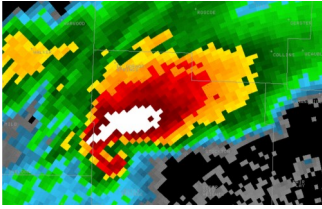


Number 3 Threat: The Storm

•Spotters unfamiliar with severe storms simply may not be able to comprehend that they are in danger until it is too late...Smart spotters never take risks near severe storms.



•Severe storms can become unbelievably fierce so fast that you may not have time to respond intelligently.

•Do not core punch a storm! To "core punch" means going through the heavy precipitation/hail core of the storm in order to get into a better position.

There are several bad things that can happen:

•You can drive into very large hail and seriously damage your vehicle (including losing a windshield).

•You can drive out of the rain and hail right into the tornado.

•In the core, you can have serious problems with rain: slick roads, zero visibility

•If you are driving in rain and you encounter hail that increases in size, stop, back up, and get out of there! You may be driving into a core without even knowing it.

Other thunderstorm threats:

Tornadoes are not the only threat from a severe thunderstorm!

Winds of 70 to 100 mph, especially when combined with very large hail, will put you in great danger.

HP supercells often bring very vicious weather, even when they are not tornadic.

Spotting the leading edge of a storm:

When spotting a storm as it approaches (the leading edge) in order to report a wind speed, position yourself with your vehicle pointed directly towards the line, or facing directly away from the line. Aerodynamics of your vehicle should give you a better chance of staying safe. Squall lines or bow echoes will have the potential to produce very strong winds, sometimes up to 80-90 mph or even higher in some cases. Be ready to act quickly and move to a safer location.

Keep a Keen Eye:

•It's easy to lose focus and become fixated on some feature you're watching - Don't get trapped into looking fixedly at one part of the scene in front of you.

•Maintain awareness of what's going on all around you and always be prepared for a surprise event.

•Keep your head on a swivel and look overhead occasionally, as well as all around.

•Spot with a partner, who can be an extra set of eyes and ears to help you stay safe.

•Usually, you can see well enough ahead to know what's coming.

•When the sky is looking especially vicious, follow your gut and head to safety.

•A good spotter knows where potential shelters may be located—use them!

•If there is time, turn your vehicle around and head the other way.

•You can always go back to your original location to look for damage to report.

•Always be prepared to brace yourself for very high winds.

•Know what to expect by listening to the NWS warning text.

Escape Routes:

•Mobile spotters must have planned escape routes.

•It is always a good idea to think about what you might do if you somehow end up trapped.

•Roads and storms can sometimes create situations that you don't expect.

•Maps aren't always accurate, and events can arise for which you didn't plan.

•It is easy to find yourself with no escape route as a storm bears down on you, so always plan ahead and know your area well.

•Know where all your potential shelters are located ahead of time.



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This reference guide was produced with information from an essay written by Dr. Charles Doswell III

Mobile Spotting Safety Rules



Safety...Safety...Safety?

- Remember—we would rather NOT receive a report than to put someone's life in danger!
- Always ask yourself: How much danger am I in?
- Always evaluate every situation for potential safety concerns!



The S.E.T. Effect and its Implications: **(Stress, Excitement and Tension)**



Anxious spotters + severe storms/tornadoes= potential disaster.

Huge impact on safety – Severely impacts how you react to a situation and cause a number of safety concerns.

This WILL happen to even the most seasoned spotter—no matter how much severe weather they've seen, they will eventually come across something they've never seen before.

KEY: Keep your emotions in check when spotting – This is true in ANY disaster, weather related or not.

Number 1 Threat: The Highway:

Even the most careful and conscientious driver may have problems under severe weather conditions.

•Spotters are prone to:

- Drive with less than 100% attention
- Drive above the speed limit
- Drive down rain/hail covered roads
- Make sudden stops and starts without warning
- Drive in adverse conditions, such as low visibilities from intense downpours, wet pavement and strong gusty winds.



Driving Tips:

- Avoid going out alone—Having two persons in the vehicle enables one person to do nothing but drive, and the other person is able to navigate and analyze the storms
- Hydroplaning is serious—If you are hearing water splashing under your car, then you are on the verge of hydroplaning, if you are not doing so already.
- Avoid speeding: Slow down on wet roads, watch for obstacles, animals and other vehicles in unusual and unsafe places.

Driving Tips Cont.



-NEVER stop in the middle of the road or highway. When pulling off on the side of the road – make sure you are fully off the right-of-way. Make sure that where you are parking is legal and remember that parking on interstate is for emergencies only. When opening your vehicle door, make sure you are off the road enough so that you can open your door safely, and inspect the shoulder you are about to park on to make sure it is in good condition.

-Stay very alert for road obstacles (construction, animals, people, stopped vehicles, etc.) as they will sometimes cause you to react suddenly, which could cause accidents.

-Fuel: Top off your tank before it gets really low. You might find yourself many miles from a gas station when you really need it. Gas stations may be closed and storms may have knocked out power to the station. Running out of fuel can put you in danger from the weather if it happened at a bad time.

-Avoid driving on wet dirt roads. Even if the mud on a dirt road isn't like quicksand, a thin layer of mud on hard-packed dirt can be extremely slick.

-Visibility: Use your headlights when it's raining or the air is filled with dust. Use your parking lights when you pull off the side of the road. Using your hazard lights are an option for roadside parking, but they may draw too much attention.

-Night spotting: This requires extreme vigilance, awareness of winds and storm behavior, and experience to avoid downbursts, hail shafts, and tornadic circulations.

-Prepare your vehicle: Make sure the car is reliable (i.e. tires filled with air including spare, good wiper blades, working lights). Prepare for small emergencies (i.e. have a tire jack, road flares, jumper cables, motor oil, etc).

-Use your turn signal: It will lessen the annoyance of sudden stops and starts and pulling onto and off of roads for other drivers around you.

-Keep your engine running and your doors open: You do not want to find out about a vehicle problem as a violent storm bears down on you. You want to be able to get away quickly!

Number 2 Threat: Lightning:

Spotters, by nature of what they do, are going to be more prone to be struck.

Almost all lightning fatalities have occurred while the victim was outdoors. Remember your spotting vehicle is a safe place.

REMEMBER: The NWS does NOT issue warnings for lightning. Lightning does NOT make a thunderstorm severe, no matter how vivid, impressive or deadly it is.



That first strike of lightning:

- The first cloud to ground lightning strikes often come near developing rain shafts. Sometimes that first strike can be right near you!
- If rain has not been approaching or has not begun around you, but then a few drops begin to fall around you, you may be in imminent danger.
- In addition, cloud to ground lightning can also occur directly ahead of moving rain shafts

Bolt from the blue:

- Lightning often strikes outside of heavy rain and may occur as far as 10 miles away from any rainfall.
- More than 50% of lightning deaths occur AFTER the storm has passed.
- These positive lightning bolts normally travel horizontally away from the storm and reach farther than typical lightning, then curve to the ground.



Lightning Safety Tips:

- Avoid being the tallest object in the immediate area.
- Avoid being close to any tall objects such as trees and power/phone poles and lines.
- Stay clear of fences and power/phone lines that lead into areas where there are lightning strikes. The wire can carry the strike to you.
- Not all lightning will give you fair warning it's on its way.
- A safe building is one that is fully enclosed with a roof, walls and floor, such as a home, school, or shopping center.
- People struck by lightning carry no electrical charge and can be handled safely. Call 911 and give first aid.