

Severe Thunderstorms / Tornadoes



Nature of the Hazard:

Despite their small size, all thunderstorms are dangerous. Every thunderstorm produces lightning which kills more people each year than tornadoes and hurricanes? Heavy rain from thunderstorms can lead to flash flooding. Strong winds, hail, and tornadoes are also dangers associated with some thunderstorms. High winds from thunderstorms can cause damage to homes, overturn vehicles, and blow down trees and utility poles, causing widespread power outages.

Many strong thunderstorms produce hail. Large hail, and the glass it may break, can injure people and animals. Hail can be smaller than a pea, or as large as a softball, and can be very destructive to automobiles, glass surfaces (skylights and windows), roofs, plants, and crops. Downbursts and straight-line winds associated with thunderstorms can produce winds of 100 to 150 miles (161 to 241 kilometers) per hour—enough to flip cars, vans, and pickup trucks. The resulting damage can equal the damage of most tornadoes.

Tornadoes are incredibly violent local storms that extend to the ground with whirling winds that can reach 300 mph. A tornado is defined as a 'violently rotating column of air which is in contact with the ground' (NWS). Spawned from powerful thunderstorms, tornadoes can uproot trees and buildings and turn harmless objects into deadly missiles in a matter of seconds. Damage paths can be in excess of one mile wide and 50 miles long.

Risk Area:

Thunderstorms and Tornadoes can occur in any state but occur more frequently in the Midwest, Southeast and Southwest. The US has the most tornadoes annually, normally between 800-1000 a year; many of these occur in 'Tornado Alley'.



Watches and Warnings:

Severe Thunderstorm Watch

This is issued by the National Weather Service when conditions are favorable for the development of severe thunderstorms in and close to the watch area. A severe thunderstorm by definition is a thunderstorm that produces 3/4 inch hail or larger in diameter and/or winds equal or exceed 58 miles an hour. The size of the watch can vary depending on the weather situation. They are usually issued for a duration of 4 to 8 hours. They are normally issued well in advance of the actual occurrence of severe weather. During the watch, people should review severe thunderstorm safety rules and be prepared to move a place of safety if threatening weather approaches.

Severe Thunderstorm Warning

This is issued when either a severe thunderstorm is indicated by the WSR-88D radar or a spotter reports a thunderstorm producing hail 3/4 inch or larger in diameter and/or winds equal or exceed 58 miles an hour; therefore, people in the affected area should seek safe shelter immediately. Severe thunderstorms can produce tornadoes with little or no advance warning

Tornado Watch -- Tornadoes are likely. Be ready to take shelter. Stay tuned to radio and television stations for additional information. A Tornado Watch is issued by the National Weather Service when conditions are favorable for the development of tornadoes in and close to the watch area. Their size can vary depending on the weather situation. They are usually issued for a duration of 4 to 8 hours. They normally are issued well in advance of the actual occurrence of severe weather. During the watch, people should review tornado safety rules and be prepared to move a place of safety if threatening weather approaches.

Tornado Warning -- A tornado has been sighted in the area or is indicated by radar. Take shelter immediately. A Tornado Warning is issued when a tornado is indicated by the WSR-88D radar or sighted by spotters; therefore, people in the affected area should seek safe shelter immediately. They can be issued without a Tornado Watch being already in effect. They are usually issued for a duration of around 30 minutes.

Emergency Public Information:

The Texarkana College Department of Public Safety will be designated as the Storm Ready 24 Hour Warning Point for Texarkana College and will monitor the NOAA Weather Radio in order to stay updated on inclement or dangerous weather situations.

Once it has been determined that a potential threat of inclement or dangerous weather is possible, The Texarkana College Executive Director of Public Safety or his designee will activate the Emergency Operations Center (EOC) located at 1201 Carroll Street Texarkana, TX. There the situation will be monitored using NOAA Weather Radio, the National Weather Service website, local and cable television, the TC Weather Station, Texarkana Emergency Management emails, and patrol officers' observation.

The EOC will notify and keep updated the students, staff and faculty of the situation and any appropriate actions that should be taken.

Direction and Control:

In the event a "Tornado Warning" is issued, an immediate place of optimum safety should be sought. Existing plans should be implemented as quickly as possible and building contacts should begin moving everyone to the designated safe areas within their respective buildings.

If inside, seek refuge in a doorway, interior hallway, or under a desk or table on the lowest floor of the building while staying away from windows and exterior doors.

If outside, attempt to reach a protective area, such as a sturdy building with a

basement. If there is not time to escape or find a suitable protective area, lie flat and face-down on low ground, protecting the back of your head with your arms. Get as far away from trees and cars as you can; they may be blown onto you in a tornado. Avoid areas subject to rapid water accumulation or flooding in heavy rains.

Note: Auditoriums, cafeterias and gymnasiums that are covered with a flat, wide-span roof are not considered safe

In a car or truck: Vehicles are extremely dangerous in a tornado. If the tornado is visible, far away, and the traffic is light, you may be able to drive out of its path by moving at right angles to the tornado. Otherwise, park the car as quickly and safely as possible -- out of the traffic lanes. [It is safer to get the car out of mud later if necessary than to cause a crash.] Get out and seek shelter in a sturdy building. If in the open country, run to low ground away from any cars (which may roll over on you). Lie flat and face-down, protecting the back of your head with your arms. Avoid seeking shelter under bridges, which can create deadly traffic hazards while offering little protection against flying debris.

Once in the shelter, personnel should protect their heads with their arms and crouch down

After the storm:

After the storm has passed, personnel from the Department of Public Safety and the Department of Facility Services will survey the campus for damage and injured people. The Department of Public Safety will provide necessary security functions during the incident. A search and rescue operation and a mass care operation will also be coordinated if necessary. Debris removal will be directed by the TC Facility Services Department.