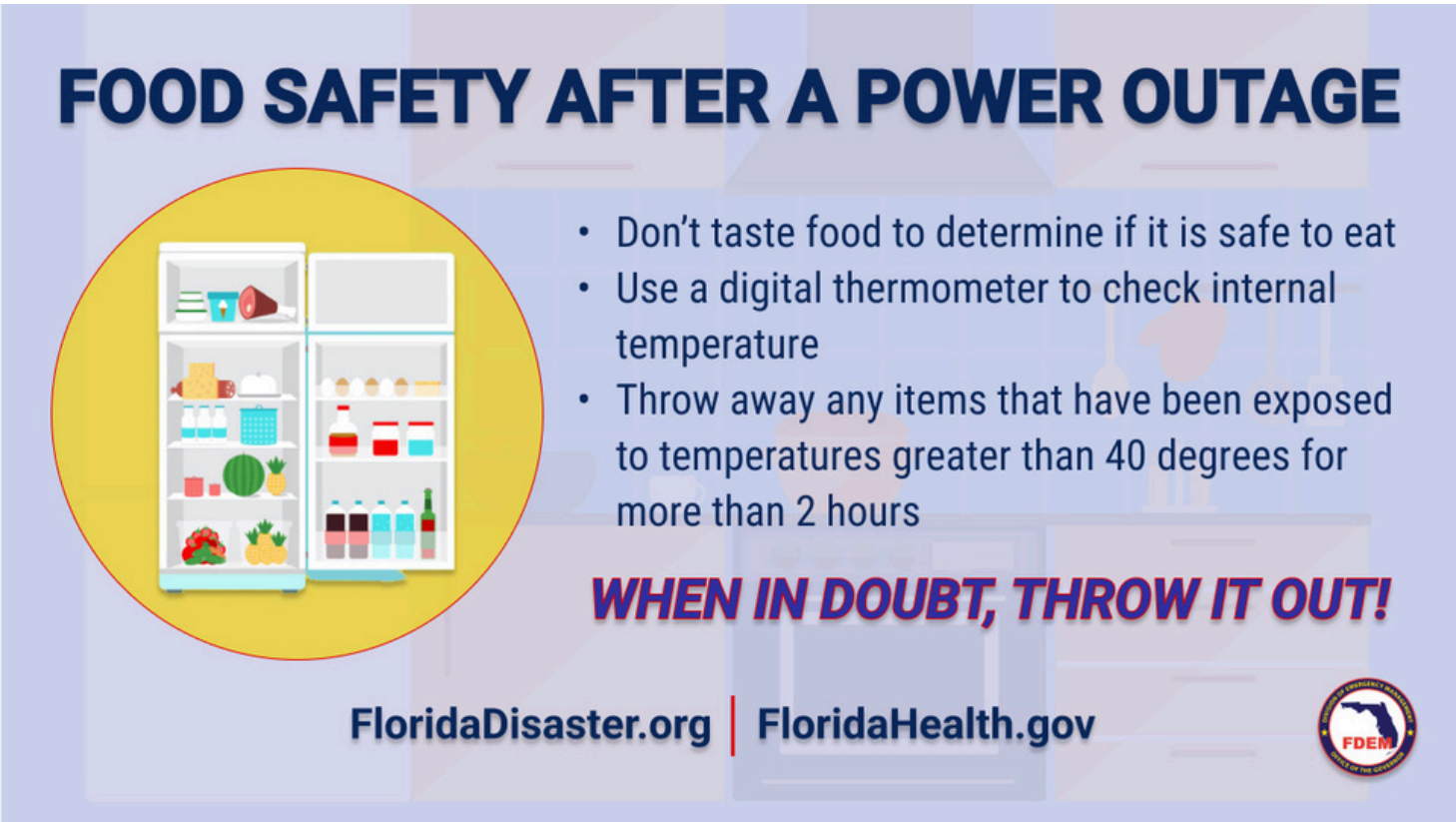
- Do not enter a damaged building until local authorities determine it is safe. Hurricanes can damage buildings and make them unsafe.
- Leave your home or building if you hear shifting or unusual noises. Strange noises could mean the building is about to fall.

