

Florida's Severe Weather Awareness Week takes place from January 23-27, 2017. 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. **Tuesday's focus is on marine hazards and rip currents.**

Although tropical cyclones, severe thunderstorms and tornadoes are often the first that come to mind when thinking of "most dangerous weather phenomenon in Florida", there is another weather-related hazard that ranks as the deadliest – rip currents. Florida's beaches attract millions of residents and tourists each year. However, while there may be beautiful weather in the sky, there are unseen dangers in the waters.

Rip currents, sometimes erroneously referred to as rip tides or undertows, occur naturally and affect many Florida beaches year-round. Since 1995, rip currents

have accounted for more than 300 drownings along Florida's Gulf and Atlantic beaches. In fact, rip currents kill more people in Florida in an average year than hurricanes, tornadoes and lightning combined. **In 2016, 19 people lost their lives due to rip currents** or high surf: 6 along the Florida Panhandle coast, 11 deaths occurring along the Florida East Coast and 2 deaths along the Florida West Coast. This number is below what occurred in 2015 (26 fatalities), but Florida still leads the nation in reported rip current drownings. Although many of our reported drownings occur with visitors or tourists, in 2016, 5 of the 19 fatalities were Florida residents.

Many of these drowning incidents occur on days when the weather is quite pleasant, with a nice breeze blowing onshore. This catches beachgoers by surprise since fair weather is usually associated with pleasant ocean conditions.

DID YOU KNOW??? Rip currents can occur at any beach with breaking waves, including the Great Lakes.

A rip current is a strong channel of water moving away from the shore at beaches. Rip currents are part of the natural near-shore ocean circulation and are quite common, occurring at many beaches every day on both the Atlantic and Gulf coasts of Florida. Rip currents typically form along the beach at breaks in the nearshore underwater sandbar, but they also form near structures such as jetties and piers. Rip currents form when water, piled against the shore, begins to return to deeper water. Typically, onshore winds



and waves push water over the sandbar, allowing excess water to collect between the bar and the beach. Eventually, this excess water starts to return seaward through low spots in the sandbar, "ripping"

an opening. While rip currents can happen any day of the year, weather or ocean conditions can cause rip currents to be stronger and more frequent on some days more than on others.



DID YOU KNOW??? You can sometimes see the signs that show a rip current is present. A visible channel of churning, choppy water; a narrow channel where there is a difference in water color; a line of seaward moving foam; an offshore area of murky water are all indicators of possible rip currents.



Rip currents are dangerous because they can pull unprepared swimmers away from shore and into

deeper offshore waters. They become especially dangerous when swimmers panic and struggle against the current while being pulled farther and farther away from the beach. Contrary to popular belief, rip currents do not pull a swimmer under the water. The force of a rip current is too strong for even the strongest of swimmers, and attempts to swim directly back toward shore, especially for the panicked and tired swimmer, can be fatal.



Hundreds of people getting swept out to sea by a strong rip current at Haeundae Beach, Busan Korea. Unfortunately, there were 58 fatalities and over 100 people rescued due to this strong rip current.

DID YOU KNOW??? Rip currents can travel as fast as

five mph, or about eight feet per second, which is faster than an Olympic swimmer can swim!



Florida's Atlantic and Gulf coasts also attract plenty of boaters yearround and Florida leads the nation with nearly one million registered boats. Before venturing out on the water, it is important for boaters to check on the weather. What may seem like a tranquil start to the day can quickly turn violent with hazards such as severe thunderstorms, strong winds, rough seas, lightning and waterspouts.

One way to be sure you are safe while boating is to check the marine forecasts issued by the local National Weather Service Offices when

planning your voyage. Stay in port if thunderstorms are expected. If you decide to venture out into the open waters, remember that lightning presents the greatest danger to boaters. Be prepared to seek safe shelter anytime lightning is seen or thunder is heard. Never let thunderstorms cut off your route back to land.

If a thunderstorm or waterspout threatens, it is best to seek safe harbor immediately. If you are unable to get back to the dock, be sure everyone aboard is wearing a life jacket, as gusty thunderstorm winds or waterspouts can quickly overturn small boats. If lightning is nearby, get low or head below deck, and stay away from masts and ungrounded metal objects. If caught near a waterspout, your best course of evasive action is to move at a 90 degree angle from its apparent movement, then seek safe harbor, if possible.

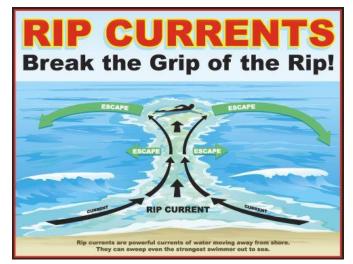


DID YOU KNOW??? Thunderstorms with frequent cloud-to ground lightning often affect the inland lakes and rivers during the afternoon, while early morning lightning storms are more common along the coast.

Knowing what kind of weather to expect is one of the keys to staying safe during your boating adventure. There are a few things that you can do to protect yourself from the dangers of rip currents and marine hazards. Before you leave, check the latest National Weather Service forecast for local beach and boating conditions. National Weather Service offices around Florida issue a surf zone forecast and coastal waters forecast each day, which includes the expected rip current risk and marine conditions. These forecasts should be your primary tools for planning a safe day on the water.

At the beach, look for the nearest lifeguards and check with them about existing water conditions. If you're going to a beach with no lifeguard on duty, look for warning flags or signs. Since 2006, approximately 80% of all rip current-related drowning incidents in Florida occurred at unguarded beaches.





If you find yourself caught in a rip current, don't panic and don't fight the current. Swim in a direction parallel to the shoreline either toward your left or right. Just remembering the simple phrase "Don't fight...Swim left or right" could save your life. When free of the current, swim at an angle back toward shore.

National Safe Boating Week is May 20-26, 2017. National Beach Safety Week and Rip Current Awareness Week is June 4-10, 2017. More information on rip currents and marine hazards and what you can do to protect yourself and others can be

found at www.ripcurrents.noaa.gov, www.nws.noaa.gov/safeboating, and www.FloridaDisaster.org.

Wednesday's topic will be on tornadoes and severe thunderstorms.