

## Early Warning & Preparedness

A High Wind Watch indicates sustained winds of a least 40 mph or gusts of 50 mph are expected.

A Severe Thunderstorm Watch means conditions are ripe that a severe storm could occur.

A Tornado Watch means conditions are ripe that a tornado could develop.

A Severe Thunderstorm Warning means a storm is imminent or has begun.

A Tornado Warning means a tornado has reportedly touched down or rotation has been spotted on radar.

A NOAA Weather Radio can be purchased at most stores that sell electronics products. They can be set so an alarm goes off if a storm warning is issued by the National Weather Service for your county.

A Family Emergency Plan should be developed which includes the protective actions that family members must take when a severe thunderstorm or tornado warning has been issued by the National Weather Service. Visit [www.readypa.org](http://www.readypa.org) or [www.ready.gov](http://www.ready.gov) or our web site for additional information.



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# Lightning Wind Tornado Facts & Tips



## Columbia County EMA

## Lightning

Lightning results from the buildup and discharge of electrical energy between positively and negatively charged areas. An invisible channel of electrically charged air moves from a cloud to the ground. When it gets close, a powerful surge from the ground moves upward toward the cloud and produces the visible strike.

The air near a lightning strike is heated to 50,000 degrees, which is hotter than the surface of the sun. The rapid heating and cooling of the air near the lightning channel causes a shock wave that results in thunder.

Lightning causes an average of 80 fatalities and 300 injuries each year in the U.S.

Most injuries and fatalities occur when people are caught outdoors in a storm during the summer months in the afternoon or evening.

When a severe thunderstorm warning is issued, immediately seek shelter in a sturdy building and stay away from the windows. You're also safer seeking refuge in a vehicle with a hard top than you are remaining out in the open.

During thunderstorms, avoid using the telephone or electrical appliances.

Power surges from lightning strikes have been known to damage air conditioners, TV's, refrigerators and computers.

If you must make an emergency telephone call, use a cell phone if it's available.

Do not take a bath or shower during a thunderstorm.

If outdoors, find a low spot that won't flood and stay away from trees if possible, unless you're in the forest than take shelter under shorter trees.

## Wind

Straight-line winds are responsible for most thunderstorm wind damage.

Straight-line winds can exceed 100 mph!

A downburst is a small area of rapidly descending air beneath a thunderstorm. Down bursts can also exceed 100 mph.

A down burst can cause damage equivalent to a strong tornado and can be extremely dangerous to aviation.

## Tornado

<u>Class</u>	<u>Strength</u>	<u>Wind Speed</u>
EF0	Weak	65-85 mph
EF1	Gale	86-110 mph
EF2	Significant	111-135 mph
EF3	Severe	136-165 mph
EF4	Devastating	166-200 mph
EF5	Catastrophic	Over 200 mph

When a tornado warning is issued, immediately go to the basement. If a basement is not available, go to a hall or interior room on the lowest level. If possible, get into a bathtub or under a sturdy piece of furniture. Stay away from windows.

Don't try to outrun a tornado in a vehicle. Immediately leave the vehicle and seek a safe shelter.

If you're caught outside, seek shelter in a ditch or depression and lie flat with your hands over your head.

Flying debris from tornadoes cause most of the injuries and fatalities.

Mobile homes offer no protection. Go to the lowest level of a nearby building.