## Stay Away from Power Lines

- Watch out for fallen power lines that may be hanging overhead.
- Stay clear of fallen power lines. Call the electric company to report them.

## Protect Yourself from Animals and Pests

- Use insect repellent (bug spray) with DEET or picaridin. Wear long sleeves, pants and socks when you're outside.
- Do not let yourself or your pets come into contact with wild or stray animals after a storm. Call 911 or your public health department to report them.
- Report dead animals to local officials.




## Drink Safe Water and Food

- Throw away food that may have come in contact with flood or storm water. Unsafe food can make you sick even if it looks, smells and tastes normal. Throw away perishable foods that have not been refrigerated properly due to power outages; also discard foods with an unusual odor, color or texture. When in doubt, throw it out.
- Listen to reports from local officials for advice on water precautions in your home. Do not use water you suspect or have been told is contaminated to make baby formula, make ice, brush your teeth, wash and prepare food, wash your hands, or wash dishes.
- Bottled, boiled or treated water are safe for drinking, cooking and personal hygiene. Your state, tribal, local, or territorial health department can make specific recommendations for boiling or treating water in your area.

## Take Care of Your Mental Health

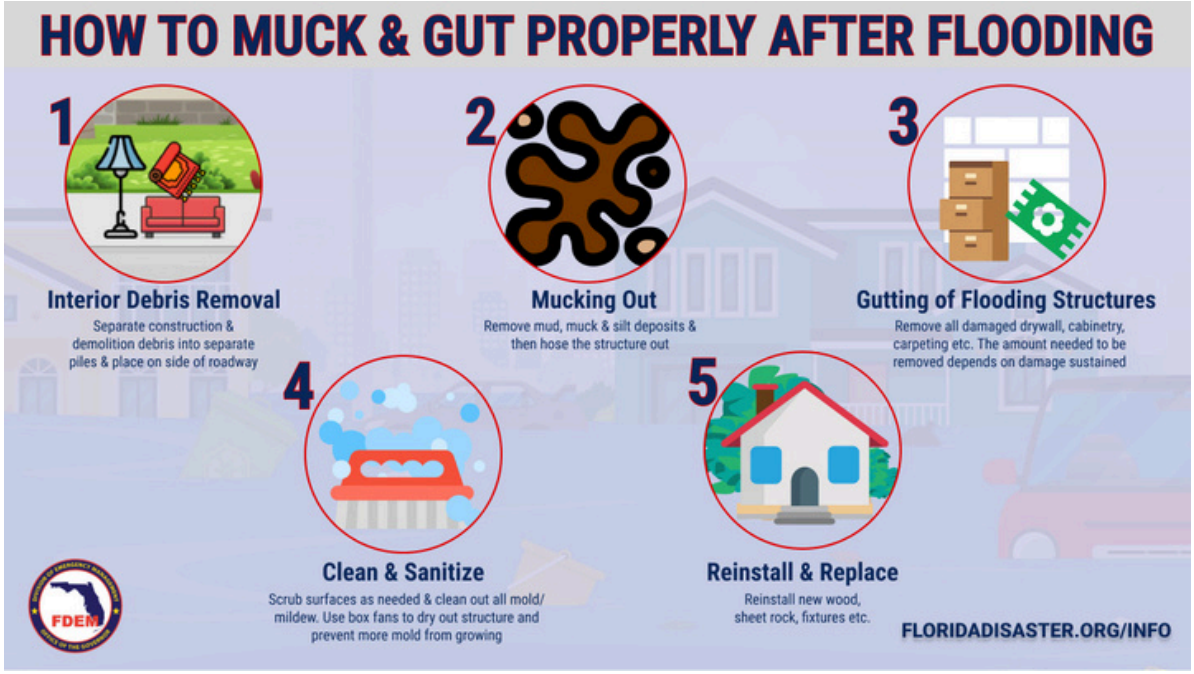
During and after a hurricane, it is natural to experience different and strong emotions. Coping with these feelings and getting help when you need it will help you, your family, and your community recover from a disaster.

