Tornado Safety Infographic



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Severe Weather Safety

"Resources to help weather the storm"

Tornadoes: By the Basics



What:
A tornado is a violently rotating column of air extending between, and in contact with, a cloud and the surface of the earth. Tornadoes are generally spawned by thunderstorms, but they have been known to occur without the presence of lightning.



When:
Tornadoes can occur at any time of the year. In the southern states, peak tornado occurrence is in March through May, while peak months in northern states are during the summer.



Where:
Tornadoes can take place anywhere, and have been reported in every state in the United States, but the majority occur in the middle of the country. "Tornado Alley" is the area in which most tornadoes hit, which include the states of Texas, Oklahoma, Missouri, Kansas, and Illinois. They also occur in many other parts of the world, including Australia, Europe, Africa, Asia, and South America.

How:
For a tornado to develop, several conditions must be present in the atmosphere at the same time: abundant low-level moisture, atmospheric instability, and a catalyst such as a cold front or other low-level zone of converging winds that acts to lift moist air aloft.

Within an area in which conditions for tornado formation are favorable, air will rise and become saturated with moisture. As air continues to rise to greater and greater heights, it will produce a thunderstorm cloud if the atmosphere is unstable -- a situation that occurs when the temperature of the air drops rapidly as it rises, or when dry air overlays moist air near the ground.
(weather.com)

To be prepared for a tornado, it is critical to be familiar with tornado warning signs. Although tornadoes vary greatly in their appearance and provide little or no warning, the following signs can indicate that a tornado could be imminent.

- A dark, often greenish sky.

- A wall cloud, particularly if it is rotating.
- Large hail. Although not always, storms that produce tornadoes frequently produce large hail as well.
- A loud roar, similar to the sound of a freight train.
- Tornadoes may occur near the trailing edge of a thunderstorm and be quite visible. They may also be embedded in rain and not be visible at all.
- Stay tuned to local radio and TV stations or a National Oceanographic and Atmospheric Administration (NOAA) Weather Radio for further weather information.
- Watch the weather and be prepared to take shelter immediately if conditions worsen.
- Designate an area in your home as a shelter, and practice having everyone in the family go there in response to a tornado threat.
- Make sure everyone understands the siren warning system, or whatever warning system occurs in your area.
- Mark where your first-aid kit and fire extinguishers are located.

During a Tornado:

Just as you don’t always know when a disaster will strike, you won’t know where you will be when a disaster will strike. Follow these safety tips which include:

If you’re in a building structure such as a home , school, office, hospital or other public building:

- Seek shelter in a windowless, interior room; storm cellar; basement; or lowest level of the building.
- If you are in a high-rise building, go to a small interior room or hallway on the lowest floor possible.
- Stay away from glass, both in windows and doors.
- Crouch down, and make as small a “target” as possible.
- Get under a piece of sturdy furniture such as a bench or heavy table or desk
- Use arms to protect head and neck.

In a vehicle, trailer, or mobile home

- Get out immediately and go to the lowest floor of a sturdy, nearby building or a storm shelter.
- If you are in a car, and you can see a tornado forming or approaching, you should leave the car and take shelter as above. A tornado can blow a car off a road, pick a car up and hurl it, or tumble a car over and over.

Outside with No Shelter

- If caught in the open, seek a safe place immediately. The chances of encountering falling trees, power lines, and lightning are more likely than encountering the tornado itself.
- Lie flat in a nearby ditch or depression and cover your head with your hands. Be aware of the potential for flooding.
- Do not get under an overpass or bridge.
- Never try to outrun a tornado.
- Watch out for flying debris. Flying debris from tornadoes causes most fatalities and injuries.

After a Tornado:

- Continue to monitor your battery-powered radio or television for emergency information.
- Be careful when entering any structure that has been damaged.
- Stay out of any building if you smell gas.
- Wear sturdy shoes or boots, long sleeves and gloves when handling or walking on or near debris.
- Be aware of hazards from exposed nails and broken glass.
- Do not touch downed power lines or objects in contact with downed lines. Report electrical hazards to the police and the utility company.
- Use battery-powered lanterns, if possible, rather than candles to light homes without electrical power.
- Never use generators or charcoal-burning devices inside your home, basement, garage or camper – or even outside near an open window, door or vent. Carbon monoxide (CO) – an odorless, colorless gas that can cause sudden illness and death if you breathe it – from these sources can build up in your home, garage or camper and poison the people and animals inside.
- Cooperate fully with public safety officials.
- Respond to requests for volunteer assistance by police, fire fighters, emergency management and relief organizations, but do not go into damaged areas unless assistance has been requested. Your presence could hamper relief efforts and you could endanger yourself.

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