



BE PREPARED FOR A HURRICANE

Everyone has seen news footage of a direct hurricane hit. But you have to experience it firsthand to get a flavor of what it must be like:

"We listened to 200-mile-an-hour winds, with gusts of 225 mph," said one survivor of Hurricane Irma. Irma passed directly through St. Thomas, USVI on September 7, 2017. "It's the most frightening thing I ever saw in my life, bar none."

The speaker, Michael Benson, 65, had prepared for a hurricane event like Irma by building a reinforced shower. He detached the shower from the rest of his home, and it was the only structure that survived.

Surviving a hurricane is a matter of knowing your vulnerability. You should prepare and know what actions you need to take before, during, and after a hurricane. Then there are the ancillary effects of powerful hurricanes, which spawn floods and tornadoes.

ABOUT THIS GUIDE

This guide focuses on preparing for a direct hit by a hurricane. It covers the following:

1. The definition and attributes of a hurricane—and who is vulnerable
2. How to prepare a hurricane plan—whether you stay in place or head for shelter
3. The supplies you will need for survival—a checklist for emergency supplies
4. What to do during a hurricane—in your safe room or at a shelter
5. What to do after a hurricane—avoiding hazards in the wake of the storm

See our *Severe Weather Guide* for additional information on *Tornado & Flood preparedness*.

ABOUT HURRICANES

The National Oceanic and Atmospheric Administration defines a hurricane as a tropical cyclone. As the term implies, a tropical cyclone forms over tropical or subtropical waters.

Hurricanes begin in the Atlantic basin. The Atlantic basin includes the Atlantic Ocean, Caribbean Sea, and the Gulf of Mexico in the east. In the west, they form in the eastern North Pacific Ocean as well as the central North Pacific Ocean.

Before the cyclone becomes a hurricane, it is a rotating low-pressure weather system. It consists of organized thunderstorms but no weather fronts. (A weather front is a boundary between two air masses of different densities.)

When its surface winds are less than 39 miles per hour, a tropical cyclone is called a tropical depression. Above 39 miles per hour, the tropical depression becomes a tropical storm.

When the winds reach a sustained rate of 74 miles per hour, the tropical storm becomes a hurricane. Rated on the Saffir-Simpson Hurricane Wind Scale, hurricanes receive a rating of 1 to 5. Hurricanes rated category 3 or above are classified as “major.” They include sustained winds of 111 to 157 miles per hour.

Powered by heat from the sea, hurricanes are steered by easterly trade winds and temperate westerly winds. They also have energy of their own. When they move ashore they bring a storm surge of ocean water along the coast with fierce high winds, torrential

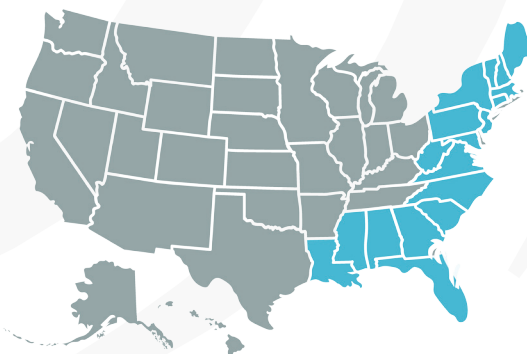
rains, flooding and tornadoes.

Hurricane season starts June 1 and ends November 30. Peak season is from mid-August to late October, but deadly hurricanes can occur anytime. Each year an average of ten tropical storms develop over the Atlantic Ocean, Caribbean Sea, or the Gulf of Mexico. About six of those tropical storms typically strengthen enough to become hurricanes.

THE MOST VULNERABLE U.S. CITIES

Based on over 125 years of hurricane data and storm paths, one expert identified five U.S. cities most vulnerable to hurricanes. Miami, Florida, headed the list, with Key West, and Tampa close behind. Outliers bracketing those cities are New Orleans and Cape Hatteras, North Carolina.

In an average hurricane season, those cities have an 11 to 16 percent chance of hurricane impact. However, any Gulf or Atlantic coast area could be in the path of a hurricane. The deadliest in U.S. history was at Galveston, Texas, where in 1900 over 6,000 people drowned.





