

Severe Weather Preparedness Week in North Carolina is March 7-13, 2021
Today's Topic: Severe thunderstorms and tornadoes

A thunderstorm is a local storm that produces lightning and thunder. Thunderstorms are often accompanied by showery rain and gusty winds, and may also bring hail or snow. Thunderstorms occur most frequently during the spring and summer, but they are also possible in the fall and winter. North Carolina experiences about 40 to 50 thunderstorm days per year. About 10 percent of thunderstorms are classified as severe – one that produces hail at least an inch in diameter, has winds of 58 miles per hour or stronger, or produces a tornado.

Tornadoes are nature's most violent storms. Spawned from powerful thunderstorms, tornadoes can cause fatalities and devastate a neighborhood in seconds. A tornado appears as a rotating, funnel-shaped cloud that extends from a thunderstorm to the ground with whirling winds that can reach 300 miles per hour. Damage paths can be in excess of one mile wide and 50 miles long. Some tornadoes are clearly visible, while rain or nearby low-hanging clouds obscure others. Sometimes, tornadoes develop so rapidly that little, if any, advance warning is possible.

The following are some additional severe storm facts for North Carolina... • North Carolina averages 26 tornadoes, 3 tornado fatalities, and 39 tornado injuries each year.

- Most tornadoes and tornado-related casualties occur during meteorological spring (March to May), with a peak in April, particularly among strong and violent tornadoes. There is also a secondary peak in tornado frequency in November.
- Tornadoes occur most frequently in the late afternoon and early evening hours; however, many killer tornadoes occur during the overnight hours when tornadoes are difficult to see and people are asleep.
- There has been an upward trend in the reports of weak tornadoes since the middle of the 20th century. This is likely due to improvements in radar technology, communication, storm surveys, and storm spotter training, as well as an expanding population, infrastructure, and spotter network.
- Thirty confirmed tornadoes occurred in North Carolina on April 16, 2011, the greatest one day total for North Carolina on record. On that day, 24 individuals lost their lives in North Carolina, and there were over 300 injuries reported in central North Carolina alone.
- Severe gusts of wind from a thunderstorm, called downbursts or straight line winds, are a serious danger and can result in injuries and fatalities. Damage from straight line winds can look like and be just as bad as tornado damage. In fact, during the past 5 years, there have been 16 fatalities and over 70 injuries in North Carolina due to straight line thunderstorm winds.
- While most of the hail that falls in the state is typically the size of a quarter or smaller, in the past 5 years, hail the size of golf balls or larger has occurred over 200 times. During this same time, baseball-size hail has occurred 8 times.

When atmospheric conditions are conducive for the formation of tornadoes, the National Weather Service will issue a Tornado Watch. A Tornado Watch means that tornadoes are possible. During Tornado Watches, you should remain alert for approaching storms, watch the sky, and stay tuned to NOAA Weather Radio, commercial radio or television for additional information. A Tornado Warning means that a tornado has been sighted or indicated by

weather radar. When a Tornado Warning is issued for your area, you should take shelter immediately.

Be sure to take some time this week to learn more about severe weather safety. Learning and practicing severe weather safety when the weather is good will allow you to react more quickly when the weather turns bad. You can learn more about severe weather safety by visiting the North Carolina Department of Public Safety preparedness website at readync.org. This web page features an abundance of information, and links to a free cell phone app, that will help you plan and prepare for the severe weather season. Once again, that's readync.org.