A BRIEF HISTORY OF HURRICANES

Hurricanes form over warm ocean waters, like those found in the Gulf of Mexico. The hurricane season starts June 1 and ends November 30. The peak threat for the Texas coast exists from August through September. However, hurricanes can and have struck the Texas coast during every month of the hurricane season. Since 1527, over 217 hurricanes and tropical storms have impacted Texas - nearly one every other year on average.

HURRICANE HAZARDS

Storm Surges
A storm surge is an abnormal rise of water generated by a storm, over and above the predicted astronomical tides. The rise in water level can cause extreme flooding in coastal areas resulting in storm tides reaching up to 20 feet or more in some cases. Along the Texas coast, these flood waters can penetrate far inland depending on the elevation of land. If the storm tide is greater than the land elevation (even if well inland) then storm surge flooding will be possible.

Tornadoes & Destructive Winds
Tropical cyclones also produce tornadoes. These tornadoes most often occur in thunderstorms embedded in rain bands well away from the center of the hurricane; however, they can also occur near the eyewall. Tornadoes produced by tropical cyclones are relatively weak and short-lived, but still pose a threat.

Hurricane force winds of 74 mph or more can destroy buildings, mobile homes, trees, and power poles. Debris such as signs, roofing material, siding, and small items left outside become flying missiles in a hurricane. The strongest winds occur in a region of the hurricane called the eyewall. Wind gusts in the right side of the eyewall are the most destructive. Hurricane force winds can be felt as far as 150 miles from the coast. The water can also rise well in advance of the coming storm, in some cases 36 hours or greater. When an evacuation is ordered, do not wait until the last minute to leave.

Inland Flooding
There are numerous examples of significant flooding caused by land-falling tropical cyclones in Texas. Storms with a slow forward motion are the most dangerous as heavy rains persist for a longer period of time.

SIX TIPS ABOUT “STORM SURGES”

1. Storm surge flooding is often the greatest threat to life and property from a hurricane. It poses a significant threat for drowning. A mere six inches of fast-moving flood water can knock over an adult. It only takes two feet of rushing water to carry away most vehicles.

2. Storm surge can cause water levels to rise quickly and flood large areas in just minutes, and you could be left with no time to take action if you haven’t already evacuated as instructed.

3. Storm surge is not dependent on the Saffir-Simpson Hurricane Wind Scale. Hurricane categories are based on winds and do not account for storm surge. Any wind category can cause life-threatening storm surge.

4. Many Gulf Coast areas are vulnerable to storm surge including areas many miles inland from the coastline depending on elevation. Find out today if you live in an evacuation zone.

5. Storm surge can occur before, during and after the center of the storm passes through an area, and sometimes cut off evacuation routes. The water can also rise well in advance of the coming storm, in some cases 36 hours or greater. When an evacuation is ordered, do not wait until the last minute to leave.

6. During the peak of a storm surge event, it is unlikely that emergency responders will be able to reach you if you are in danger.

MOBILE HOME RESIDENTS MUST EVACUATE!

No mobile home or manufactured home – no matter how new it is – can provide safe shelter from hurricane force winds. Straps or other tie-downs will not protect a mobile home from the high winds associated with a hurricane. Mobile home residents must evacuate when told to do so by local authorities.

STORM SURGE MAP

KIIITV.COM/WEATHER
5 WAYS TO PROTECT YOURSELF & OTHERS

1. Protect Your Personal Documents & Special Items
   - Store valuables in plastic tubs with locking tops.
   - In case of evacuation, you should be able to secure and move all your items within 15 minutes.

2. Buy Flood Insurance: A Plan for Replaceable Items
   - The National Flood Insurance Program (NFIP) is available from an insurance agent or the NFIP.
   - For more information, visit: www.floodsmart.gov

3. Take Steps to Flood Proof Your Home
   - Shut off the main circuit breaker to prevent short circuiting and eliminate the threat of electrocution.
   - Raise outside A/C units onto platforms above ground level.
   - Store rarely used or expensive items in the attic or on high shelves.

4. Develop a Family Flood Plan
   - Make a plan of action in advance to keep from panicking during an emergency.
   - Have an evacuation route and alternatives planned in the event you are asked to evacuate.
   - Communicate your plans with friends or family outside of your home area.
   - Battery powered radios or televisions can be used in the event of a power outage.

AND 5

NEVER DRIVE ON FLOODED ROADS

Driving into flooded roadways puts your life and the lives of others at risk. Unless told to evacuate, you are probably safest staying at your current location.

If you encounter flood waters when driving,

TURN AROUND, DON’T DROWN!

Always check road conditions before heading out in a storm situation!
Call TxDOT for highway conditions at 800-452-9292 or visit drivetexas.org.

