

# ABOUT STORMS

## WHAT IS A HURRICANE?

A hurricane is a type of tropical cyclone, which is a generic term for a low pressure system that generally forms in the tropics. The cyclone is accompanied by thunderstorms and, in the Northern Hemisphere, a counterclockwise circulation of winds near the earth's surface. 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 (33 kt\*\*) or less
- **Tropical Storm**  
An organized system of strong thunderstorms with a defined surface circulation and maximum sustained winds of 39-73 mph (34-63 kt)
- **Hurricane**  
An intense tropical weather system of strong thunderstorms with a well-defined surface circulation and maximum sustained winds of 74 mph (64 kt) or higher

## WATCH vs. WARNING - *KNOW THE DIFFERENCE*

- **TROPICAL STORM WATCH:** An announcement that tropical storm conditions (sustained winds of 39 to 73 mph) are *possible* within the specified coastal area within 48 hours.
- **TROPICAL STORM WARNING:** An announcement that tropical storm conditions (sustained winds of 39 to 73 mph) are *expected* somewhere within the specified coastal area within 36 hours.
- **HURRICANE WATCH:** An announcement that hurricane conditions (sustained winds of 74 mph or higher) are *possible* within the specified coastal area. Because hurricane preparedness activities become difficult once winds reach tropical storm force, the hurricane watch is issued 48 hours in advance of the anticipated onset of tropical-storm-force winds.
- **HURRICANE WARNING:** An announcement that hurricane conditions (sustained winds of 74 mph or higher) are *expected* somewhere within the specified coastal area. Because hurricane preparedness activities become difficult once winds reach tropical storm force, the hurricane warning is issued 36 hours in advance of the anticipated onset of tropical-storm-force winds.

## STORM SURGE

**"The greatest potential for loss of life related to a hurricane is from the storm surge."**

Storm surge is simply water that is pushed toward the shore by the force of the winds swirling around the storm. This advancing surge combines with the normal tides to create the hurricane storm tide, which can increase the mean water level 15 feet or more. In addition, wind driven waves are superimposed on the storm tide. This rise in water level can cause severe flooding in coastal areas, particularly when the storm tide coincides with the normal high tides. Because much of the United States' densely populated Atlantic and Gulf Coast coastlines lie less than 10 feet above mean sea level, the danger from storm tides is tremendous.

The level of surge in a particular area is also determined by the slope of the continental shelf. A shallow slope off the coast will allow a greater surge to inundate coastal communities. Communities with a steeper continental shelf will not see as much surge inundation, although large breaking waves can still present major problems. Storm tides, waves, and currents in confined harbors severely damage ships, marinas, and pleasure boats.

## DISASTER SUPPLY KIT

- Water** - at least 1 gallon daily per person for 3 to 7 days
- Food** - at least enough for 3 to 7 days
  - non-perishable packaged or canned food / juices
  - foods for infants or the elderly
  - snack foods
  - non-electric can opener
  - cooking tools / fuel
  - paper plates / plastic utensils
- Blankets / Pillows, etc.**
- Clothing** - seasonal / rain gear/ sturdy shoes
- First Aid Kit / Medicines / Prescription Drugs**
- Special Items** - for babies and the elderly
- Toiletries / Hygiene items / Moisture wipes**
- Flashlight / Batteries**
- Radio** - Battery operated and NOAA weather radio
- Telephones** - Fully charged cell phone with extra battery and a traditional (not cordless) telephone set
- Cash (with some small bills) and Credit Cards** - Banks and ATMs may not be available for extended periods
- Keys**
- Toys, Books and Games**
- Important documents** - in a waterproof container or watertight resealable plastic bag
  - insurance, medical records, bank account numbers, Social Security card, etc.
- Tools** - keep a set with you during the storm
- Vehicle fuel tanks filled**
- Pet care items**
  - proper identification / immunization records / medications
  - ample supply of food and water
  - a carrier or cage
  - muzzle and leash

## FAMILY DISASTER PLAN

- Discuss the type of hazards that could affect your family. Know your home's vulnerability to storm surge, flooding and wind.
- 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.
- Have an out-of-state friend as a family 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.
- 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.
- Stock non-perishable emergency supplies and a Disaster Supply Kit.
- Use a NOAA weather radio. Remember to replace its battery every 6 months, as you do with your smoke detectors.
- Take First Aid, CPR and disaster preparedness classes.

