

# Be Prepared

The following slides contain important information regarding Hurricanes and your safety.

# Tropical Cyclones



**Hurricane  
Season for  
Sunset Beach:  
June 1 to  
Nov. 30 with  
peak period  
mid-August to  
late October**

**A PREPAREDNESS GUIDE**

**U.S. DEPARTMENT OF COMMERCE**

**National Oceanic and Atmospheric Administration**

National Weather Service

**Revised April 2013**



**FEMA**



**American  
Red Cross**

# What is a Tropical Cyclone?

## Understanding the Terminology

- **Tropical Cyclone** is a rotating, organized system of clouds and thunderstorms that originates over tropical or subtropical waters and has a closed low-level circulation. Tropical cyclones rotate counterclockwise in the Northern Hemisphere.
- **Tropical Depression**—A tropical cyclone with maximum sustained winds of 38 mph (33 knots) or less.
- **Tropical Storm**— A tropical cyclone with maximum sustained winds of 39 to 73 mph (34 to 63 knots).

# What is a Tropical Cyclone?

- **Hurricane**—A tropical cyclone with maximum sustained winds of 74 mph (64 knots) or higher.
- **Major Hurricane**—A tropical cyclone with maximum sustained winds of 111 mph (96 knots) or higher, corresponding to a Category 3, 4, or 5 on the Saffir–Simpson Hurricane Wind Scale.
- **A Post-Tropical Cyclone** is a system that no longer possesses sufficient tropical characteristics to be considered a tropical cyclone. Post-tropical cyclones can still bring heavy rain and high winds.

# Saffir-Simpson Hurricane Wind Scale

## Scale Number Category 1

**Sustained Winds 74-95 MPH**

**Very dangerous winds will produce some damage:** *Well-constructed frame homes could have damage to roof, shingles, vinyl siding, and gutters. Large branches of trees will snap and shallowly rooted trees may be toppled. Extensive damage to power lines and poles likely will result in power outages that could last a few to several days.*

# Saffir-Simpson Hurricane Wind Scale

**Scale Number Category 2**

**Sustained Winds 96-110 MPH**

**Extremely dangerous winds will cause  
extensive damage:**

*Well-constructed frame homes could sustain major roof and siding damage. Many shallowly rooted trees will be snapped or uprooted and block numerous roads. Near-total power loss is expected with outages that could last from several days to weeks.*

# Saffir-Simpson Hurricane Wind Scale

## Scale Number Category 3

### Sustained Winds 111-129 MPH

**Devastating damage will occur:** *Well-built framed homes may incur major damage or removal of roof decking and gable ends. Many trees will be snapped or uprooted, blocking numerous roads. Electricity and water will be unavailable for several days to weeks after the storm passes.*

# Saffir-Simpson Hurricane Wind

## Scale

Scale Number Category 4

Sustained Winds 131-156MPH

**Catastrophic damage will occur:** *Well-built framed homes can sustain severe damage with loss of most of the roof structure and/or some exterior walls. Most trees will be snapped or uprooted and power poles downed. Fallen trees and power poles will isolate residential areas. Power outages will last weeks to possibly months. Most of the area will be uninhabitable for weeks or months.*

# Saffir-Simpson Hurricane Wind Scale

## Scale Number Category 5

**Sustained Winds >156 MPH**

**Catastrophic damage will occur:** *A high percentage of framed homes will be destroyed, with total roof failure and wall collapse. Fallen trees and power poles will isolate residential areas. Power outages will last for weeks to possibly months. Most of the area will be uninhabitable for weeks or months.*

# Rip Currents

- The strong winds of a tropical cyclone can cause dangerous waves that pose a significant hazard. When the waves break along the coast, they can produce deadly rip currents—even at large distances from the storm.
- Rip currents are channeled currents of water flowing away from shore, usually extending past the line of breaking waves, that can pull even the strongest swimmers away from shore.

# Rip Currents

- In 2008, despite the fact that Hurricane Bertha was more than a 1,000 miles offshore, the storm resulted in rip currents that killed 3 people along the New Jersey coast and required 1,500 lifeguard rescues in Ocean City, Maryland, over a 1-week period.
- In 2009, all 6 deaths in the United States directly attributable to tropical cyclones occurred as the result of drowning from large waves or strong rip currents.

# Ways to Stay Informed

## NOAA Weather Radio All Hazards

The National Weather Service (NWS) continuously broadcasts warning, watches, forecasts and non-weather related hazard information on NOAA Weather Radio All Hazards (NWR).



# Ways to Stay Informed

These radios meet specific technical standards and come with many features such as:

- Specific Area Message Encoding (SAME),
- A battery backup,
- Both audio and visual alarms,



# Ways to Stay Informed

- Selective programming for the types of hazards you want to be warned for.
- The ability to activate external alarm devices for people with disabilities.
- Similar to a smoke detector, an NWR can wake you up in the middle of the night to alert you of a dangerous situation.



# What to Listen For

## HURRICANE WATCH:

- Hurricane conditions (sustained winds of 74 mph or higher) are possible within the specified area.
- During a Watch, prepare your home and review your plan for evacuation in case warnings are issued. Listen closely to instructions from local officials.

# What to Listen For

## HURRICANE WATCH:

- 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.

# What to Listen For

## TROPICAL STORM WATCH:

- Tropical storm conditions (sustained winds of 39 to 73 mph) are possible within the specified area within 48 hours.
- During a Watch, prepare your home and review your plan for evacuations in case warnings are issued. Listen closely to instructions from local officials.

# What to Listen For

## HURRICANE WARNING:

- Hurricane conditions (sustained winds of 74 mph or higher) are expected somewhere within the specified area.

# What to Listen For

- 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.
- The warning can remain in effect when dangerously high water or a combination of dangerously high water and waves continue, even though winds may be less than hurricane force.

# What to Listen For

## TROPICAL STORM WARNING:

- An announcement that tropical storm conditions (sustained winds of 39 to 73 mph) are expected somewhere within the specified area within 36 hours.

# What to Listen For

## EXTREME WIND WARNING:

- Extreme sustained winds of a major hurricane (115 mph or greater), usually associated with the eyewall, are expected to begin within an hour.
- Take immediate shelter in the interior portion of a well-built structure.