

# Fact Sheet

# Tornadoes

NIMS Integration Center  
U.S. Department of Homeland Security  
500 C Street, SW  
Washington, DC 20472



A tornado is a violently rotating column of air extending from a thunderstorm to the ground. The most violent tornadoes are capable of tremendous destruction with wind speeds of 250 mph or more. Damage paths can be in excess of one mile wide and 50 miles long. In an average year, 800 tornadoes are reported nationwide. Every state is at some risk from this hazard.

## Know Your Risk and What To Do

- Contact your local emergency management office to learn about emergency plans.
- Get additional information from the Federal Emergency Management Agency ([www.fema.gov](http://www.fema.gov)), the American Red Cross ([www.redcross.org](http://www.redcross.org)) and the National Oceanic and Atmospheric Administration ([www.noaa.gov](http://www.noaa.gov)).
- Inquire about emergency plans and procedures at your child's school and at your workplace.
- Make a family disaster plan that includes out-of-town contacts and locations to reunite if you become separated. Be sure everyone knows home, work and cell phone numbers, and how to call 9-1-1.
- Assemble a 3-day disaster supplies kit with food, water, medical supplies, battery-powered radio and NOAA Weather Radio All Hazards, batteries, flashlights and other items.
- Gather important documents such as birth and marriage certificates, social security cards, passports, wills, deeds, and financial and insurance records. Store them in a fire and flood safe location or safe deposit box.

## Before a Tornado

- Be alert to changing weather conditions.
- Listen to NOAA Weather Radio or to commercial radio or television newscasts for the latest information.
- Remember that a **Tornado Watch** means tornadoes are possible. Remain alert for approaching storms. Watch the sky and stay tuned to NOAA Weather Radio All Hazards, commercial radio, or television for information. A **Tornado Warning** means that a tornado has been sighted or indicated by weather radar. Take shelter immediately.
- Look for approaching storms.
- Look for the following danger signs:
  - Dark, often greenish sky
  - Large hail
  - A large, dark, low-lying cloud (particularly if rotating)
  - Loud roar, similar to a freight train
- If you see approaching storms or any of the danger signs, be prepared to take shelter immediately.

## During a Tornado

- If you are under a tornado WARNING, seek shelter immediately!
- If you are inside, go to the safe place you picked to protect yourself from glass and other flying objects. The tornado may be approaching your area.
- If you are outside, hurry to the basement of a nearby sturdy building or lie flat in a dry ditch or low-lying area.
- If you are in a car or mobile home, get out immediately and head for safety (as above).

## After a Tornado

- Watch out for fallen power lines and stay out of the damaged area.
- Listen to the radio for information and instructions.
- Use a flashlight to inspect your home for damage; do not use candles at any time.

## Preparing a Safe Room

The purpose of a safe room or a wind shelter is to provide a space where you and your family can seek refuge that provides a high level of protection. You can build a safe room in one of several places in your home, including your basement, atop a concrete slab-on-grade foundation or garage floor, or in an interior room on the first floor.

- To protect its occupants, a safe room must be built to withstand high winds and flying debris, even if the rest of the residence is severely damaged or destroyed.
- The safe room must be adequately anchored to resist overturning and uplift.
- The walls, ceiling, and door of the shelter must withstand wind pressure and resist penetration by windborne objects and falling debris.
- Below-ground safe rooms must be designed to avoid accumulating water during the heavy rains that often accompany severe windstorms.
- The connections between all parts of the safe room must be strong enough to resist the wind.
- Sections of either interior or exterior residence walls that are used as walls of the safe room must be separated from the structure of the residence so that damage to the residence will not cause damage to the safe room.
- Additional information about safe rooms available from FEMA: **Taking Shelter from the Storm: Building a Safe Room Inside Your House** (FEMA-320) is a manual with detailed information about how to build a wind-safe room to withstand tornado, hurricane and other high winds.

## The Recovery Process

- For direct assistance to individuals' and families' immediate needs contact the American Red Cross or other local voluntary agencies.
- Check newspapers, television, or radio news for information on available disaster assistance.
- If you have property damage, contact your insurance company as soon as possible.
- For information on helping children deal with disaster, visit [www.fema.gov](http://www.fema.gov) or get a copy of FEMA 478 **Helping Children Cope with Disaster**. To obtain other fact sheets and publications call the FEMA publications warehouse at 1-800-480-2520. You can also visit DHS' [www.ready.gov](http://www.ready.gov).

Dangerous Tornado Myth!	The Facts:
<b>Open windows equalize pressure and minimize damage.</b>	Opening windows does <b>not</b> affect wind pressure but will allow damaging winds to enter the structure. The best course of action is to close the windows and immediately go to a safe place.