# EVACUATION

If you live in a flood-prone or other vulnerable area, be prepared to evacuate. Plan your evacuation route now. Emergency managers will notify the public, via the media, of what areas should evacuate and when. In the event you evacuate, take a storm kit with you. Take valuable and/or important papers with you. Secure your house by locking the windows and doors. Turn off all utilities (gas, water, electric, etc.). Notify a family member or someone close to you outside the evacuation area of your destination.

- Secure all outdoor items. Property owners also will need to secure their boats.
- Area residents should clear rainspouts and gutters and trim any trees that may pose a problem during high winds.
- Have a family disaster kit. This kit should include the following items:
  - A three-day supply of water. This should include at least one gallon of water per person per day;
  - Non-perishable foods and a manual can opener;
  - A change of clothes and shoes for each person;
  - Prescription medicines;
  - A blanket or sleeping bag and pillow for each person;
  - Personal hygiene items;
  - A flashlight and extra batteries for each person;
  - Special needs items, such as formula and diapers for infants, as well as items needed for elderly or disabled family members;
  - A portable radio with extra batteries;
  - Money. During power outages, ATMs will not work;
  - Fuel. Gas pumps are also affected by power outages, so it is a good idea to have fuel in advance.
- In the event of an approaching storm, travel during daylight hours.

## **DO NOT WAIT UNTIL THE LAST MINUTE TO MAKE PLANS OR TO PURCHASE GASOLINE AND SUPPLIES.**

When a storm watch is issued, you should monitor the storm on the radio and television. An evacuation could take 24 to 36 hours prior to a storm's onset. If ordered to evacuate and seek shelter elsewhere, follow the instructions of local emergency managers on where to go and when. Authorities will announce shelter locations in advance of their opening. Make provisions for your pets, as many shelters will not accept animals.

If not ordered to evacuate and you decide to take shelter in your home, have your disaster kit ready. Keep your important papers with you or store them in the highest, safest place in your home, and in a waterproof container. Even if you seek shelter in place, you need to secure your home by locking the doors and

windows. Turn off all utilities (gas, water, electric, etc). Monitor the storm by portable radio to keep up with the latest information. Stay indoors. Try to stay in an inside room away from doors and windows.

Use your phone sparingly. Make only essential calls and keep the calls brief. Report emergencies to 911. When reporting emergencies, identify yourself and your location, making sure to speak clearly and calmly. If you have a mobile telephone, make sure it is charged and ready to use at all times. Remember, however, that cell service may be interrupted during and after the storm.

In the event a hurricane affects our area, expect polluted water, limited communications, no electricity, overflowing or backed-up sewers, undermined foundations, beach erosion and heavy damage to homes and roadways.

Do not re-enter the area until recommended to do so by local authorities. As you re-enter the area, be aware of possible hazards such as downed trees and power lines. Be aware of debris and water on roadways. Upon re-entry, have identification and important legal papers ready to show officials proof of residency. Continue to use your emergency water supply or boil water until notified that the drinking water is safe. Take precautions to prevent fires.

## HAVE SOMEWHERE TO GO

**Develop a family hurricane preparedness plan before an actual storm threatens your area.** 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:

**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.

**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.

**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.

**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. 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.

**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. Find Pet-Friendly hotels and motels.

**Make sure that you fill up your car with gas, before you leave.**

# YOUR PET & THE STORM

Contact your veterinarian or local humane society for information on preparing your pets for an emergency.

## **BEFORE THE DISASTER**

- Make sure that your pets are current on their vaccinations. Pet shelters may require proof of vaccines.
- 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.

## **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 all pose a threat for animals after a disaster.

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.

Don't forget your pet when preparing a family disaster plan.

## **PET DISASTER SUPPLY KIT**

- Proper identification including immunization records
- Ample supply of food and water
- A carrier or cage
- Medications
- Muzzle, collar and leash