



NOAA - National Weather Service

Tampa Bay Area

2525 14th Avenue SE, Ruskin, Florida 33570

813-645-2323

<http://weather.gov/tampa>

STATEWIDE TORNADO DRILL AT 10:10 AM FRIDAY

[En español](#)

In cooperation with the National Weather Service, state and local emergency management agencies and the American Red Cross, this week has been proclaimed as Florida Severe Weather Awareness Week. This week is designed to teach Floridians about the dangers of the different types of hazardous weather found in Florida.

The following hazardous weather topics will be discussed...

Monday	Lightning Hazards
Tuesday	Marine Hazards
Wednesday	Tornadoes and Thunderstorms
Thursday	Hurricanes and Flooding
Friday	Temperature Extremes and Wildfires

TORNADOES

Tornadoes are the most powerful small scale phenomena in nature. Violent tornadoes can level a city block in a matter of seconds. When most people think of Florida weather hazards, tornadoes do not normally come to mind. However, since 1970, more than 2,600 tornadoes have been reported across the state!

In general, tornadoes form when rapidly rising air in a thunderstorm updraft combines with an increase in wind speed or a change in wind direction known as shear. The larger the shear, the greater the rotation and thus the better chance a tornado will form.

In west central and southwest Florida, frontal systems, sea breeze or boundary collisions, and tropical cyclone bands are the primary weather threats that lead to tornado formation.

Frontal system tornadoes occur mostly in the winter and spring and develop along squall lines preceding moderate to strong cold fronts. These storms often develop in high shear environments, and thus tend to be stronger and the most damaging.

Sea breeze or boundary collision tornadoes are the most common, occurring mostly during late spring and summer. These twisters, forming along colliding sea breezes or thunderstorm outflow boundaries, are normally small and brief, producing minor damage.

Tropical cyclone band tornadoes form along the outer bands ahead of land falling tropical cyclones. Damage is generally proportional to the strength of the approaching cyclone. In other words, the stronger the cyclone, the stronger the tornado.

Date: 2/13/2013



NOAA - National Weather Service

Tampa Bay Area

2525 14th Avenue SE, Ruskin, Florida 33570

813-645-2323

<http://weather.gov/tampa>

TORNADO WARNINGS

Remember; take immediate action if a tornado warning has been issued for your area! A tornado warning means the twister has either been spotted, or there are very strong indications in radar data that one exists.

The following are some tornado safety rules:

- Abandon mobile homes for a pre-determined sturdy building nearby.
- In buildings, move to an interior room on the lowest floor, away from windows. Get under a piece of heavy furniture and cover your head with pillows or cushions.
- Abandon vehicles and seek refuge in a sturdy building. Do not try and outrun a tornado!
- In open country, seek safety in a sturdy building if time permits. If not, lie flat in the nearest ditch and cover your head with your arms.

SEVERE THUNDERSTORMS

Thunderstorms are an almost daily occurrence in Florida between June and September. By definition, thunderstorms are hazardous due to the threat from lightning strikes. However, severe thunderstorms produce the added hazards of damaging downburst winds and large hail.

Severe thunderstorms are defined by one or more of the following:

- Wind gusts of 58 mph or greater, sufficient to produce damage to well-built structures or sturdy foliage.
- Hail 1 inch in diameter or larger.

Hundreds of severe thunderstorms occur in Florida each year. These Storms occur most frequently between mid-May and early August when the atmosphere across the state is the most unstable.

DOWNBURST WINDS

A downburst is a pronounced gust of "straight-line" wind which descends rapidly from a thunderstorm, hits the ground, and spreads out horizontally along the earth's surface. The downburst is initiated by evaporation of water and ice particles falling toward earth. Drier air entrained into a thunderstorm increases the rate of evaporation, and hence accelerates the downburst. Downbursts in severe thunderstorms often begin well above the earth's surface and encounter several layers of dry air on the way down.

HAIL

Hail forms when water droplets freeze in the upper reaches of thunderstorms. Gravity and/or downdrafts bring the hailstones toward the earth. On the way, they melt a bit and combine with other water and ice particles. Sometimes these larger particles move into adjacent updraft regions, rise back above the freezing level and grow even larger. Eventually the hailstones become too heavy for any updraft to support them and they fall to the ground.

Date: 2/13/2013



NOAA - National Weather Service

Tampa Bay Area

2525 14th Avenue SE, Ruskin, Florida 33570

813-645-2323

<http://weather.gov/tampa>

Hail is a common occurrence in Florida thunderstorms. Though most hailstones are small, about the size of a pea, some reach 1 inch in diameter or larger. Very large hailstones, like those seen in the Midwest, are rarely seen in Florida due to our normally warm and humid atmosphere.

The following are some severe thunderstorm safety rules:

- Put as many walls between you and the outside wind as possible and stay away from windows.
- In vehicles, avoid driving into a severe thunderstorm. Pull off the road and wait until the storm passes.
- Prior to a severe thunderstorm, move vehicles into garages or carports to prevent hail and debris damage.

Visit the following websites for additional information about tornadoes and severe thunderstorms:

<http://www.nssl.noaa.gov/edu/safety/tornadoguide.html>

<http://www.floridadisaster.org/kids/>