

PREPARING ST. CHARLES COUNTY - TORNADOES AND THUNDERSTORMS

Next in our discussion of the [top hazards impacting St. Charles County residents and businesses](#) is the concern about dangers from severe thunderstorms and tornadoes.

When cold and warm air masses come together, storm clouds develop. A [severe thunderstorm](#) is defined as a weather system that contains hail that is one inch or larger in size or that has wind gusts at about 60 miles per hour or greater. These storms may also include heavy rains and lightning. More than 150 severe thunderstorm events occur each year on average in Missouri, resulting in approximately 15 injuries, two deaths and more than \$100 million in property damage.

[Tornadoes](#) form when the different air masses start rotating and drop to the ground. Tornadoes are rated according to wind speeds, ranging from an EF0 at up to 85 miles per hour to and EF5 with winds greater than 200 miles per hour. For comparison, the 2011 tornado that devastated the Joplin area was rated an EF5 while the storm that damaged homes and businesses from Weldon Spring to St. Charles in 2013 (*see damage example on right*) was rated an EF3.



HOW TO PROTECT YOUR FAMILY

Thunderstorms and tornadoes occur throughout the year in Missouri. While these are naturally occurring events that can develop quickly, [there are precautions](#) you can take to protect yourself, your family and your property.

- 1) The first step is to be aware of your surroundings. Listen to weather reports for the possibility of severe weather that day or that week. A NOAA Weather Radio will alert you to immediate threats, and there are many online applications you can download to your phone or electronic device to alert you to severe weather.
- 2) The next step is to listen and take action to these reports. Stay inside your home or vehicle if there are threats for lightning. Review your response plan and outline what you would do if case high winds, tornadoes or flooding develop from the storm.
- 3) When these emergency alerts are activated, go immediately to your safe location. Whether it is in a basement, interior room, under stairs or other safe space, take your emergency kit, communications device and all family members (including pets).

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- 4) Additional things to have on hand and do during extreme storms include:
- Extra batteries and flashlights will help you see in the dark if the power is disrupted.
 - Wear shoes in case you have to walk across damaged floors after the storm.
 - Keep a small supply of cash, in case credit card machines and ATMs are inoperable.
 - Back-up communications and information gathering units – like battery operated radios, HAM radio units and fully charged cellphones – will keep you informed.
 - Contact friends or relatives to let them know you're ok (please text first instead of calling in an emergency, so as not to tie-up systems from first responders) .

Another way to protect yourself is to recognize [the difference between a watch and a warning](#). A **WATCH** means that conditions are right for the event to occur, whereas a **WARNING** means that the activity is occurring at that moment in the warned area. For example, if St. Charles County were to be under a TORNADO WATCH, residents should listen for more information and review preparedness plans with family and coworkers. When a WARNING is issued, residents should take action immediately.

ADDITIONAL RESOURCES

[Missouri Storm Aware](#)

[Missouri State Emergency Management Agency](#)

[Ready.gov](#)

[National Weather Service – Local Forecast](#)

[National Weather Service – Storm Safety](#)

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