

Severe Storm Season

The arrival of the spring season brings the threats for severe thunderstorms include damaging winds and large hail, as well as tornadoes, very heavy rain, and flash floods. Severe thunderstorms damage homes and businesses, and in some cases, cause injury or loss of life. They can form at any time and anywhere conditions are favorable. As a resident, it is best to be prepared ahead of time.

Severe weather warnings have improved greatly over the last decade, following the introduction of Doppler weather radars. Even so, the most accurate and timely warnings will not be effective if people do not receive the warnings or do not know how to react to them.

Most people receive their weather information, including severe weather watches and warnings, from their favorite television station. But, what happens when people are not at home or do not have their television turned on?

One of the best sources of severe weather information is the National Weather Service (NWS) weather radio, the voice of the National Weather Service. As a service to the public, the National Weather Service broadcasts uninterrupted weather information 24 hours a day on any of seven different VHF frequencies with the Kay County frequency being 162.450MHz. These broadcasts can generally be received up to 40 miles from the transmitter site, which is located on the KLVV radio station tower west of Ponca City.

NWS weather radio programming includes:

1. Weather statements, watches, and warnings.
2. Location, movement and impacts of threatening weather.
3. Current weather conditions and local forecasts.
4. Civil emergency messages, including the “Amber Alerts”.
5. Climate data.



During severe weather, watches and warnings within the listening area are tone alerted. This alarm tone will activate those NWS weather radio receivers with a tone alert feature. Most models available today use the latest digital technology and have Specific Area Message Encoder, or (S. A. M. E.), capabilities. This allows users to designate which counties they wish to be alarmed for and eliminates the problem of receiving alerts for weather events not affecting their location.

The NWS recommends that everyone have a weather radio in their home and business. NWS weather radios are inexpensive and can be purchased at local radio and electronic stores, as well

as at a growing number of department stores, and even on the Internet. NWS weather radio models with battery backup capabilities are recommended in the event of a power outage.

In addition to television, radio, and NWS weather radio, there are a variety of new technologies available that enable severe weather warning reception. Digital messaging to computers, cell phones, and pagers can be obtained through various service providers.

IF YOU WOULD LIKE MORE INFORMATION ABOUT THE NOAA/NWS WEATHER RADIO'S CONTACT KAW NATION EMERGENCY MANAGER, GARY ROBISON, 580-362-1232. LEAVE YOUR NAME AND PHONE NUMBER ON ANSWERING MACHINE IF I AM NOT AVAILABLE.

A tornado is defined as a violently rotating column of air in contact with the ground and pendant from a thunderstorm. On average, nearly 1000 tornadoes are reported across the United States annually. These tornadoes kill more than 60 Americans and injure another 1500 in a typical year. On average, 54 tornadoes touch down in Oklahoma each year and these tornadoes result in an average of five fatalities a year across the state.



In 2005, 27 tornadoes occurred in Oklahoma. These tornadoes resulted in no fatalities or injuries. The strongest tornado to affect the state was rated F1 on the Fujita Scale, and there were several tornadoes that reached that category including a tornado that tore a path of about 2.5 miles long and 150 yards wide in Sequoyah County on April 5, 2005.

Tornadoes are most likely to develop across the state during the spring months in the afternoon and evening hours. However, as long as the necessary ingredients are present, tornadoes can develop during any month of the year and at any time of the day.

Tornadoes are classified by the damage they produce, which is determined by surveying impacted structures within their paths. The three classification categories are weak, strong, and violent. Tornadoes may move forward at speeds of up to 70 mph but some may remain nearly stationary. Regardless of their strength, appearance, or forward speed, all tornadoes are dangerous.

There are a number of things you can do to increase your odds of surviving a tornado depending on where you are when severe weather threatens. If at home, take shelter in a predetermined safe place such as a basement or storm cellar. Get under something heavy. If no such place is available, then move into a small interior room on the lowest floor such as a closet or bathroom. Put as many walls between you and the outside as possible. Leave mobile homes for a sturdier structure.

