

MAFES Dawg Tracks



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Thunderstorms and Lightning Safety



In Mississippi, in the past, we have had tornado and thunderstorm seasons. Over the last few years, this pattern has changed. It seems that we can have lightning, thunderstorms, tornadoes or straight-line winds just about any time of the year. This subject should be on all of our minds since we have experienced our share of inclement weather conditions during the past several years.

Did you know?

- **Lightning** has been the 2nd largest weather related killer in the U.S. over the last 40 years, causing 80 fatalities and 300 injuries each year and is exceeded only by flooding.
- **Flooding** is the #1 cause of deaths associated with thunderstorms - more than 140 fatalities each year.

THUNDERSTORMS -

In comparison to other types of weather conditions, thunderstorms affect relatively small areas. But they are extremely dangerous, usually covering an area about 15 miles wide and lasting on the average about 30 minutes. The best estimate of occurrences of thunderstorms in the U.S. is about 100,000 each year. Of this number, statistics tell us that only 10% are severe. The National Weather Service considers a thunderstorm severe if it produces at least ¼ inch hail and 58 mph winds or stronger, or a tornado.

We already know that with thunderstorms we get lightning, strong winds, sometimes flash flooding and hail, depending upon the nature of the storm. Wind speeds in excess of 100 mph can happen with thunderstorms. Strong and straight line winds can cause damage equal to a tornado. Sometimes we don't stop to think how much hail damage can do to us, but hail causes \$1-billion in crop and property damage each year.

FLOODS -

Most flood fatalities occur at night, and most of the victims are folks who become trapped in automobiles. According to the National Oceanic and Atmospheric Administration (NOAA), six inches of moving water can knock you off your feet: A depth of two feet will cause most vehicles to float. With these statistics in mind, this is forewarning enough to keep us from walking or driving through flood waters.

LIGHTNING -

Lightning occurs in all thunderstorms. Each year, lightning strikes Earth 20 million times. The energy generated from one lightning flash will power a 100-watt light bulb for three months. The air near a lightning strike is heated to 50,000 degrees F. (hotter than the surface of the sun). The rapid heating and cooling in the air near a channel of lightning is what causes thunder. Lightning is no chooser of locations or situations to strike. It can get you anywhere, on the water, golf course, on a lawnmower or a horse. So when it starts, you need to find cover.

BE PREPARED!!

- Develop a family **EMERGENCY PREPAREDNESS PLAN** - The next issue will detail what to do in this plan and what should be included.
- **Watch for developing thunderstorms:** Keep your radios and TV tuned into local stations or area stations to stay abreast of the developing weather trends.
- Lightning can strike as far as 10 miles from the area where it is raining. You can hear thunder from that distance. **Remember, if you can hear thunder, you are in striking distance - seek safe shelter immediately.** A safe shelter is any enclosed building with plumbing and electrical service that will direct the charge to the ground. An enclosed vehicle (windows closed and rubber tires) is also safe. Avoid open-air structures and tall trees. Stay away from open water.
- **Use the 30-30 Rule** – When you see lightning, count the seconds until you hear thunder. If that time is **30 seconds** or less, the storm is within six miles and is dangerous. Seek shelter immediately. Wait at least **30 minutes** after you hear the last clap of thunder before you leave the shelter. Don't be fooled by the sunshine or blue sky.
- **Outdoors** – When you hear the first roar of thunder, stop all outside activities, work or sports to give all the folk's time to get into a large building or enclosed vehicles. **Follow the 30-30 Rule.**
- **Indoors** – Refrain from using cord phones, computers and other electrical equipment that puts you in direct contact with electricity. Unplug sensitive equipment and stay away from plumbing fixtures and running water. A good investment in advance of thunderstorm activity is to replace electrical outlets with Ground Fault Circuit Interrupters (GFCIs).
- **Helping lightning victims** – Call 9-1-1 and start CPR if necessary. Cardiac arrest and heart irregularities, burns, and nerve damage are common injuries. With proper treatment for these injuries, the victim will normally survive. I heard of an old wives' tale that helping a lightning victim might affect the helper. This isn't true, the charge cannot affect you.

If you respect lightning and thunderstorms and **practice the 30-30 Rule**, you can enhance the safety for yourself and others with you. As we mentioned above, when the weather favors thunderstorm conditions, stay tuned to your radio and/or TV to stay abreast of the coming possibilities of serious inclement conditions.