- Connect with family, friends and others in your community.
- Take care of yourself and each other, and know when and how to seek help.

# CLEAN UP YOUR HOME SAFELY

Take steps to protect yourself and your loved ones during cleanup after a hurricane.

Mucking and gutting is the first step in the rebuilding process after a flood. This phase of construction consists of removing damaged belongings and prepping the home for mold treatment. The muck and gut process presents a set of health hazards, so protecting oneself against potential injuries or illnesses is extremely important. This guide provides a step-by-step overview of mucking and gutting and explains how to prepare the home and how to protect yourself.




## Materials Needed:

| | | | |
|---|---|---|---|
| Respirators | Tyvek Suits | Hammers | Crowbar/Pry-bar |
| Safety Goggles | Boots | Water | Tile Chisel |
| Hard Hats | Shovels | Duct Tape | Floor Scraper |
| Nitrile Gloves | Hand Sanitizer | Clorox Wipes | Contractor Garbage Bags |
| Leather Work Gloves | Wheelbarrows | Sledge Hammer | Utility Knives |

## Before You Begin:

- Make sure the homeowner has taken pictures of all damages before beginning work. These will be helpful for any future FEMA or insurance claims.
- Ensure that electricity and gas are shut off to the property.
- It may be helpful to also turn off the water to the home. This will prevent possible further water damage from incidentally damaged pipes during gutting.
- Make sure the home is safe to enter. Inspect the roof and exterior for damage that could compromise the structural integrity of the home.
- Before you enter the home, ensure you are wearing a respirator, protective suit, goggles, and gloves.

## Safety Notes:

- Wearing protective equipment is essential for the safety of anyone inside the home as mold spores can stick to clothing.
- Toxins and contaminants in the mud leftover from floodwaters can be extremely harmful, especially to children and the elderly, and result in serious illness. When finished, thoroughly wash all clothes worn during this process.
- Protect open wounds or scrapes. If injured during the process, immediately clean and cover the wound.
- Watch out for animals such as snakes when removing items from the home.

## Step 1 – Cleaning

- Clear out the home. For homeowners mucking and gutting their own homes - if any of your belongings were affected by floodwaters, remove them from the home. Toxins and contaminants in floodwaters are often very harmful, and wet items can quickly become moldy.
- Damaged items should be separated by material type. Ex. Furniture in one pile, electronics in another, drywall and insulation in another.
- Personal belongings affected by floodwaters must be removed from the home.
- DO NOT open the refrigerator - there might be toxins or contaminants from the floodwater inside. Tape or tie shut and place on curb.
- Place smaller items in contractor trash bags. Tape the bag shut and place beside curb.
- Both volunteers and homeowners should set aside any medical equipment or insured items, so that these items may be claimed as a loss.

## Step 2 - Mucking

- Begin mucking: Use a flat shovel to remove as much mud and debris as possible. This will reduce the chance of slipping and make it safer to move around the home.

