

# Safety Column



**John Bell**  
Missouri Department of Agriculture

I know the weather, at least in the United States, can vary greatly from North to South and East to West. Here in Missouri the cold weather usually occurs between December and February with some frigid days in late November and early March. The extreme heat begins around May or June and goes till August or September. Not to mention the drought, snowfall, tornadoes, severe thunderstorms, and flooding. All that being said, it's a good idea to use this NCWM Newsletter's Safety Column to discuss the topic of Severe Weather.

Here in Missouri, we are no stranger to heavy rain and flooding, high winds, lightning, hail, and tornadoes. When severe weather approaches, we need to be aware of the dangers and be prepared to act when alarms are activated. No matter where you are located in an office building, if an emergency warning system is activated, all personnel should get up and move to a "Storm Safe Area." These areas are designated by safety professionals and are posted to direct you to a safe area away from flying glass and debris should a window break. If you work remotely then you should avoid windows, go to the lowest floor, small center room (like a bathroom or closet), under a stairwell, or in an interior hallway with no windows. Crouch as low as possible to the floor, facing down; and cover your head with your hands.

I personally do not have any experience with hurricanes, but would advise evacuating when ordered and adhere to the following rules regarding rain and wind.

# Safety Column

For Weights & Measure inspectors and individuals driving in vehicles:

- Flooding after a downpour can come unexpectedly. If there is water on the roadway avoid driving into it. Water can hide depth, so even if it looks shallow enough to cross, it may not be safe. If possible, drive to higher ground and wait for the flooding to subside.
- Trees are not safe during heavy hail, but buildings are. Drive under a shelter to help minimize damage to the vehicle; shelters include parking garages and similar places. Set your headlights to low beams and drive slowly. Driving in hail is similar to driving in the rain, but the ice has a greater chance of causing damage (including damaging windows) and can be difficult to drive on, particularly when thick.
- Be aware that larger vehicles are more affected by the wind than smaller ones and allow extra room around other vehicles. It may be difficult for drivers to maintain a straight heading; the winds may push them towards other lanes, and remaining close can significantly increase the chances of a collision. Sudden changes in wind speed can cause you to over-correct your speed or heading, so drive slowly to reduce the chance of swerving off the road or into another vehicle.
- Remember that flashes of lightning can blind you and make it difficult to see hazards. As with the winds that may accompany it, slowing down will help, and so will pulling to the side of the road and turning on the emergency flashers. This will help ensure that other drivers can see your vehicle. Furthermore, you should remain inside your vehicle and avoid touching metal.
- Do not remain under trees. They can be struck by lightning and collapse on top of your vehicle.
- Do not drive during tornado conditions. If the tornado is far enough away and road options and traffic allow, you should try to find a substantial building for shelter. Follow the basic tornado safety guidelines (get in - get down - cover up). Motorists have found truck stops, convenience stores, restaurants, and other businesses to be adequate shelters in a tornado situation. Walk-in coolers can sometimes make a good shelter.

# Safety Column

·While you should never try to outrun a tornado in your vehicle, you may, in some situations, be able to get out of the tornado's way by driving out of its path, or simply stopping and allowing the tornado to pass. Again, this can be extremely dangerous unless traffic, time of day and road options allow you to see the tornado, determine which way it's moving (and how fast), find a road option that will take you out of its path (while avoiding other storms) and to safe shelter.

The worst-case scenario for motorists would be to be trapped in your vehicle on the road with no escape possible. This scenario could occur in more densely populated areas, in metropolitan areas at rush-hour or in high traffic situations, or on limited access roadways, such as interstates or turnpikes, where it might not be possible to quickly exit and find safe shelter. It is in these situations when it may become necessary to leave your vehicle and seek shelter in a ditch, culvert or low spot.

For Extreme Hot Weather:

When extreme heat comes in the summer be sure to dress in loose and cool fabrics. Drink plenty of water and be sure to have a water source close at hand. Use the shade and/or fan as much as possible and work under canopies if available. Be aware of the health issues that can be caused by extreme heat.

·Heat Cramps - muscle pains and spasms due to heavy exertion. Although heat cramps are the least severe, they are often the first signal that the body is having trouble with the heat.

·Heat Exhaustion - typically occurs when people work in a hot, humid place where body fluids are lost through heavy sweating. Blood flow to the skin increases, causing blood flow to decrease to the vital organs. This results in a form of mild shock. If not treated, the victim's condition will worsen. Body temperature will keep rising and the victim may suffer heat stroke.

·Heat or Sun Stroke -a life-threatening condition. The victim's temperature control system, which produces sweating to cool the body, stops working. The body temperature can rise so high that brain damage and death may result if the body is not cooled quickly.

# Safety Column

For Extreme Cold Weather:

Be aware of the health issues that can be caused by extreme cold.

- Frostbite - These include loss of feeling and white or pale appearance in extremities such as fingers, toes, ear lobes, and the tip of the nose. If symptoms are detected, get medical help immediately.
- Hypothermia - These include uncontrollable shivering, memory loss, disorientation, incoherence, slurred speech, drowsiness, and apparent exhaustion.
- Avoid overexertion when shoveling snow. If you must shovel snow, stretch before going outside and take frequent breaks.
- Be cautious when walking outside and lookout for ice.

When traveling in cold weather be sure to:

- Carry a winter weather kit in your vehicle.
- Listen to radio or television for weather reports and emergency information.
- Try and dress in layers of loose fitting, lightweight warm clothing rather than one layer of heavy clothing. Wear gloves and a hat. Cover your mouth with a scarf to protect your lungs. Protect your lungs from extremely cold air by covering your mouth when outdoors. Keep dry. Change wet clothing.
- Drive only if necessary. If you must drive, travel in the day, don't travel alone, and keep others informed of your schedule. Stay on main roads, avoid back road shortcuts. If you need assistance while on the road, or need to report an accident, broken down car, or vehicle off the road, call the local Highway Patrol or Police.

If a blizzard traps you in the car: Pull off the highway, turn on hazard lights and hang a distress flag from the radio antenna or window. Remain in your vehicle where rescuers are most likely to find you.

# Safety Column

Do not set out on foot unless you can see a building close by where you know you can take shelter. Be careful: distances are distorted by blowing snow. A building may seem close but be too far to walk to in deep snow. Run the engine and heater about 10 minutes each hour to keep warm. When the engine is running, open an upwind window slightly for ventilation and periodically clear snow from the exhaust pipe. This will protect you from possible carbon monoxide poisoning. In extreme cold, use road maps, seat covers, and floor mats for insulation. Huddle with others in the vehicle and use your coat for a blanket. Take turns sleeping. One person should be awake at all times to look for rescue crews. Drink fluids to avoid dehydration. Be careful not to waste battery power. Balance electrical energy needs - the use of lights, heat, and radio - with supply. Turn on the inside light at night so work crews or rescuers can see you. If stranded in a remote area, stomp large block letters in an open area, spelling out HELP or SOS and line with rocks or tree limbs to attract the attention of rescue personnel who may be surveying the area in the air. Leave the car and proceed on foot - if necessary - once the blizzard passes. (MO Department of Safety, SEMA)

There are a variety of weather apps out there that may also help warn you if severe weather is approaching especially if you live in more rural areas without warning sirens. Weather radios are also a valuable tool in these situations. Stay safe out there “whether” the conditions are favorable or not.

