



## Hurricane Knowledge

The first step is to familiarize yourself with hurricane facts and terminology. Tropical cyclone storm conditions can change dramatically depending on intensity, size, and even the angle at which they approach your area, so it is critical that you understand what forecasters and news reporters are saying.

**Tropical Depressions** are cyclones with winds of 38 mph. **Tropical Storms** vary in wind speeds from 39-73 mph while **Hurricanes** have winds 74 mph and greater. Typically the upper right quadrant of the storm (the center wrapping around the eye) is the most intense portion of the storm. The greatest threats are damaging winds, storm surge and flooding. This is in part why Hurricane Katrina was so catastrophic when bringing up to 28 foot storm surges onto the Louisiana and Mississippi coastlines.

Here are some important terms you may hear:

- **Tropical Storm Watch:** Tropical storm conditions are possible in the area.
- **Hurricane Watch:** Hurricane conditions are possible in the area.  
Watches are issued 48 hours in advance of the anticipated onset of tropical storm force winds.
- **Tropical Storm Warning:** Tropical storm conditions are expected in the area.
- **Hurricane Warning:** Hurricane conditions are expected in the area.  
Warnings are issued 36 hours in advance of tropical storm force winds.
- **Eye:** Clear, sometimes well-defined center of the storm with calmer conditions.
- **Eye Wall:** Surrounding the eye, contains some of the most severe weather of the storm with the highest wind speed and largest precipitation.
- **Rain Bands:** Bands coming off the cyclone that produce severe weather conditions such as heavy rain, wind and tornadoes.
- **Storm Surge:** An often underestimated and deadly result of ocean water swelling as a result of a landfalling storm, and quickly flooding coastal and sometimes areas further inland.



Prepare your house and your escape route while you're keeping a watch. Keep an eye out for officials' instructions and immediately leave the area if they tell you to. An **Extreme Wind Warning/Advisory**, which indicates that sustained winds of 115 mph or greater are expected to begin within an hour, requires immediate shelter inside a well-built structure.

## Hurricane Forecasts

Forecasting the path of a tropical cyclone is difficult because of the numerous global and local factors at play. What kind of wind patterns guide, enhance, or hinder the storm's growth can be directly influenced by the storm's size and path, and the reverse is also true! Forecasters use computers to analyze a huge amount of data and try to predict where the storm will go, and they can usually get it right within two or three days. You'll hear the terms "computer models" and "spaghetti models" a lot in this paragraph. For the most part, these forecast tracks or paths are given by averaging the predictions of the various models. Tropical cyclone developments, forecasts and weather alerts, discussions analyzing the data, and more are all kept up to date at the National Hurricane Center.

<http://www.nhc.noaa.gov/>

## Hurricane Names

Hurricane names are picked randomly, then rotated and recycled every 6 years. If a hurricane was catastrophic or severely deadly and costly (i.e. Charlie, Katrina, Irene) it is officially retired since use is not appropriate and can be confusing when naming current storms. To view the current list of tropical cyclone names click here: <http://www.nhc.noaa.gov/aboutnames.shtml>

## Hurricane Kits

Make a disaster supply kit that you can take with you if you need to flee. Even if you are able to stay in your house during the storm, you may still need this kit if your electricity goes out. When a hurricane is near, there is a widespread sense of dread. When this happens, people rush to get everything they think they need in large numbers. It is possible to lessen the stress of a potentially chaotic situation by prepping your kit in advance. Create a kit that you can carry with you at all times.



Some recommended items to include are:

- Non-perishable food (enough to last at least 3 days)
- Water (enough to last at least 3 days)
- First-aid kit (include any prescription medication you may need)
- Personal hygiene items and sanitation items
- Flashlights (have extra batteries on hand)
- Battery operated radio (again, have extra batteries)
- Waterproof container with cash and important documents
- Manual can opener
- Lighter or matches
- Books, magazines, games for recreation
- Special needs items: pet supplies and baby supplies if applicable
- Cooler and ice packs
- A plan for evacuation and for if family members are separated

## Securing Your Home

Know how to secure your home in the event of damaging winds, storm surge and flooding.

- Cover all of your windows, either with hurricane shutters or wood.
- Although tape can prevent glass from shattering everywhere, be warned that tape does not prevent the window from breaking.
- If possible, secure straps or clips to securely fasten your roof to the structure of your home.
- Make sure all trees and shrubs are trimmed and clear rain gutters.
- Reinforce your garage doors.
- Bring in all outdoor furniture, garbage cans, decorations, and anything else that is not tied down.
- If winds become strong, stay away from windows and doors and close, secure and brace internal doors.



## Power Outages

In the event a storm should leave you without power, there are a few things to consider and help you be ready and stay safe outside of your normal hurricane preparedness.

- **Gas:** Make sure your tank is full far in advance of an approaching storm. Most people wait until the last minute, rush to get extra gas for cars and generators, and subsequently gas stations can run out early.
- **ATMS:** Have extra cash on hand in the event no ATMS in your area are accessible or working.
- **Cell Phones:** Charge your cell phone and limit use after power is out.
- **A/C:** This can be the most uncomfortable side effect of losing power during a storm. Try to prevent as much light from entering and warming the house by covering up your windows on the inside. If you have back-up or battery operated fans, don't run them unless you are in the room. Fans create a difference in perceived temperature but do not cool the room; instead they create a cooling effect by dispersing the heat off your skin. It is said they can actually add heat to a room just by running.
- **Water:** Fill bathtub and large containers with water for washing and flushing only.
- **Food:** Turn your fridge temperature down and/or freeze any food or drinking water that can be frozen if you expect a power outage. Here is a guide on freezing food: [Freezing and Food Safety](#). Have a cooler with ice packs prepared to cool your drinks and snacks after power has been out for more than 4 hours. And importantly, check out this food safety guide for when to discard your perishable food: [http://www.foodsafety.gov/keep/charts/refridg\\_food.html](http://www.foodsafety.gov/keep/charts/refridg_food.html)
- **Health/Safety:** The CDC has a great guide on how to stay safe in the event of a power outage: [Power Outages](#)

Remember that a severe storm can be deadly and devastating at the same time. A landfalling cyclone can cause a lot of inconvenience and distress if you've ever been through one. Knowing the cyclone's **approach, arrival, and aftermath** are some of the best ways to be prepared. Prepare ahead of time and follow official instructions for the approach. Find a safe place to shelter or secure your home before the storm arrives, and be prepared for its aftermath.