



MIAMI-SOUTH FLORIDA
National Weather Service
Forecast Office
<http://www.weather.gov/miami>



Tornado in Everglades of Collier County on June 24th, 2012 (courtesy Dan Floyd)

2018 Severe Weather Awareness Week

Wednesday, January 24th is Tornado and Thunderstorm Awareness Day

Tornado Drill at 10 AM EST

Tornadoes and severe thunderstorms are more frequent in South Florida than some people realize. Since 1996, South Florida has averaged 11 reported tornadoes per year, and a total of 56 tornadoes of EF-1 or EF-2 intensity on the Enhanced Fujita Scale (winds

greater than 85 mph). South Florida tornadoes occur with a variety of weather systems, from strong winter/spring cold fronts to waterspouts moving onshore to tornadoes embedded in the outer rain bands of tropical storms and hurricanes.

A total of 15 tornadoes were reported in South Florida in 2017 from a variety of weather systems, including 8 associated with Hurricane Irma and Tropical Storm Phillipe. Previously in 2017, two EF-1 tornadoes (Palm Beach Gardens/Juno Beach and Miami Springs/Hialeah) occurred in Southeast Florida on January 23rd in association with a strong squall line ahead of a cold front. These tornadoes were reported to cause at least \$1 million in damage, and probably much more which hasn't yet been accounted for. Other smaller tornadoes in 2017 occurred with localized showers and thunderstorms, including two unrated ones which occurred in unpopulated areas.

Most South Florida tornadoes fall in the EF0 and EF1 category, which translates to winds less than 110 mph. Impacts from these tornadoes typically include: significant damage to mobile homes, uprooted trees/broken tree branches, downed power lines, minor structural/roof damage to buildings and patio/pool screen enclosures. Only 1 minor injury was noted with last year's tornadoes, but a total of 6 injuries occurred in 2015 and 2016, a sign that ANY tornado is dangerous.

Even waterspouts (tornadic circulation on water) can be dangerous to boaters as well as to those at the beach. On May 25th, 2015, a waterspout moved onshore Fort Lauderdale Beach and flipped a bounce house in the air about 30 feet. Four children were in the bounce house at the time and sustained injuries.



NWS Storm Survey picture from Miami Springs on January 23rd, 2017



NWS Storm Survey picture from Palm Beach Gardens on January 23rd, 2017

Tornadoes have occurred in every month in South Florida, but occur mostly from May to August when thunderstorms are most frequent. Most South Florida tornadoes are relatively small and short-lived. This means that it is very difficult to give plenty of advance warning. In many cases, only a few minutes of warning are given between the time a warning is issued by the National Weather Service and the tornado touchdown. Nevertheless, even a few minutes of warning can make the difference between life and death. Having a NOAA Weather Radio is a critical component of the warning system. Having a weather radio available to alert of an approaching tornado has proven to save lives. Local media will also relay tornado warnings via the Emergency Alert System (EAS). There are also many mobile services available to alert of tornadoes, including [Wireless Emergency Alerts](#) (WEA) which allows customers who own newer-model wireless phones and other enabled mobile devices to receive geographically-targeted, text-like messages alerting them of imminent threats to safety, such as tornado warnings, in their area.

It is important to understand the meaning of the terminology meteorologists use to assess the threat of tornadoes in your community. A **Tornado Watch** means that atmospheric conditions are conducive for tornadoes. Remain alert for approaching storms. A **Tornado Warning** means that a tornado has been sighted by a weather spotter or member of the public, or indicated by weather radar.

IMPORTANT TORNADO SAFETY TIP: when a tornado warning is issued for your area, **move immediately to your pre-designated place of safety** which should be an interior

room or hallway on the lowest floor away from windows, or underneath a desk or table if a windowless room is not available. In a multi-story building, go to the lowest floor.

TORNADO DRILL INFORMATION

On the morning of the drill, all participants should consider themselves under a Tornado Watch. A Watch means you should monitor the weather and be prepared to go to a safe place in the event of a Warning. At approximately 10:00 a.m. EST, the National Weather Service will issue a practice Tornado Warning. The warning will be broadcast on NOAA Alert Radios as a **weekly test message** (NOT a live warning). Everyone is encouraged to participate in the drill by activating their tornado safety plan at 10 AM. This is especially encouraged at schools, businesses and hospitals. The tornado drill will last until 1030 AM EST when the test tornado warning will be cancelled.

Severe thunderstorms are also fairly common in South Florida. These are defined as thunderstorms containing wind speeds of at least 58 mph and/or large hail of at least one inch in diameter. Severe thunderstorms can occur year-round but are most common from May to August. Winds in excess of 58 mph can cause damage to trees, cause signs to fly through the air, knock down power lines and even cause structural damage to buildings. On January 17th, 2016, an intense thunderstorm squall line caused a large area of severe wind gusts with peak winds of 70 to 90 mph in the Naples and Immokalee areas. Damage was observed across a large swath of Collier County and consisted of many downed trees and power lines, with minor structural damage noted in a couple of areas.

Large hail, although usually not damaging in South Florida, can still pose a threat, especially in urban areas where vehicles can suffer damage. Large hail can also damage crops.

Tornado and Severe Thunderstorm warnings are normally issued within 30 minutes of an expected impact, and people are urged to take immediate protective action due to the imminent nature of the threat.

For more information on tornadoes and thunderstorms, including safety information, visit the [National Weather Service's Severe Weather website](#).

Make sure to visit our website at weather.gov/southflorida for the latest weather information, [including information on potential tornado and thunderstorm threats](#), watches and warnings. Also monitor NOAA Weather Radio and local media, particularly during potentially threatening weather days.