

SEVERE WEATHER AWARENESS

As the cold, dry air from Canada moves southward into the warm, moist air streaming northward from the Gulf of Mexico, the stage is set for the development of thunderstorms. In South Carolina, thunderstorms occur an average of 45 to 65 days per year depending on location (see figure at right). Although most of these storms never reach severe levels, some do. Being informed of the proper precautions and procedures to follow when severe weather threatens is imperative to saving lives and property. Severe Weather Awareness Week is typically held in late February or early March before the clash of winter and spring air masses create the volatile conditions required to spawn severe thunderstorms. The State Climate Office provides the following information on thunderstorms and the associated risks of lightning, flash floods, hail, high winds, and tornadoes.

Perhaps the most feared weather phenomenon is the tornado. Technically defined, a tornado is a violently rotating column in contact with the ground that extends from the base of a parent cumulonimbus cloud. Most of South Carolina experiences the highest frequency of tornadoes in April, May, and August. Between 1950 and 2000, tornadoes hit the state on numerous occasions causing 51 deaths, more than 100 injuries, and more than \$250 million in damage. The average number of tornadoes to affect the state annually is 10, with 3 of those characterized as strong (see figure below). Nationwide, tornadoes cause 70 deaths and 1,500 injuries each year.

The National Weather Service provides the public with warnings as severe thunderstorms and tornadoes move into a given area. The Storm Prediction Center in Norman, Oklahoma, issues Severe Thunderstorm Watches and Tornado Watches for sections of the country deemed likely to see severe weather. Products from the Storm Prediction Center may be found at www.spc.noaa.gov. A severe thunderstorm is defined as a thunderstorm that produces hail of at least 3/4 inch diameter and/or winds of 58 mph and possible tornadoes. The State Climate Office recommends purchasing a NOAA Weather Radio for your home to alert your family to life-threatening weather conditions. Weather radios can be purchased at most department stores and electronic retailers.

The Federal Emergency Management Agency and the National Weather Service recommend the following actions before, during, and after severe weather. A thorough list of information and preparedness guides may be found at www.erh.noaa.gov/gsp/links/safety.htm.



Tornado over Hard Rock Cafe in Myrtle Beach, July 6, 2001.
Photo by Jimmy Card, Pawleys Island, SC

SEVERE WEATHER AWARENESS WEEK is a valuable time to practice the preparation and response to severe weather that promises to affect South Carolina throughout the year. PLEASE take the time to meet with your family members and discuss a plan of action during weather emergencies. It will save lives!

Additional information may be obtained on weather and climate from the State Climate Office at their Web site (www.dnr.state.sc.us/climate/sco) or you may contact the Severe Weather Liaison, Jason Caldwell, at (803) 734-0039 or CaldwellJ@dnr.sc.gov.

DEVELOP A FAMILY DISASTER PLAN

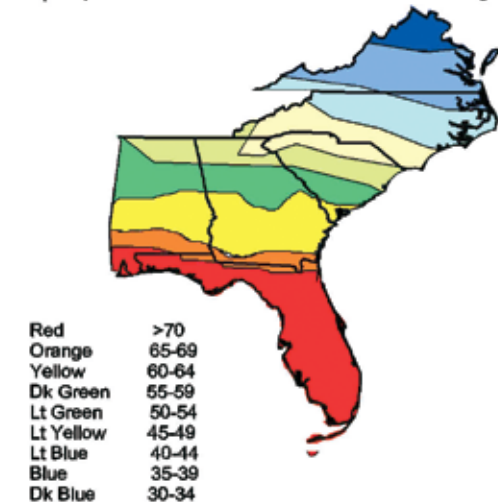
1. Identify a safe place for shelter.
2. Designate a place to meet once the storm passes.
3. Discuss safety practices.
4. Practice the plan as a tornado drill.

MAKE A DISASTER SUPPLY KIT

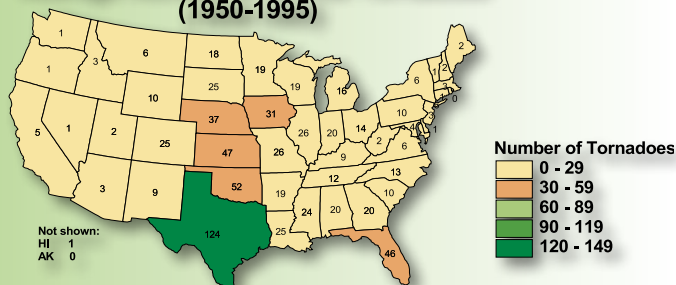
INCLUDE:

- a 3-day supply of water and non-perishable food
- a change of clothes and several blankets
- a first aid kit, medicines, flashlights, and batteries
- a NOAA Weather Radio, AM/FM radio, or television
- cash or credit card, and other necessary items

AVERAGE NUMBER OF THUNDERSTORM DAYS PER YEAR (adapted from National Climatic Data Center graphics)



Average Number of Annual Tornadoes (1950-1995)



KNOW LIGHTNING SAFETY

- ⚡ Stay or move indoors.
- ⚡ DO NOT take shelter under trees or near tall objects. If outside, find a low spot and squat on the balls of your feet with your hands over your ears and head between the knees. DO NOT LIE DOWN!
- ⚡ Unplug appliances and DO NOT use the phone or take a bath.
- ⚡ Lightning causes 80 deaths and 300 injuries yearly in the nation.

KNOW TORNADO SAFETY

- Stay or move indoors to a sheltered area (basement, small interior room/hallway) on the lowest floor away from windows.
- DO NOT stay in an automobile. Lie flat in a nearby ditch and cover your head.
- A bridge or overpass is not a safe place.
- DO NOT open windows in your home. The myth that your home will explode is not true and may cost valuable time in finding shelter.

KNOW FLASH FLOOD SAFETY

- ✓ DO NOT walk, swim, or drive into floodwaters. Find higher ground.
- ✓ Flooding is the #1 KILLER (more than 140 deaths) with thunderstorms each year.