## Step 3 - Gutting

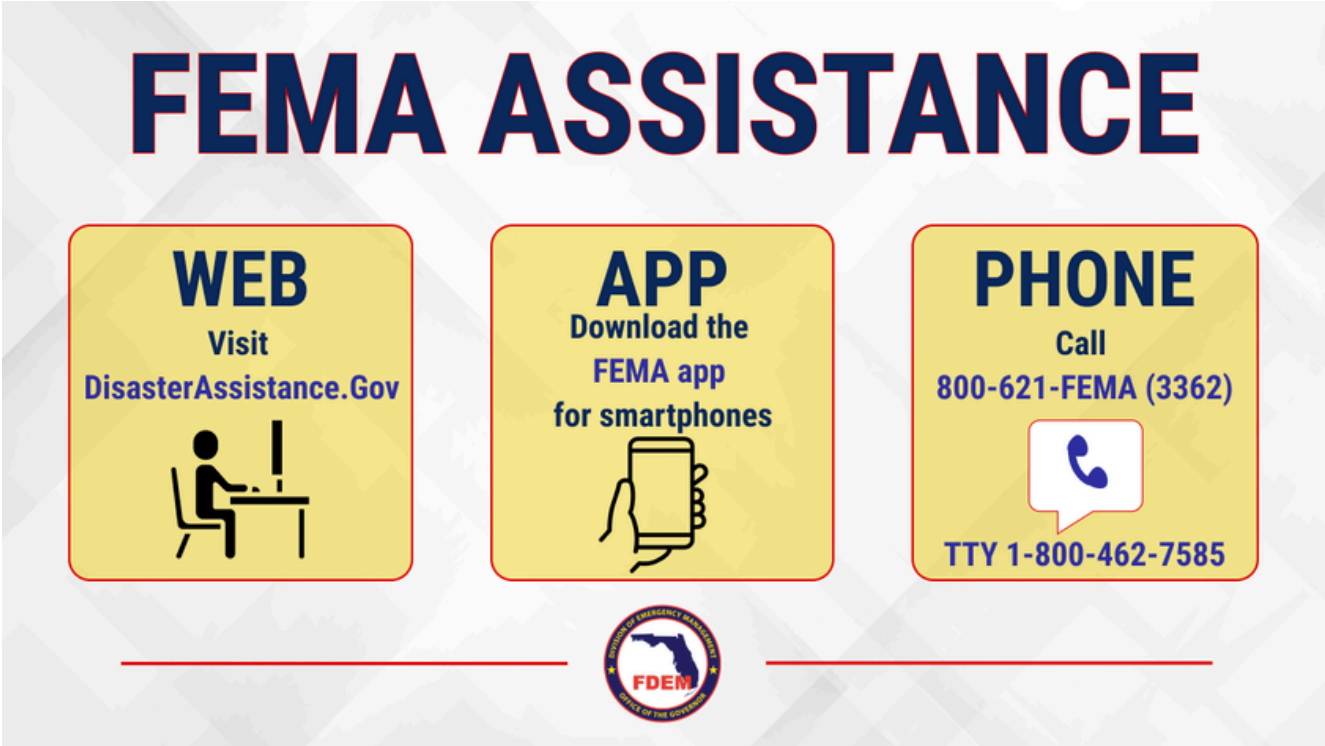
- Remove affected baseboard, door trim, door casings, and doors from the home. Use a pry bar to wedge trim away from wall, and be mindful of exposed nails. Look for the waterline. This will serve as an initial point of reference when removing drywall.
- Remove drywall. If the home received below 4' of flooding, remove 4' of drywall - this will make the installation of new drywall much easier.
- Much like paper towel, water travels up drywall. Remove drywall at least 2' above the water line. If drywall is still damp, continue to remove further above the waterline.

**REMINDER**

**Take frequent breaks and drink plenty of water. This work can be extremely physical and very hot, so be sure to monitor peers for signs of heat exhaustion and fatigue.**