KIII TV.COM/WEATHER
**PREPARING FOR YOUR PET’S SAFETY**

Your pet should be part of your overall hurricane preparation plans. Below are a few important things to help you get ready:

- Make sure your pet’s vaccinations are current and you have their shot records available.
- DO NOT assume that a public shelter or hotel will accept your pet.
- Be sure to have a current photo of your pet.
- Each animal should have a properly sized pet carrier - the carrier should be large enough for the animal to stand up in and turn around.
- Pack enough food and bottled water for the duration of your evacuation - DO NOT let your pet eat food or drink water from outside that may be contaminated.
- Be sure to pack all medications your pet may need along with a muzzle, collar, leash, paper towels, and trash bags.
- Make sure your pet has a proper ID collar.

**HURRICANE PREPARATION — HOME PREP —**

- **Elevation Matters**
  - Know the elevation of your home. Are you in a flood or evacuation zone? Be prepared with sandbags, if necessary.

- **Mobile Homes**
  - Check tie-downs for rust or breakage.
  - Residents of mobile homes MUST EVACUATE when told to do so.

- **Landscaping**
  - Trim trees, shrubbery, and dead limbs...especially ones close to your home.
  - Repair or replace broken / damaged fences.

- **Roofing**
  - Inspect the roof for loose tiles, shingles, or debris.
  - Consider replacing old or damaged shingles with new ones rated for hurricane force winds.
  - Clear loose and clogged rain gutters and downspouts.

- **Doors**
  - Reinforce garage doors and tracks or replace with a hurricane-tested door.
  - Reinforce double entry doors with heavy duty foot and dead bolts.
  - Use a security dead bolt with one inch minimum bolt length.

- **Windows**
  - If possible, install tested and manufactured hurricane shutters.
  - Inspect shutters to ensure they are in good working order.
  
  Alternative: Use 5/8” or greater exterior grade plywood secured by 2 ½” screws and/or special clips. Obtain wood and fasteners, cut wood to size, pre-drill holes and place anchors to secure.
CHECK LIST & SUPPLY KIT
WE RECOMMEND THE FOLLOWING ITEMS:

HURRICANE ESSENTIALS
- WATER
  ONE GALLON PER PERSON, PER DAY
  (3-7 DAY SUPPLY)
- FOOD
  NON-PERISHABLE, EASY TO PREPARE
  (3-7 DAY SUPPLY)

BASIC SUPPLIES
- FLASHLIGHT / LANTERN
- RADIO OR TV
- EXTRA BATTERIES
- FIRST AID KIT / MANUAL
- N95 MASKS
- CELL PHONE & CHARGER
- MEDICATIONS
- MULTI-TOOL
- EXTRA CASH
- BABY ITEMS
- HYGIENE ITEMS
- AREA MAPS
- EMERGENCY BLANKET
- PET NEEDS
- IMPORTANT DOCUMENTS
- CAR REPAIR ITEMS

ADDITIONAL ITEMS
- WORK GLOVES
- MATCHES
- KITCHEN UTENSILS
- EMERGENCY WHISTLE
- PHOTOS / HOME INVENTORY
- EXTRA BLANKETS / SLEEPING BAGS
- ENTERTAINMENT ITEMS
- EXTRA CLOTHING

KIIITV.COM/WEATHER
WHAT TO DO WHEN THE STORM NEARS YOU

WHEN A STORM IS IN THE GULF:

- Listen frequently to radio, TV, or NOAA weather radio for bulletins and forecast of the storm's progress.
- Double check items in your emergency supply kit.
- Fuel and service your vehicles.
- Inspect and secure mobile home tie-downs.
- Board up windows (if shutters do not exist) in case storms move quickly and you have to leave! TAPE PROVIDES NO PROTECTION!
- Garage or store vehicles that are not being used.
- Follow instructions issued by local officials.
- Store lawn furniture and other loose, lightweight objects, such as garbage cans and garden tools.

EVACUATE IMMEDIATELY IF ORDERED TO DO SO!

FINAL ACTIONS TO TAKE

--- IF STAYING ---

- Close storm shutters, if installed.
- Notify family members of your evacuation plans.
- Lower water level in swimming pool by one foot.
- Turn refrigerator or freezer to coldest setting and open / use only if necessary.
- Follow instructions from emergency managers and be prepared to turn off utilities, if ordered to do so.
- Board up remaining doors, brace garage door, and remain inside. STAY AWAY FROM WINDOWS.
- Take refuge in a predetermined safe room, such as an interior closet, bathroom, or hallway.

FINAL ACTIONS TO TAKE (IF LEAVING)

- Turn off propane tanks.
- Unplug small appliances.
- Lock home securely.
- Shelter or take pets with you.

DO NOT EXPECT EMERGENCY RESPONDERS TO BE OF ANY ASSISTANCE DURING A LANDING FALLING HURRICANE!

25 pounds of dry ice will keep a 10-cubic foot freezer below freezing for 3-4 days.

DID YOU KNOW?

THE OFFICIAL COASTAL BEND HURRICANE GUIDE