WHERE IS YOUR SAFE ROOM?

PREPARING A HURRICANE PLAN

If you can stay at home (e.g., your home is structurally sound and outside a designated evacuation route), take these precautions:

LISTEN TO AND HEED THE WARNINGS

Modern meteorological science has made great strides since the Galveston disaster. Your warning will begin with a hurricane/tropical storm watch 36 hours in advance.

Stay tuned to your television, radio, mobile phone or internet for updates. When meteorologists issue a hurricane/tropical storm warning, you will have about 24 hours to react. Those warnings will include what you need to know about the specific threats.

SAFEGUARD AND COPY IMPORTANT DOCUMENTS

Whether you remain in place or plan to evacuate, make an extra copy of birth and marriage certificates, wills, and other important legal documents. Make sure your homeowner's and separate flood insurance are adequate to rebuild your home.

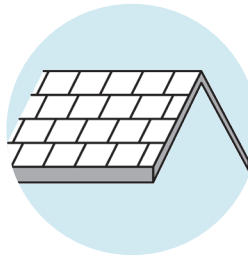
Make a physical inventory with photos of your household furnishings and appliances. Personal home inventory software is available on the web. Also, keep off-site backups of your important business and financial electronic files.

PREPARE A SAFE ROOM IF YOU CAN RIDE OUT THE HURRICANE

Your home may be built to be hurricane resistant, but it may not be able to withstand a major hurricane. If your roof begins to fail and

your walls start to collapse, you will need to seek shelter in a safe room.

You can locate and prepare a safe room in your basement. Alternatively, it can be on a concrete slab on your home's foundation or the garage floor. The safe room must be constructed so that damage to the residence will not cause damage to the safe room.



The safe-room walls, ceiling, and doors must withstand wind pressure and resist penetration by falling debris and wind-borne objects. Also, the connections between all its parts need to be strong enough to resist the wind.

(Source: "Taking Shelter from the Storm: Building a Safe Room Inside your House," FEMA-320.)

MITIGATE POTENTIAL HURRICANE DAMAGE TO YOUR HOME

Inspect your home and look for any damage or wear that a hurricane could worsen. For example, loose shingles and damaged roofs make the home more vulnerable to wind gusts.

Make a list of anything on the grounds of your property that could be a missile hazard (as debris) during high winds. Purchase plywood to cover your windows. Secure your doors with heavy latches to keep them closed during gusting winds.

EMERGENCY SUPPLIES YOU'LL NEED FOR SURVIVAL



In the aftermath of a hurricane, it may take days before power is back up and supplies are available to the general public. If you plan to shelter in place, you must have food, water, and emergency supplies:

CONSUMABLES: Gather emergency supplies. Assemble a hurricane survival kit consisting of non-perishable food (with a can opener) and bottled water. Don't forget pet food supplies and toys along with extra water.

EMERGENCY MEDICAL AND TOOLS:

Include a complete first aid kit along with your medications, contact lens supplies and spare eyeglasses. You will also need a portable, battery-powered radio, and a flashlight with

extra batteries. Include adjustable tools to turn off gas or water in case of pipe ruptures.

COOKING SAFETY: Have an alternate cooking source – stay alert to carbon monoxide dangers from indoor barbecues. Have a fire extinguisher handy.

MISCELLANEOUS: Stock extra blankets, clothes, and heavy shoes. Have extra cash in case ATMs and local stores cannot process credit cards.

Finally, have a fully charged cell phone handy. Emergency crews typically give priority to restoring emergency communications and repairing downed cell phone towers.

WHAT TO DO DURING THE HURRICANE

Take shelter in an interior safe room, a closet or bathroom on the lower level of the home. Stay clear of windows, skylights and glass doors.

If flooding is an imminent threat, shut off the electricity at the main breaker. If the power goes out, turn off major appliances. This will prevent electrical surge when the power is restored.

Important: Remain in your shelter until you are sure the storm has passed. Listen for storm alerts and status on the Emergency Broadcast System.

Alternatively, if you must leave your home...

If you must evacuate the storm area, you should have a plan. Your best choice is to make advance arrangements with family or friends outside the storm area.