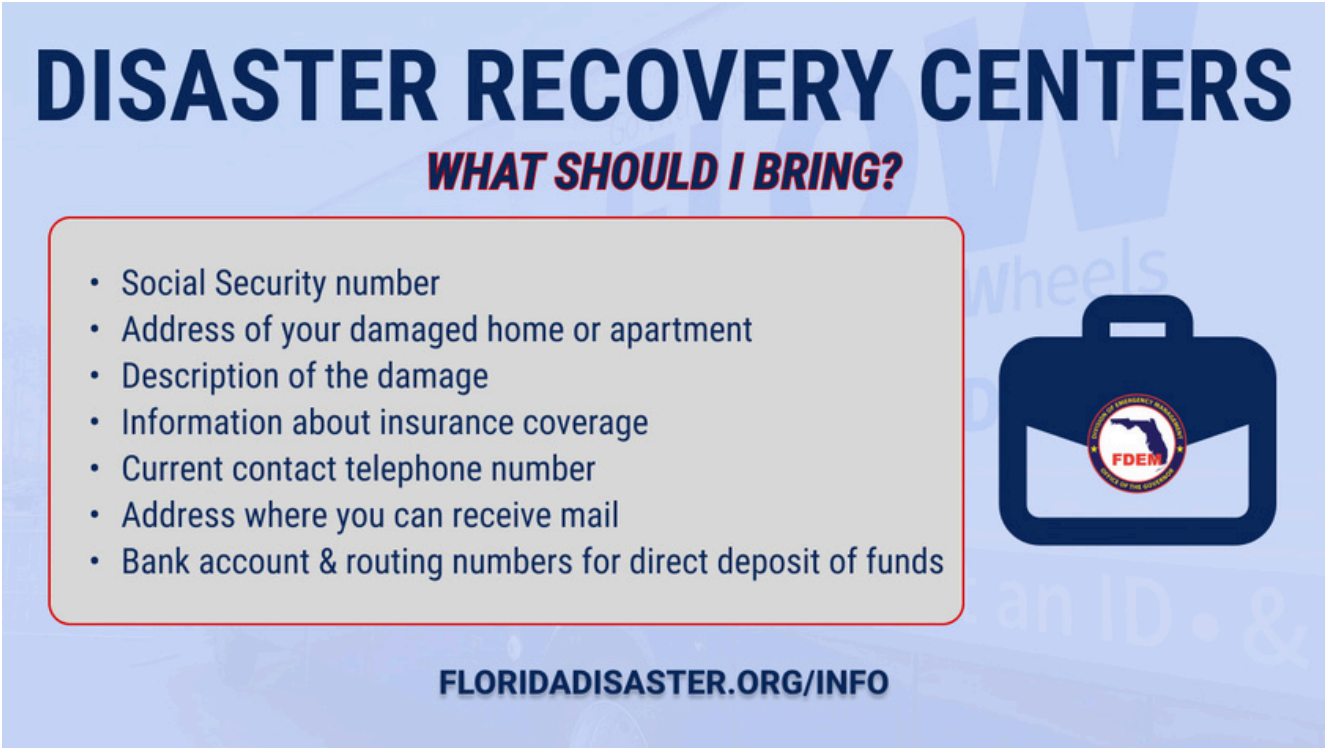
- Once the drywall is removed, assess the spread of mold. Mold growth higher than the water line will necessitate the removal of more drywall. Use a hammer to punch a hole in the wall to inspect the extent of mold growth.
- Remove insulation and place in contractor trash bags. Place bags on curbside. Insulation can be very irritating to the skin, eyes and throat if proper protective equipment is not worn.
- Remove cabinets and vanities from the home. Be sure the water and gas to any appliances or fixtures are cut off before attempting to remove. If you are unsure or do not feel comfortable doing so, contact a licensed plumber to ensure fixtures are disconnected properly.
- Most ceramic tile flooring will not need to be removed. Inspect grout lines to ensure no cracks or openings are present, as mold can grow in these spaces and underneath tiles. If you are unsure if the tile was affected, remove an edge tile to see if moisture is present underneath it.
- Remove all nails/screws from exposed framing. This will make mold treatment much easier and safer. Be mindful when disposing of these and any items with exposed nails or screws.
- Use the floor scraper to remove any remaining debris or damaged flooring.

# APPLYING FOR FEMA ASSISTANCE




Depending on the Disaster Declaration, you may be able to apply for FEMA Assistance. There are several ways to apply:

- Online at DisasterAssistance.gov
- Use the FEMA mobile app.
- Call FEMA at 800-621-3362 24 hours a day, seven days a week. Multilingual operators are available. If you use a relay service, such as video relay service (VRS), captioned telephone service or others, give FEMA the number for that service.
- Temporary FEMA disaster recovery centers may open in hurricane-effected areas. Check the FEMA App or visit the FEMA DRC Locator to find the locations and hours of operation.



