



HURRICANE PREPAREDNESS INFORMATION PROVIDED BY THE GULF COAST CENTER 2010 HURRICANE SEASON

Hurricane

A hurricane is a type of tropical cyclone, the generic term for a low pressure system that generally forms in the tropics. A typical cyclone is accompanied by thunderstorms, and in the Northern Hemisphere, a counterclockwise circulation of winds near the earth's surface. All Atlantic and Gulf of Mexico coastal areas are subject to hurricanes or tropical storms. Parts of the Southwest United States and the Pacific Coast experience heavy rains and floods each year from hurricanes spawned off Mexico. The Atlantic hurricane season lasts from June to November, with the peak season from mid-August to late October.

Hurricanes can cause catastrophic damage to coastlines and several hundred miles inland. Winds can exceed 155 miles per hour. Hurricanes and tropical storms can also spawn tornadoes and microbursts, create storm surges along the coast, and cause extensive damage from heavy rainfall. As shown on the Saffir-Simpson Hurricane Scale chart below, hurricanes are classified into five categories based on their wind speed, central pressure, and damage potential. Category Three and higher hurricanes are considered major hurricanes, though Categories One and Two are still extremely dangerous and warrant your full attention.

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 crafts, 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

Hurricanes can produce widespread torrential rains; resulting in deadly and destructive flooding. Slow moving storms and tropical storms moving into mountainous regions tend to produce especially heavy rain. Excessive rain can trigger landslides or mud slides, especially in mountainous regions. Flash flooding can occur due to intense rainfall. Flooding on rivers and streams may persist for several days or more after the storm. Between 1970 and 1999, more people lost their lives from freshwater inland flooding associated with land falling tropical cyclones than from any other weather hazard related to tropical cyclones.

Hurricane: Know the Terms

Every resident on the Texas Gulf Coast is at risk of a Hurricane; and as such, should familiarize themselves with the following terms to help identify a hurricane hazard and respond accordingly. These are the same terms that weather forecasters, television news, and newspapers will use in describing the Hurricane situation.

- **Tropical Depression**
An organized system of clouds and thunderstorms with a defined surface circulation and maximum sustained winds of 38 MPH (33 knots) or less. Sustained winds are defined as one-minute average wind measured at about 33 ft (10 meters) above the surface.
- **Tropical Storm**
An organized system of strong thunderstorms with a defined surface circulation and maximum sustained winds of 39–73 MPH (34–63 knots).
- **Hurricane**
An intense tropical weather system of strong thunderstorms with a well-defined surface circulation and maximum sustained winds of 74 MPH (64 knots) or higher.
- **Storm Surge**
A dome of water pushed onshore by hurricane and tropical storm winds. Storm surges can reach 25 feet high and be 50–1000 miles wide.
- **Storm Tide**
A combination of storm surge and the normal tide (i.e., a 15-foot storm surge combined with a 2-foot normal high tide over the mean sea level created a 17-foot storm tide).
- **Hurricane/Tropical Storm Watch**
Hurricane/tropical storm conditions are possible in the specified area, usually within 36 hours. Tune in to NOAA Weather Radio, commercial radio, or television for information.
- **Hurricane/Tropical Storm Warning**
Hurricane/tropical storm conditions are expected in the specified area, usually within 24 hours.
- **Short Term Watches and Warnings**
These warnings provide detailed information about specific hurricane threats, such as flash floods and tornadoes.

Disaster Supply Kit Checklist

The following is a recommended listing of basic disaster supplies that individuals and families should consider placing in their disaster supply kit. These are not the only items individuals and families should include in their disaster supply kit. Individuals and families should adjust accordingly for such things as projected needs, personal tastes, age, projected time away, and medical situations. Individuals should prepare for a minimum of 3 to 7 days; but should give consideration to possibly longer periods. All disaster supplies should be stored in a water-proof container; be easily accessible; and manageable – do not make it too heavy or large to where it cannot be easily carried or stored. Individuals and families should prepare their disaster supply kit at the start of the hurricane season, and maintain it through out the hurricane season period. Once your disaster supply kit is prepared, store it where it is easily accessible and known to all family members.

