

March Safety Subject

Tornado Safety

- Tornado evacuation notification given for a tornado warning, not watch
- Each office should have a weather monitor radio maintained by a designated person
- Review your tornado evacuation route plan and know your safe area
- Identify your office and building monitor
- Review the Wood County tornado policy
- Participate in the 2010 Statewide Tornado Drill on March 24, 2010. Outdoor sirens will sound and NOAA Weather Radio will broadcast the drill at 9:50 a.m.





Tornado Safety Tips

When a tornado is coming, you have only a short amount of time to make life-or-death decisions. Advance planning and quick response are the keys to surviving a tornado.

BEFORE

Conduct tornado drills each tornado season.

Designate an area in the home as a shelter, and practice having everyone in the family go there in response to a tornado threat.

Discuss with family members the difference between a "tornado watch" and a "tornado warning."

Contact your local emergency management office or American Red Cross chapter for more information on tornadoes.

Have disaster supplies on hand:

- Flashlight and extra batteries
- Portable, battery-operated radio and extra batteries
- First aid kit and manual
- Emergency food and water
- Non-electric can opener
- Essential medicines
- Cash and credit cards
- Sturdy shoes

Develop an emergency communication plan

In case family members are separated from one another during a tornado (a real possibility during the day when adults are at work and children are at school), have a plan for getting back together.

Ask an out-of-state relative or friend to serve as the "family contact." After a disaster, it's often easier to call long distance. Make sure everyone in the family knows the name, address, and phone number of the contact person.

Tornado Watches and Warnings

A *tornado watch* is issued by the National Weather Service when tornadoes are possible in your area. Remain alert for approaching storms. This is time to remind family members where the safest places within your home are located, and listen to the radio or television for further developments.

A *tornado warning* is issued when a tornado has been sighted or indicated by weather radar.

Mobile Homes

Mobile homes are particularly vulnerable. A mobile home can overturn very easily even if precautions have been taken to tie down the unit. When a tornado warning is issued, take shelter in a building with a strong foundation. If shelter is not available, lie in ditch or low-lying area a safe distance away from the unit.

Tornado Danger Signs

Learn these tornado danger signs:

An approaching cloud of debris can mark the location of a tornado even if a funnel is not visible. Before a tornado hits, the wind may die down and the air may become very still. Tornadoes generally occur near the trailing edge of a thunderstorm. It is not uncommon to see clear, sunlit skies behind a tornado.

DURING

If at home:

Go at once to a windowless, interior room; storm cellar; basement; or lowest level of the building. If there is no basement, go to an inner hallway or a smaller inner room without windows, such as a bathroom or closet. Get away from the windows. Go to the center of the room. Stay away from corners because they tend to attract debris. Get under a piece of sturdy furniture such as a workbench or heavy table or desk and hold on to it. Use arms to protect head and neck. If in a mobile home, get out and find shelter elsewhere.

If at work or school:

Go to the basement or to an inside hallway at the lowest level. Avoid places with wide-span roofs such as auditoriums, cafeterias, large hallways, or shopping malls. Get under a piece of sturdy furniture such as a workbench or heavy table or desk and hold on to it. Use arms to protect head and neck.

If outdoors:

If possible, get inside a building. If shelter is not available or there is no time to get indoors, lie in a ditch or low-lying area or crouch near a strong building. Be aware of the potential for flooding. Use arms to protect head and neck.

If in a car:

Never try to out drive a tornado in a car or truck. Tornadoes can change direction quickly and can lift up a car or truck and toss it through the air. Get out of the car immediately and take shelter in a nearby building. If there is no time to get indoors, get out of the car and lie in a ditch or low-lying area away from the vehicle. Be aware of the potential for flooding.

AFTER

Help injured or trapped persons. Give first aid when appropriate. Don't try to move the seriously injured unless they are in immediate danger of further injury. Call for help. Turn on radio or television to get the latest emergency information. Stay out of damaged buildings. Return home only when authorities say it is safe. Use the telephone only for emergency calls. Clean up spilled medicines, bleaches, or gasoline or other flammable liquids immediately. Leave the buildings if you smell gas or chemical fumes. Take pictures of the damage--both to the house and its contents--for insurance purposes.

Remember to help your neighbors who may require special assistance--infants, the elderly, and people with disabilities.

