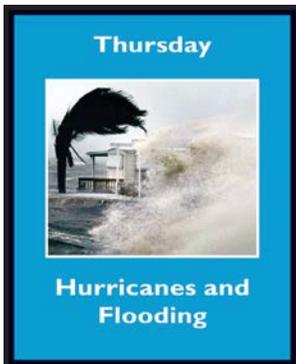




Florida's Severe Weather Awareness Week takes place from January 14-18, 2019. Severe Weather Awareness Week is an opportunity for Floridians to learn about the various weather hazards that frequently impact the state and how families and businesses can prepare for these natural events.



Each day focuses on a specific weather event. **Thursday's focus is on hurricanes and flooding.**

The most feared weather phenomenon throughout Florida during the summer and early fall is the tropical cyclone. Close to the tropics and surrounded on three sides by warm water, the unique location of Florida makes it particularly vulnerable to these systems as they develop across the Atlantic Ocean, Gulf of Mexico, and Caribbean Sea. The relatively flat terrain of Florida can also make it susceptible to flooding.

Florida has a long history of hurricanes. Records indicate that approximately 115 hurricanes and almost 160 tropical storms have impacted the state since 1888 (130 years), with many more cited in history books prior to that year and even before official records were kept.

DID YOU KNOW??? No other state in the country has more hurricane landfalls per year on average than Florida does. Nearly 40% of all hurricanes that strike the United States make landfall in Florida.

DID YOU KNOW??? In the last 150 years, all of Florida's counties have been impacted by at least one hurricane.



The North Atlantic Ocean hurricane season officially begins on June 1st and continues through November 30th. However, tropical systems can still form outside of hurricane season as early as May and as late as December. Although the number of tropical storms and hurricanes typically peaks during August and September, it is important to remember that Florida can be impacted by tropical weather systems any time during the season. Residents and visitors need to plan ahead and remain ready for possible hurricane impacts.

The 2018 hurricane season was the third in a consecutive series of above-average and damaging Atlantic hurricane seasons, featuring 15 named storms, of which 8 were hurricanes. 2 of the 8 hurricanes (Florence and Michael) became Major Hurricanes (Category 3 or higher), both of which made landfall in the U.S. For the fourth consecutive year, activity began early, with the formation of Tropical Storm Alberto on May 25. Alberto went on to attain winds of 65 mph, before making landfall in the Florida Panhandle near Laguna Beach with winds of 45 mph. After a month of inactivity, Beryl, formed on July 5th and attained hurricane status before dissipating just east of the Caribbean, but became the first hurricane to form in the eastern Atlantic during the month of July since Bertha in 2008.

Chris formed a day after Beryl, was upgraded to a hurricane on July 10, and became the earliest second hurricane in a season since 2005. No hurricanes formed in the Atlantic during the month of August, marking the first season since 2013, and only the eighth season on record to do so. On September 5, Florence became the first major hurricane of the season. Florence made landfall in North Carolina on September 14, becoming the wettest tropical cyclone on record there and in neighboring South Carolina. Activity would increase dramatically in September with Tropical Storm Gordon forming on September 3 over South Florida and would go on to cause minor damage and two deaths in Mississippi. Hurricanes Helene and Isaac followed suit on September 7, making 2018 the second consecutive year with three hurricanes simultaneously active. On September 12, Joyce formed, making 2018 the first season since 2008 to feature four named storms active simultaneously (Florence, Helene, Isaac, and Joyce). After a brief period of inactivity, Kirk and a tropical depression formed on September 22, and Subtropical Storm Leslie followed suit the following day. Activity picked up once again in October, with Michael forming on October 7 and strengthening into a major hurricane over the Gulf of Mexico, before making landfall in the Florida Panhandle at Tyndall AFB/Mexico Beach at peak intensity of 155 mph on October 10. It became the third-most intense hurricane to make landfall on the United States in terms of pressure, behind the 1935 Labor Day hurricane and Hurricane Camille of 1969. On October 9, Tropical Storm Nadine developed in the eastern tropical Atlantic and spent fifteen days as a tropical cyclone. A two-week period of inactivity ensued as the season began to wind down. On October 27, Oscar, the seventh in a record-breaking number of subtropical storms developed in the central Atlantic Ocean. Oscar intensified into a hurricane the next day, making it the eighth hurricane of the season. Oscar's dissipation ended the season on October 31, a month prior to the season's official end. No systems formed in November, making it the first occurrence since 2014. With the formation of Oscar on October 27, the season is the first on record to see seven storms that were subtropical at some point in their lifetimes (Alberto, Beryl, Debby, Ernesto, Joyce, Leslie, and Oscar).