- Water – at least 1 gallon daily per person for 3 to 7 days
- Food – at least enough food for 3 to 7 days per person; and should include some of the following items below. Try and stay away from items that required a lot of cooking preparation, as space will be limited. As best as possible, add some variety – 3 to 7 days of the *same* thing will make it difficult to manage and will not be satisfying. And minimize the sweets, sodas, chocolates, chips – remember pretzels, dried fruits, raisins, and sugar free drink mixes.

Recommendations food related items include:

- non-perishable packaged or canned food / juices
 - foods for infants or the elderly
 - snack foods
 - non-electric can opener
 - cooking tools / fuel / matches or lighter
 - paper plates / plastic utensils
 - re-sealable storage bags
- Blankets / Pillows, etc. – a sleeping bag or bed roll is recommended
 - Clothing – seasonal / rain gear/ sturdy shoes; extra pairs of socks
 - First Aid Kit / Medicines / Prescription Drugs – remember to bring the actual prescription information such as the prescription bottle with the information. Also include your doctor’s name and contact information. And regularly check expiration dates and assure current.
 - Insect spray or wipes
 - Toiletries / Hygiene items / Moisture wipes – don’t forget toilet paper
 - Special Items as needed for family member such as babies, children, or the elderly – these may include diapers, walkers, hearing aids, or car seat or carrier. And remember to bring trash bags or containers to properly dispose of diapers and such
 - Flashlight and extra batteries – it is recommended that each family member have a flashlight; but at least assure that each adult family member has one flashlight – NO CANDLES
 - Radio – small, battery operated; and include extra batteries
 - Cash – small bills (ones and fives) and change are recommended; Banks and ATMs could be affected and not open or available for extended periods
 - Keys – maintain an extra set of all major keys; including house doors, cars, and locks
 - Toys, Books, and Games for all family members; and don’t forget a pad of paper and a pen or pencil. It is recommended that the toys be reasonable and not be noisy or disturbing to others.
 - Important documents in a waterproof container or watertight re-sealable plastic bag
 - insurance, medical records, bank account numbers, Social Security card, etc
 - photos of property, pets, vehicles, furniture
 - Keep a set of basic tools with you during the storm; such as a hammer, screwdriver, and pliers
 - Vehicle fuel tanks filled; and vehicle well maintained; and don’t forget the spare tire and tire tools – make sure they are in working order and accessible.
 - Pet care items
 - proper identification / immunization records / medications
 - ample supply of food and water
 - carrier or cage
 - muzzle and leash

Family Disaster Plan

Prepare a family disaster plan and assure that all family members know it. Your family disaster plan should outline what you will do in the event of a hurricane emergency, including before, during and after the hurricane; what will happen in the event you are separated; and how you will contact each other. Once the family disaster plan is in place, and everyone knows it; do not deviate or change it without assuring everyone knows and understands. Your family disaster plan should address some of the following:

- Know your home's vulnerability to storm surge, flooding and wind. If your home will not sustain the winds and rains of a hurricane or if you are at risk of flooding or storm – do not stay there: evacuate as instructed by your local officials.

- ☑ Locate a safe room or the safest areas in your home for each hurricane hazard. In certain circumstances the safest areas may not be your home but within your community.
- ☑ Determine escape routes from your home and places to meet. These should be measured in tens of miles rather than hundreds of miles. And assure you have alternate routes – for instance if you cannot go north, which road will you go south on?
- ☑ Have an out-of-state friend or family member as contact, so all your family members have a single point of contact.
- ☑ Make a plan now for what to do with your pets if you need to evacuate. Do not leave your pets at home and then call the police or fire department to come take care of them.
- ☑ Post emergency telephone numbers by your phones and make sure your children know how and when to call 911.
- ☑ Check your insurance coverage - flood damage is not usually covered by homeowners insurance. Assure your insurance papers and your insurance agent's phone numbers are included in your disaster supply kit.
- ☑ Stock non-perishable emergency supplies and a Disaster Supply Kit. Make sure that the kit and supplies are readily accessible, and easy to carry and store.
- ☑ Consider purchasing an approved weather radio; but for sure have at least one portable radio with both AM and FM station access. And remember to replace the batteries every 6 months, as you do with your smoke detectors.
- ☑ Consider taking a First Aid, CPR and disaster preparedness classes; or consider volunteering for your local Medical Reserve Corps (contact your local health district for more information on that)
- ☑ Assign responsibilities, and give some responsibilities to all family members including, as possible, children. This will assist in the education and support of the plan.