Remember: Public shelters are for those who have nowhere else to go. If you must go to a

shelter, take the following into account:

- A special-needs shelter is not equipped for extensive medical care. It can provide only medical monitoring.
- Most shelters cannot accommodate pets, except for service animals. Check in advance and make alternative sheltering plans if you have a pet.
- If the shelter allows pets, bring pet food.
- Feeding facilities may not be available at the shelter during the first 24 hours. Bring your own food and snacks.
- Blankets and pillows may not be provided or may be in limited supply. So, bring sleeping gear.

Don't forget books, cards, etc., to pass the time. Bring a battery-operated radio and a flashlight with extra batteries. You'll want to listen to emergency broadcasts and have a light source in case of a power outage at the shelter.

WHAT TO DO AFTER THE HURRICANE

Use caution when going outside to survey damage. Watch for downed power lines, weakened roads, unstable trees, or a porch or chimney that could collapse unexpectedly.

If the phone service is working, it may be overloaded. Stay off the line except to report hazardous situations to rescuers. Also, unless absolutely necessary, do not drive.

Rescuers need a clear path to distressed areas. If it is necessary to leave the home, leave a message informing family and friends of the new location.

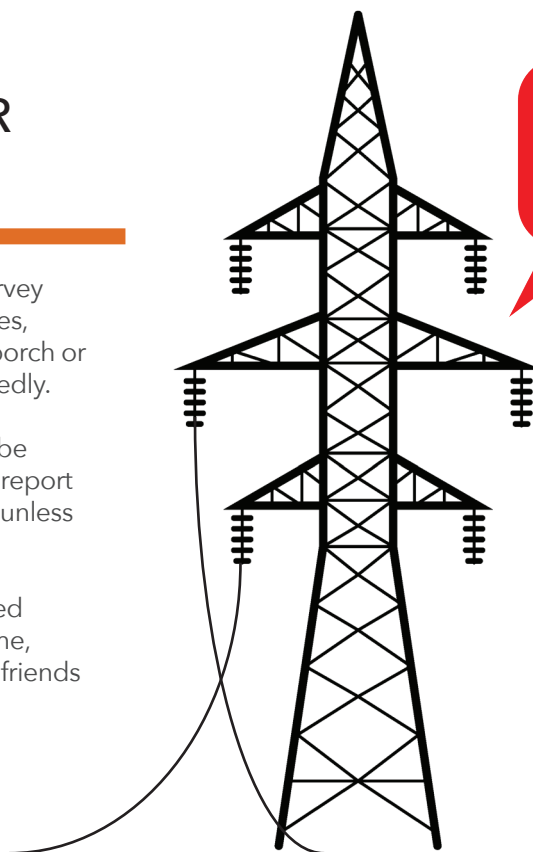
SUMMARY

Hurricanes are nature's most dangerous purveyors of disaster. If you live along the Atlantic and Gulf Coast of the United States, you could be in their path. You need a plan for shelter and survival.

You need to stock emergency supplies and equipment. If at home, seek shelter in a safe room. If you must go to a shelter, bring your own food and bedding supplies. Your best bet is to seek safe haven with family or friends outside the hurricane area.

After the hurricane, use caution when surveying damage around your home. Beware of downed electrical lines or falling hazards.

This guide is sponsored by Nexis Response, a Mead Group company. Look for a downloadable copy on our websites at nexisprep.com and meadgroup.com.



BE CAREFUL! WATCH FOR DOWNED POWER LINES, WEAKENED ROADS, UNSTABLE TREES, AND WEAK STRUCTURES.

SOURCES:

Sources for this guide are as listed and linked in the text.

Additionally:

<https://www.cnn.com/2017/05/15/us/2017-atlantic-hurricane-season-fast-facts/index.html>

<https://www.accuweather.com/en/weather-news/top-5-most-vulnerable-us-cities-to-hurricanes-atlantic-tropical-season/48281135>

<https://www.accuweather.com/en/weather-news/six-ways-to-prepare-for-tropical-storms-hurricanes-atlantic-season/46771146>

<https://www.thebalance.com/hurricane-harvey-facts-damage->