Tornado Facts



Tornado Facts

As the severe weather season approaches, take some time during Severe Weather Safety Awareness Week to make a safety plan for your family, friends, neighbors and co-workers. Planning ahead will lower the chance of injury or death in the event severe weather strikes.

Tornadoes develop from severe thunderstorms. They are usually preceded by very heavy rain and/or large hail. A thunderstorm accompanied by hail indicates that the storm has large amounts of energy and may be severe. In general, the larger the hailstones, the more potential there is for damaging winds and/or tornadoes.

The most violent tornadoes are capable of tremendous destruction with wind speeds of 250 mph or more. Damage paths have exceeded the width of one mile and 50 miles long. Tornadoes generally move from southwest to northeast, but have also been recorded traveling in any direction. The forward speed of a tornado varies from 30 mph to 70 mph.

Even though Ohio had tornadoes in November of 2002 and 2003, the peak tornado season for Ohio is generally April through July. Tornadoes usually occur between 2 p.m. and 10 p.m., but have been known to occur at any hour.

Fujita Tornado Damage Scale – By Category

The Fujita tornado scale (F scale) was developed by the late Professor Theodore Fujita of the University of Chicago to classify tornadoes according to wind speed and damage. As of February 1, 2007, the F scale was replaced by the Enhanced Fujita (EF) scale. A team of meteorologists and wind engineers develops the EF scale to better classify the damage associated with the wind speeds of tornadoes. Effective immediately, all tornadoes will be given “EF” classifications, rather than “F”.

<i>Operational EF Scale #</i>	<i>3-Second Gust (mph)</i>
<i>EF-0</i>	65-85 mph
<i>EF-1</i>	86-110 mph
<i>EF-2</i>	111-135 mph
<i>EF-3</i>	136-165 mph
<i>EF-4</i>	166-200 mph
<i>EF-5</i>	200 mph).

Note: The Enhanced Fujita Scale is a set of wind estimates (not measurements) based on damage. It uses three-second gusts estimated at the point of damage. These estimates vary with height and exposure.

NOAA Weather Radio (NWR)

NOAA Weather Radio (NWR) is a nationwide network of radio stations broadcasting National Weather Service (NWS) warnings, watches, forecasts and other hazard information 24 hours a day.

Working with the Federal Communication Commission's (FCC) Emergency Alert System, NWR is an "all hazards" radio network, making it your single source for comprehensive weather and emergency information. NWR broadcasts warning and post-event information for all types of hazards—both natural (such as earthquakes and volcano activity) and environmental (such as chemical releases or oil spills).

Known as the "Voice of NOAA's National Weather Service," NWR is provided as a public service by the National Oceanic & Atmospheric Administration (NOAA), part of the Department of Commerce. As of October 1, 2002, NWR includes more than 760 transmitters, covering all 50 states, adjacent coastal waters, Puerto Rico, the U.S. Virgin Islands, and the U.S. Pacific Territories. NWR requires a special radio receiver or scanner capable of picking up the signal. NOAA Weather Radio receivers can be purchased at many retail stores and through mail order catalogues and Internet web sites that sell electronic merchandise. They are often available at boat and marine accessory outlets. Broadcasts are found in the public service band at 7 frequencies (see page 3).

NWR service depends on reliable signal reception, typically a 40 mile radius from the transmitter, assuming level terrain. Some counties, especially in mountainous areas, may not have reliable reception due to signal blockages or excessive distance from the transmitter.

NWR Specific Area Message Encoder (SAME) receivers employ digital coding to automatically activate for specific weather or emergency conditions in specific areas (typically a county or portion of a county). You program SAME receivers for the county(s) and types of products you require. Your receiver will then automatically alert you only of weather and other emergencies in areas you programmed. SAME county code numbers are available by telephone, 1-888-NWR-SAME (1-888-697-7263), or website, <http://www.nws.noaa.gov/nwr/indexnw.htm>. Your NWR receiver manufacturer instructions will describe how to select for particular types of products. Television, cable and radio stations can use SAME to allow their listeners to hear warnings as they are issued. Less sophisticated NWR receivers are equipped with the warning alarm or tone alert feature. These receivers will either sound an alarm, or when operated in mute mode, will automatically turn the volume on so the warning message may be heard.

Facts About NOAA Weather Radio

NOAA Weather Radio broadcasts NOAA's National Weather Service warnings, watches, forecasts and non-weather hazard information 24 hours a day.

