

# Tornadoes

Tornadoes are one of nature's most violent storms. They are common in Texas, especially during the spring. Learn how to protect yourself before, during and after a tornado strikes.

## **What is a tornado?**

A tornado is a rotating funnel-shaped cloud that drops out of a storm cloud to the ground. Whirling winds range from 75 miles an hour to 300 miles an hour. Tornadoes can measure one mile in width and travel for 50 miles, often changing direction erratically.

Mobile homes are particularly vulnerable, but even sturdy, brick buildings on concrete slabs are in danger. The power of tornadoes can be great enough to hurl objects as large as cars over long distances, resulting in extreme damage.

Each year tornadoes are responsible for about 70 deaths and 1,500 injuries nationwide. To learn more about tornadoes, go to NOAA's Tornado FAQ.

## **How do I prepare for a tornado before it strikes?**

Find out about public warning systems in your area. Most communities at risk from tornadoes use sirens to warn their residents. Understand the difference between a tornado watch and a tornado warning. A watch means that the formation of tornadoes is possible. A warning means that one has been sighted or detected by radar; seek shelter now.

## **Inspect your home**

Make an inspection of your home, paying close attention to the walls and roof. You may need to make some improvements such as bolting the walls to the foundation or attaching "hurricane clips" between wall studs and roof rafters. Use the "Home Inspection Checklist" provided by the U.S. Centers for Disease Control and Prevention as a guide. You will also want to contact building inspectors in your city or county about structural concerns in your area.

## **Prepare a shelter**

If your home does not have a basement or storm cellar, locate the safest room in your house and designate it as your storm shelter. An interior room without windows such as a closet, bathroom or the crawl space under a staircase may be the safest place.

Mobile homes – even those with tie-downs – are not safe during tornadoes. If you live in a mobile home, plan to shelter in a nearby sturdy building. If one does not exist, find a low spot outside, such as a ditch, and plan to go there during tornado warnings. Lie flat on the ground and cover your head with your hands.

## **Safe Rooms**

Building a safe room is another option. Safe rooms are above-ground shelters built to withstand tornado-force winds and flying debris. An existing room, such as an interior bathroom, can be reinforced to function as a safe

room while remaining functional as a bathroom. See information from FEMA on Preparing a Safe Room. Manufactured free-standing safe rooms also are available.

## **How do I protect myself and my family during tornado threats?**

When severe weather is approaching, you may not be able to see funnel clouds, so learn how to look for other weather conditions that may indicate tornadic activity:

- A dark or green-colored sky
- Large, dark, low-lying clouds
- Large hail
- A loud roar that sounds like a freight train.

If you see any of these signs, go to your shelter immediately and tune in to local radio, television or get information about NOAA Weather Radio. Help alert others by reporting tornado sightings to the media.

### **In your car**

If you see a tornado while you are driving, stop your car and get out. Find the lowest spot, such as a ditch, and lie flat on the ground. Cover your head with your hands. Do not seek shelter beneath overpasses as wind speeds can be higher in narrow passages. Never try to out-drive a tornado.

### **At school, the office or shopping centers**

In schools and office buildings, go to a designated shelter. If there is not one, the safest place is the basement or an interior hallway on the lowest floor. In shopping centers, move as far away from glass doors and windows as possible. If you are in a building with a large-span roof, such as a gymnasium or auditorium, seek shelter elsewhere.

## **How do I stay safe after a tornado?**

Once a tornado has passed, the danger is not over. In fact, half of all tornado-related injuries occur following the storm. Before you leave your shelter, look outside and assess potential hazards. While inspecting damage, cleaning up and living without power, take the following precautions:

- Do not touch downed power lines or any objects that are in contact with downed lines. Report electrical hazards to authorities.
- Wear sturdy shoes or boots, long sleeves and gloves when cleaning up.
- Look out for broken glass and exposed nails, a leading cause of tetanus. If you get a nail puncture, contact your doctor or local health department. You may need to get a tetanus shot.
- Use extreme caution when entering damaged structures.
- If your home is damaged, shut off the electrical power, natural gas and propane gas to avoid electrocution, fires and explosions.
- If you smell gas in your home, turn the main gas valve off and call the gas company. Open windows and doors. Do not smoke, light candles or use matches.
- Whenever possible, use battery-powered flashlights and lanterns instead of candles.
- Help avoid injuries when using chain saws and power tools by learning how to operate them properly, and always following recommended safety procedures.



# *What you need to know about...*



- Never use generators, grills, camp stoves or other gas or charcoal- burning devices inside your home, garage or near open windows, doors and vents. Carbon monoxide – a colorless, odorless gas – can build up and cause sudden illness and death. If you suspect carbon monoxide poisoning or feel dizzy, light-headed or nauseous, seek immediate medical attention. More information on carbon monoxide poisoning is available online. For more information, go to Carbon Monoxide and Generators on the DSHS Web site.