Having a Place to Go

Develop a family hurricane preparedness plan BEFORE an actual storm threatens your area. You cannot wait until a few days before a hurricane is projected to make landfall to do this. If your family hurricane preparedness plan includes evacuation to a safer location for any of the reasons specified with in this web site, then it is important to consider the following points:

(1) If ordered to evacuate, do not wait or delay your departure.

If possible, leave before local officials issue an evacuation order for your area. Even a slight delay in starting your evacuation will result in significantly longer travel times as traffic congestion worsens.

(2) Select an evacuation destination that is nearest to your home, preferably in the same county, or at least minimize the distance over which you must travel in order to reach your intended shelter location.

In choosing your destination, keep in mind that the hotels and other sheltering options in most inland metropolitan areas are likely to be filled very quickly in a large, multi-county hurricane evacuation event.

(3) If you decide to evacuate to another county or region, be prepared to wait in traffic.

The large number of people in this state who must evacuate during a hurricane will probably cause massive delays and major congestion along most designated evacuation routes; the larger the storm, the greater the probability of traffic jams and extended travel times. If possible, make arrangements to stay with the friend or relative who resides closest to your home and who will not have to evacuate. Discuss with your intended host the details of your family evacuation plan well before the beginning of the hurricane season.

(4) If a hotel or motel is your final intended destination during an evacuation, make reservations before you leave.

Most hotel and motels will fill quickly once evacuations begin. If you have identified an area you

plan to evacuate to, have a listing of the available hotels in the area and their phone numbers. The longer you wait to make reservations, even if an official evacuation order has not been issued for your area or county, the less likely you are to find hotel/motel room vacancies, especially along interstate highways and in major metropolitan areas.

(5) If you are unable to stay with friends or family and no hotels/motels rooms are available, then as a last resort go to a shelter.

Remember, shelters are not designed for comfort and do not usually accept pets. Bring your disaster supply kit with you to the shelter. And if you have a pet, you will need to find a pet-friendly hotels or motels.

(6) Make sure that you fill up your car with gas, before you leave.

It is strongly recommended that through-out the hurricane season that you keep your vehicle(s) filled daily...if at all possible; do not let the vehicle go below half-full.

Pet Plan

Don't forget your family pet when developing your hurricane disaster plan. Contact your veterinarian or local humane society for information on preparing your pets for an emergency. Remember, if you decide to leave your pet at home, secure it as best as possible. Make sure there is adequate water and food; and that they are wearing ID tags. And remember that after a storm passes, the local police and fire department are normally overwhelmed by the situation and maintaining order. They may have limited time and accessibility to go to your home and check on your pets.

Before the disaster:

- Make sure that your pets are current on their vaccinations. Pet shelters may require proof of vaccines; it is strongly recommended that you
- Have a current photograph
- Keep a collar with identification on your pet and have a leash on hand to control your pet.
- Have a properly-sized pet carrier for each animal - carriers should be large enough for the animal to stand and turn around.
- Plan your evacuation strategy and don't forget your pet! Specialized pet shelters, animal control shelters, veterinary clinics and friends and relatives out of harm's way are ALL potential refuges for your pet during a disaster.
- If you plan to shelter your pet - work it into your evacuation route planning.
- Include in your family disaster plan who is responsible for the pet

During the disaster:

- Animals brought to a pet shelter are required to have: Proper identification collar and rabies tag, proper identification on all belongings, a carrier or cage, a leash, an ample supply of food, water and food bowls, any necessary medications, specific care instructions and news papers or trash bags for clean-up.
- Bring pets indoor well in advance of a storm - reassure them and remain calm.
- Pet shelters will be filled on first come, first served basis. Call ahead and determine availability.

After the disaster:

- Walk pets on a leash until they become re-oriented to their home - often familiar scents and landmarks may be altered and pets could easily be confused and become lost. Also, downed power lines, reptiles brought in with high water, and debris can pose a threat for animals.
- If pets cannot be found after a disaster, contact the local animal control office to find out where lost animals can be recovered. Bring along a picture of your pet if possible.
- After a disaster, animals can become aggressive or defensive - monitor their behavior.