

Tornadoes



General Information

- Tornadoes come from powerful thunderstorms that can cause fatalities and devastate communities in matter of seconds.
- They appear as a rotating, funnel-shaped cloud coming out of the thunderstorm with whirling winds that can reach up to 300 miles per hour.
- Damage paths can be a mile wide and 50 miles long.
- Every state can experience a tornado.
- Usually tornadoes are visible, but sometimes they can be obscured by rain or low-hanging clouds.
- There are times they can develop without warning.

Several signs that a tornado is near

- The wind dying down and the air becoming very still.
 - There could be cloud of debris even though the funnel isn't visible.
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- Usually you will see a tornado near the trailing edge of a thunderstorm.
 - Behind the tornado you can find clear skies.



Before a Tornado

- You need to have an emergency kit and a family communication plan.
- You need to have your NOAA Weather Radio or commercial radio or television on so you can hear the latest information about the storm and any instructions being given by emergency management officials.
- Keep an eye on the sky so you can keep track of changing weather conditions.
- Be aware of the following danger signs:
 - Dark, often greenish skies
 - Large hail
 - A large, dark low-lying cloud (particularly if rotating)
 - Loud roar, like a train engine
- When you see any of these signs you need to take shelter immediately.

Inspecting the Damage

- You need to inspect your structure for structural, electrical, or gas-leak hazards. Make sure you contact your local or county building inspectors for information on structural safety codes and standards. They also may be able to help you find qualified contractors to help you with your work.
- Before a tornado you need to make sure you know where all your shut-off valves are for electrical, natural gas, or propane so after the tornado you can turn these valves off if you have damage. Only have qualified personnel turn on these valves after your systems have been thoroughly checked out.
- Inspect your structure for any frayed wire or sparks or for any odor of something burning, if you have any of these you need to immediately turn off your electricity.
- Inspect your structure for gas leaks, if you suspect you have one turn off the gas and let safety officials and the gas company know immediately. If you suspect a gas leak **do not turn on lights, light matches, smoke or do anything that could cause a spark. Do not return to your structure until you are told it is safe to do so.**

Safety During Clean Up

- Always wear sturdy shoes, long sleeves and gloves.
- Make sure you learn the proper safety procedures and operating instructions before operating any gas-powered or electric-powered saws or tools or any other tools.
- Use proper procedures to clean up spilled medicines, drugs, flammable liquids and other potential hazardous materials.

- For lighting use battery-powered lanterns rather than candles. If you use candles you need to make sure they are in safe holders and away from curtains, paper, wood or other flammable items. If you leave the room, blow out the candle or take the candle with you.
- When the electricity is off, we sometimes use generators, always have them located outside any structure. There are other tools you should use only outside and away from windows or doors or vents as well, like pressure washers, grills, camp stoves, or other gasoline, propane, natural gas, or charcoal burning devices. You want to avoid carbon monoxide (CO) poisoning which can come from the use of these devices in an unvented area. You need to seek medical attention promptly if you suspect CO poisoning are feeling dizzy, light-headed or nauseated.
- You will need to hang up displaced telephone receivers and use the phone only for reporting an emergency.
- You will need to fully cooperate with all public safety officials.
- You will need to respond to all requests by public safety officials.
- As requests come in for volunteers you can respond as well, but do not go into damaged areas unless you have been invited and you are escorted by local volunteer officials. Your presence could hamper relief efforts and you could endanger yourself.

During a Tornado

If a Tornado warning is given you need to seek shelter immediately! You need to seek shelter so you can protect yourself from flying debris. If you have a bicycle or motorcycle helmet you should put it on.

If you are in:

A structure (e.g. residence, small building, school, nursing home, hospital, factory, shopping center high-rise building):

- You need to go to the designated shelter area, safe room, basement, storm cellar, or the lowest building level.
- When there is no basement, you need to go to a center interior room on the lowest level like a closet, interior hallway or bathroom, making sure you are away from corners, windows, doors, and outside walls.
- You need to make sure you have as many walls as possible between you and the outside.
- You will want to get under a sturdy table and use your arms to protect your head and neck.
- You need to have on sturdy shoes.
- **Do not open** windows.

If you are in a **high rise building** you need to go to a small interior room or hallway on the lowest floor possible.

A trailer or mobile home:

- You need to get out immediately and go to the lowest floor of a sturdy, nearby building or storm shelter.
- Even if the mobile home is tied down it offers little protection from tornadoes.

Outside with no shelter:

- You should never try to outrun a tornado, but if you have time then immediately get into a vehicle, buckle up and drive to the nearest sturdy shelter.
- If you are hit by flying debris pull over and park, stay buckled in your vehicle put your head down below the windows, cover your head with your hands and if available cover yourself with a blanket, coat, or cushion.
- If you can get to an area lower than the roadway, leave your vehicle and lie down in that area covering yourself with a blanket, coat, or cushion.
- **Do not park under a bridge or overpass.**
- You need to watch out for debris; flying debris causes the most injuries and fatalities from a tornado.

After a Tornado

Tornado injuries take place both during and after the tornado. Studies have shown that 50% of injuries come after the tornado as residents are being rescued and clean-up is taking place. A third of the injuries are from stepping on nails.

Tornadoes damage power lines, gas lines, which can cause electrocution, fire or explosions.

Injuries

You need to always check for injuries. If the injuries are serious do not move the person unless they are in immediate danger of further injury.

Seek medical assistance for those who need it, taking those measures that will prevent shock and keep them safe.

If someone has stopped breathing then you need to begin CPR if you are trained to do so. (It would be great if you could get trained in CPR and other basic emergency techniques.)

If someone is bleeding apply direct pressure to the wound to get it stopped.

Have any injuries evaluated by a physician.

If you are trapped you need to find away to let people know where you are at.

General Safety Precautions after a tornado

- You need to continue to monitor emergency broadcasting for information.
- Always to be careful when entering a damaged structure.
- If you are clearing debris you need to wear sturdy shoes, long sleeves and gloves.
- Watch out for exposed nails and broken glass.
- Avoid down power lines or objects in contact with downed lines.
 - You'll need to report them to police and the utility company.