

# TORNADOES

D e a d l y   a n d   D e s t r u c t i v e



DEPARTMENT OF



PUBLIC SAFETY



# Twisted Facts:

## What causes tornadoes?

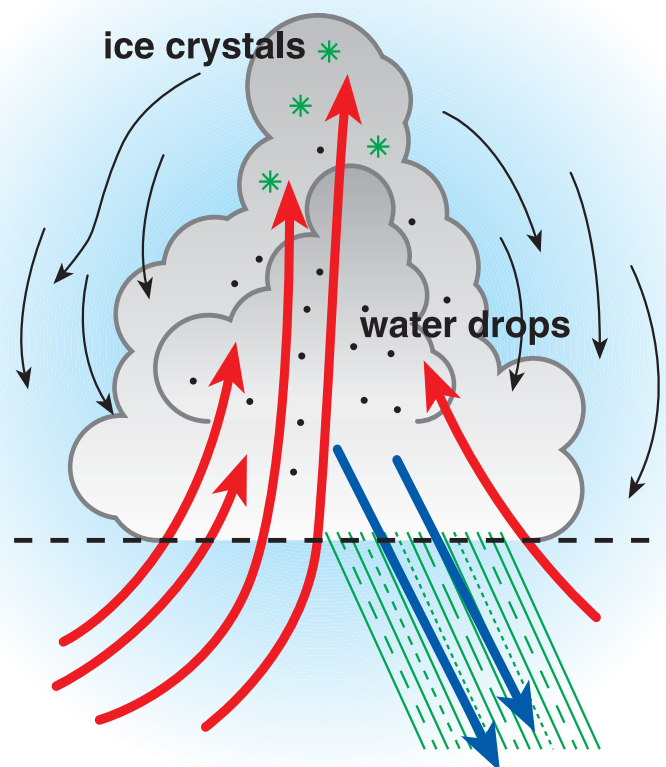
Tornadoes are produced inside powerful thunderstorms, which in turn are created near the junction between warm, moist air and cold, dry air. The conditions that produce a “tornadic thunderstorm” (a storm that produces tornadoes) exist when moist, warm air gets trapped beneath a stable layer of cold, dry air by an intervening layer of warm, dry air. This stratified sandwich of air is called an inversion. If the cap is disturbed by a front or disturbance in the upper atmosphere, the warm, moist air can rise and punch through the stable air that was holding it down. The warm air will start to spiral upward, as latent heat is released when the moisture it holds condenses. Aided by different winds at different levels of the atmosphere, the rotating updraft gains velocity and a tornado is born. In an average year, the state of Florida confirms approximately 100 tornadoes. While most tornadoes fortunately do not cause any fatalities in Florida, about 75 people do receive injuries each year, and annual property damage typically costs \$35 million.

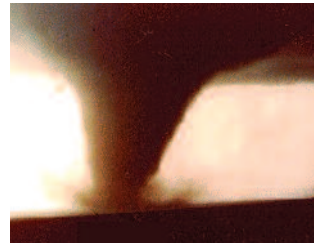


## When a Tornado Watch is in effect in your area:

You can take certain precautions to lessen damage to you or your property:

- Move automobiles inside a garage or carport if possible to avoid damage from hail that often accompanies severe storms.
- Move lawn equipment and furniture inside if time permits. These objects can become flying debris causing serious injury or damage.
- Have an emergency kit ready and keep your radio or television tuned to local media for further weather information.





## When a Tornado Warning has been issued in your area:

- Seek shelter immediately.
- Shelter in basements if available, if not go to the center of the house, and get into a small room such as a bathroom or closet.
- Stay away from outside walls and windows.
- Stay in your shelter until after the storm passes.

After the storm has passed and you leave your shelter, check for injuries and check your home for any damage. If damage has occurred, be cautious of arcing electrical lines, leaking gas, etc.



## Tornado Watch:

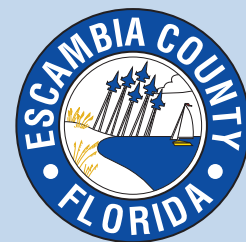
Conditions favor tornado development. During a tornado watch, you should take steps to protect yourself and your property. Listen to local radio or television stations to keep informed.

## Tornado Warning:

A tornado has been sighted in the region.

If a tornado warning is issued for your area, you should seek shelter immediately!

*For more information contact:*



**Escambia County**  
**Division of Emergency Management**  
**6575 North "W" Street**  
**Pensacola, Florida 32505**  
**850-471-6400**  
**[www.EscambiaEmergency.com](http://www.EscambiaEmergency.com)**

## The Fujita Scale:

F-Scale Number	Intensity Phrase	Wind Speed	Scope of Damage
F0	Gale tornado	40-72 mph	Some damage to chimneys; breaks branches off trees; pushes over shallow rooted trees; damages sign boards
F1	Moderate tornado	73-112 mph	73 mph is minimal hurricane wind speed; peels surface off roofs; mobile homes pushed off foundations; overturned autos pushed off road; attached garages destroyed
F2	Significant tornado	113-157 mph	Considerable damage. Roofs torn off frame houses; mobile homes demolished; boxcars pushed over; large trees snapped or uprooted; light objects become missiles
F3	Severe tornado	158-206 mph	Roofs and some walls torn off well-constructed houses; trains overturned; most forest trees uprooted
F4	Devastating tornado	207-260 mph	Well-constructed houses leveled; structures with weak foundations blown off some distance; cars thrown and large missiles generated
F5	Incredible tornado	261-318 mph	Strong frame homes moved off foundations and disintegrated; car-sized missiles moved more than 100 meters; trees debarked; steel-reinforced concrete structures badly damaged
F6	Inconceivable tornado	319-379 mph	A tornado this strong is very unlikely. If it ever happens, evidence may only be found through ground swirl patterns, for engineering studies may never identify it.