# PREPAREDNESS CHECKLIST

All Floridians need to take a few basic steps to plan for their personal/family needs and protection in the event of a disaster or emergency.

## ☐ Form Your Personal Support Network

__Give at least one trusted member of your Personal Support Network a key to your house or apartment
__Show members of your support group where you store your emergency kit and run through what is included
__Arrange for more than one person in your Personal Support Network to check on you in an emergency

## ☐ Complete a Personal Assessment

__Make a list of your personal needs and your resources for meeting them in a disaster environment. Consider the following:
__*How will I receive emergency alerts and warnings?*
__*What is my shelter plan?*
__*What is my evacuation route?*
__*What is my family/household communication plan?*

## ☐ Get Educated, Get Informed

__Know the specific hazards that threaten your community (hurricanes, tornadoes, wildfires, etc.)
__Learn about community disaster plans and community warning systems
__Learn your community's evacuation routes

## ☐ Prepare an Emergency Kit

__Stock enough supplies to last every individual in your home at least 7 days
__Include items for your pets in your emergency kit
__Dont forget to include nonperishable food, water, batteries, and medications

## ☐ Make a Plan for Your Pets

__ Include medications, vet paperwork, collars with ID tags, and sturdy leashes in your kit
__ Don't forget to pack your pet's favorite toys and comfort items
__ NEVER leave your pets behind

## ☐ Utilities

__ Know how and when to turn off water, gas and electricity at the main switches and valves
__ Keep any tools you will need near gas and water shut-off valves
__ Turn off utilities only if you suspect lines are damaged or if local officials instruct you to do so

## Safety Devices

__Be sure everyone in the household knows where your fire extinguishers are located and how to use them
__Install smoke alarms on every level of your home, especially near the bedrooms
__Several times a year, test your smoke alarms to ensure they are working properly

## Insurance Coverage

__Check with your insurance agent or carrier to make sure you have adequate insurance coverage

## Important Records & Documents

__ Keep copies of important family records and other documents (birth and marriage certificates, Social Security cards, passports, wills, deeds, financial, insurance, medical/immunization records and copies of current bills) in a safe deposit box or other safe location

## First Aid/CPR & AED

__ Take first aid and CPR/AED classes

## Inventory Home Possessions

__Make a record of your possessions - in writing or video - to help you claim reimbursement in case of loss or damage

## Reduce Home Hazards

__Have defective electrical wiring and leaky gas connections repaired
__Place large, heavy objects on lower shelves
__Hang pictures and mirrors away from beds
__Have cracks in ceilings and foundations repaired

## Considerations for People with Disabilities/Special Needs

__ Contact your physician to discuss emergency planning
__ Know how to connect and start a back-up power supply for essential medical equipment
__ If you use an electric wheelchair or scooter, have a manual wheelchair as a back-up
__ Label medical equipment, assistive devices and any other necessary equipment and attach laminated instructions for equipment use. Also include your identification information
__ Store back-up equipment (mobility, medical, etc.) at an alternate location (friend's, family member's, neighbor's or caregiver's home, school or workplace)
__ If you have visual/sensory disabilities, plan for someone to convey essential emergency information to you if you are unable to use the television or radio

__If you use a personal care attendant from a home healthcare agency, check to see if the agency has special provisions for emergencies (i.e. providing services at another location should an evacuation be ordered)

__If you live in an apartment, ask the management to identify and mark accessible exits and access to all areas designated for emergency shelter or safe rooms

__Have a cell phone with an extra battery

__Learn about devices and other technology available to assist you in receiving emergency instructions and warnings from local officials

__Consider getting a medical alert system that will allow you to call for help if you are immobilized in an emergency