15) impacted Florida in some way.

Hurricane Michael became the second major hurricane and the fourth hurricane to affect Florida within 2 years (Category 4 Irma on September 10, 2017 along with Hurricanes Hermine and Matthew in 2016).

In addition to the catastrophic impacts from Hurricane Michael, Florida received direct impacts from Tropical Storms Alberto and Gordon. The East Coast of Florida saw high surf and coastal erosion from Hurricanes Beryl and Florence. This means one-third of all the tropical cyclones last season (5 of

When a tropical system approaches the state, The National Hurricane Center will issue watches and warnings. **Do you know the difference between a watch and warning?** Watches are issued 48 hours in advance of the time dangerous winds or surge are *possible* within the specified area. Warnings are issued 36 hours prior to the time when damaging winds or storm surge are *expected*. A watch should trigger your family's disaster plan, and protective measures should be initiated. Once a warning has been issued, your family should be in the process of completing protective actions and deciding the safest location to be during the storm.

Your main protection against hurricanes is to be prepared and have a plan. Hurricane force winds can easily destroy poorly constructed buildings and mobile homes. A hurricane plan doesn't have to be anything extremely complicated, but should at least consist of the following two things. First, determine whether you live in an evacuation zone. This information can be obtained from your local emergency management office. If you live in an evacuation zone, know when and where you will be going to pass

the storm. Second, have a disaster supply kit ready with non-perishable food, batteries for electronic devices such as your NOAA Weather Radio, and enough supplies to last 3 to 5 days. Assess your property to ensure that landscaping and trees do not become a wind hazard.

Know Your Zone



While hurricanes are known and feared for their ferocious winds, historically it is the water that causes most of the deaths in hurricanes. About 90% of all hurricane fatalities occur from drowning in either storm surge or freshwater flooding. The widespread flooding caused by Tropical Storm Fay in 2008 serves as a reminder that tropical storms can cause as much or greater devastation than hurricanes with freshwater flooding.

Even outside of tropical systems, flooding is a serious concern in Florida since it can happen anywhere and at any time. Effects from flooding can be localized, impacting just a few streets in a neighborhood or community, or very large, affecting multiple cities, counties and even whole states. Flooding is caused by the amount of rainfall and what happens to the rain after it hits the ground.

As our state's population increases, buildings and pavement replace the natural land. This creates more water runoff and can increase flood problems. Most deaths due to flooding in the United States are from people driving their cars into flooded areas. Once a vehicle begins to float, the situation becomes dangerous and often deadly. Residents should be aware of their location with respect to flood-prone areas and know evacuation routes. People are also urged to be extremely cautious when driving in heavy rains, especially when water covers the road. Because it is difficult to determine the depth of water or the condition of the road under the water, if you come to a flooded road, remember the phrase "Turn Around, Don't Drown".



Meteorologists at the National Weather Service watch the weather to try to warn people well in advance of the flooding so they can save lives and property. Flood Watches and Warnings, along with Flash Flood Watches and Warnings, are issued for a specific area when flooding conditions are likely or are already occurring. The National Hurricane Center will also issue [Storm Surge Watches and Warnings](#) for areas of the U.S. that have the potential for damaging storm surge from a tropical cyclone.

National Flood Safety Awareness is March 11-15, 2019. National Hurricane Preparedness Week is May 5-11, 2019. More information about hurricanes and flooding and what you can do to protect yourself and others can be found at www.nhc.noaa.gov/prepare, <http://www.nhc.noaa.gov/surge/resources.php>, <https://www.weather.gov/safety/hurricane>, <https://www.weather.gov/safety/flood> or www.FloridaDisaster.org.

Friday's tropic will be on temperature extremes and wildfires.