If in your vehicle, go to a nearby sturdy building. If there is no building nearby and you are in immediate danger from the tornado then leave your vehicle for a low spot such as a ditch or ravine. Lie low and cover your head with your arms and hands. Do not stop at overpasses and attempt to wait out the tornado.

Most importantly, stay informed of developing severe weather events, know what to expect and know when to expect it. A weather radio with tone alert feature will provide you with this vital information 24 hours a day. One with a battery backup is suggested in the case of a power outage.

Have a predetermined plan of action that everyone in your home knows

And practice this plan as severe weather season approaches. Your local National Weather Service office in Norman, Oklahoma or the American Red Cross chapter can provide you with the information necessary to develop such a plan. More information about tornadoes and tornado safety can found on the NWS Norman website at: weather.gov/norman/tornadodata/

There are an estimated 25 million cloud-to-ground lightning flashes each year. While lightning can be fascinating to watch, it is also extremely dangerous. During the past 30 years, lightning killed an average of 73 Americans and injured another 300. The number of Americans killed by lightning typically exceeds the number of deaths resulting from both tornadoes and hurricanes. In 2005, there was one lightning related fatality in Oklahoma and four injuries. The fatality resulted from a lightning strike that occurred on July 23rd in broken arrow.



By definition, all thunderstorms produce lightning and during a thunderstorm each flash of cloud-to-ground lightning is a potential killer. Although some victims are struck directly by the main visible lightning stroke, many other victims are struck as the current moves in and along the ground. While virtually all people take some protective action during a thunderstorm, many leave themselves vulnerable to being struck by lightning as thunderstorms approach, depart, or are nearby.

Lightning can strike as far away as 10 miles from the rain area in a thunderstorm, which is about the distance from a storm that you are able to hear the thunder. If you can hear the thunder then you are within striking distance of that storm.

Follow the 30/30 lightning safety rule when thunderstorms threaten your area. Go indoors if after seeing lightning you cannot count to 30 before hearing thunder. Stay indoors for 30 minutes after hearing the last clap of thunder. Following these guidelines will better ensure that you are out of harms way when the storm approaches your area and

That you don't prematurely resume outdoor activities as the storm moves away.

A flash flood is a rapid rise of water along a stream or low-lying urban area. Slow moving thunderstorms or thunderstorms that move repeatedly over the same area often produce flash

floods. These floods can develop within minutes, depending on the intensity and duration of the rain, topography, soil conditions, and ground cover.

On average, flooding is the number one weather related killer across the country each year. Most flash flood fatalities occur at night when it is harder to see and are a result of victims driving their vehicles into flood waters. In 2005, there were no flood related fatalities or injuries in Oklahoma but about 300 thousand dollars of property damage resulted from flooding.



Flash floods can roll boulders, tear down trees, destroy buildings, and scour out new channels. Rapidly rising water can reach heights of 30 feet or more depending on the terrain. Water can erode the road bed creating unsafe driving conditions. Underpasses can fill rapidly with water, while adjacent roadways are clear. Flowing water that is 2 feet deep is sufficient to carry away most cars and trucks, including pickup trucks and sport utility vehicles.

Determine your risk when a flash flood warning is issued. In urban areas, storm drains can become overwhelmed and flood roads and buildings. Low spots such as underground parking garages and basements can flood quickly. In rural areas, people who enjoy hunting, camping, and fishing should stay

away from streams if thunderstorms have occurred.

Here are some flash flood safety tips, purchase a National Weather Service (NWS) weather radio so you can monitor vital weather information. Be especially cautious at night when it is harder to recognize the dangers of flash flooding. Avoid low spots prone to flooding. Do not camp or park your vehicle along streams and washes, particularly during thunderstorms. Go to higher ground when flooding occurs in your vicinity. Do not attempt to cross flowing streams with your vehicle, and remember, Turn Around Don't Drown. If your vehicle is suddenly caught in rising water, leave it immediately for higher ground.