Weather radios equipped with a special alarm tone feature can sound an alert and give immediate information about a life-threatening situation.

SAME (Specific Area Message Encoding) technology lets listeners pre-select the NOAA's National Weather Service and non-weather alerts they want to receive, based on the county where they live.

Weather radios come in many sizes and with a variety of functions and costs; from simple, battery-operated portables, to CB radios, scanners, short wave sets, and in some cars and TV's.

Broadcast range from a NOAA Weather Radio transmitter is approximately 40 miles.

The hearing and visually impaired can receive alerts by connecting weather radios with the appropriate plug in to other kinds of attention-getting devices, such as strobe lights, pagers, bed-shakers, personal computers and text printers.

On October 1, 2002, there were more than 760 NOAA Weather Radio stations in the 50 states and near adjacent coastal waters, Puerto Rico, the U.S. Virgin Islands and U.S. Pacific Territories.

NOAA Weather Radio broadcasts watches when conditions are favorable for severe weather, and warnings when severe weather is imminent or occurring.

Tornado Watch/Warning Procedure

BCC 95-2571 12/14/95

BCC 00-1828 8/31/00 Rev. 07-2041

- I. Wood County will provide a copy of the Tornado Watch/Warning Procedures to all employees and training on the same. Each department shall post an evacuation route designating the tornado safe area.
- II. Tornado Watch Procedure
 - A. Upon notification of a Tornado Watch issued by the National Weather Service, the Emergency Management Agency shall provide notification over the Courthouse and Office Building intercom system which states that Wood County has been put under a Tornado Watch, and provide the beginning and ending times of the watch.
 - B. If the Tornado Watch is extended or canceled, the Emergency Management Agency will provide notification over the intercom system.
 - C. Areas not covered under the County's intercom system shall be notified by their existing communications system, or by weather monitors located in a staffed area of the department.
- III. Tornado Warning Procedure
 - A. Upon notification of a Tornado Warning issued by the National Weather Service or other authorized source, the Emergency Management Agency will provide notification over the Courthouse and Office Building intercom system stating that, a Tornado Warning has been issued for Wood County. Please report to your tornado safe area until further notice.
 - B. Those areas not covered by the County's intercom system shall be notified by their existing communication system, or by weather monitors located in a staffed area of the department and the designated safe area.
- IV. Evacuation Procedures (Tornado Warning)
 - A. Employee Responsibility
 1. All personnel/visitors shall evacuate to their designated tornado safe area.
 2. Always use stairways to get to your tornado safe area. Do not use elevators.

3. Remain at the tornado safe area as an office/department unit for further instruction from a County official or emergency response personnel.

B. Office/Building Monitor Responsibilities

1. Each office/department shall have a primary and secondary Office Monitor who will be responsible for the following:
 - a. Maintain a working flashlight.
 - b. Obtain an accurate count of all personnel/visitors in the office.
 - c. Assign one person to each physically challenged person in the office.
 - d. Direct the people in the office to the appropriate exits and control the speed of the evacuation to avoid panic.
 - e. Report to the tornado safe area.
 - f. Conduct a second count of all personnel/visitors in the office upon reaching the tornado safe area.
 - g. Report to the designated staging area and advise the building monitor that the office has been evacuated.
2. Each building shall have a primary and secondary Building Monitor who will be responsible for the following:
 - a. Maintain a working flashlight.
 - b. Maintain a working weather monitor radio at the designated tornado safe area.
 - c. Evacuate to the tornado safe areas designated staging area.
 - d. Verify with the office monitors that all persons have been evacuated.
 - e. Report employee/visitor counts to the county representative at the staging area.

V. RE-ENTRY

- A. After an "All Clear" has been issued or the tornado warning has expired, employees/visitors may return to their office or workplace.

TEST YOUR KNOWLEDGE

Tornado Safety Quiz QUESTIONS

1. All employees and visitors should move to the tornado safe area upon the issuance of a tornado _____.

2. If a tornado is approaching, and no basement is available in the building, where is the next best place to take cover?

3. What is the name of the scale used to measure the intensity of a tornado?

4. What is the approximate broadcast range of a NOAA weather radio transmitter?

5. What federal agency issues tornado watches and warnings?

Tornado Safety Quiz ANSWERS

1. Warning
2. Small, interior room
3. Fujita Tornado Damage Scale (EF-Scale)
4. 40 miles
5. National Weather Service