



# Tornado Safety for the Family

OAKLAND COUNTY EMERGENCY MANAGEMENT

1200 N. Telegraph, Dept. 410

Pontiac, MI 48341-0410

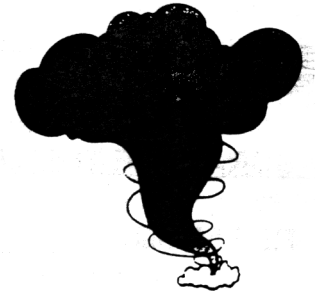
(248) 858-5300

## **What is a Tornado?**

It is a column of violently rotating winds extending down from a thunderstorm cloud and touching the surface of the earth. A tornado spins like a top and may sound like an airplane or train.

## **How do Tornadoes Form?**

Before thunderstorms develop, a change in wind direction and an increase in wind speed with increasing height creates an invisible, horizontal spinning effect in the lower atmosphere. Rising air within the thunderstorms updraft tilts the rotating air from horizontal to vertical.



## **What is the difference between a tornado and a funnel cloud?**

Much like a tornado, a funnel cloud is also a column of violently rotating winds extending down from a thunderstorm; however, it does not touch the ground.

## **When do tornadoes generally occur?**

Most tornadoes occur during the months of April through August in the late afternoon and evening hours. However, tornadoes can occur anytime of the day or night in almost any month during the year.

## **How many tornadoes usually occur in Michigan every year?**

An average of 18 tornadoes occur in Michigan each year. Since 1950, 239 persons have been killed due to tornadoes. During the same time, Michigan has experienced 772 tornadoes.

## **How far do tornadoes travel once they touch the ground?**

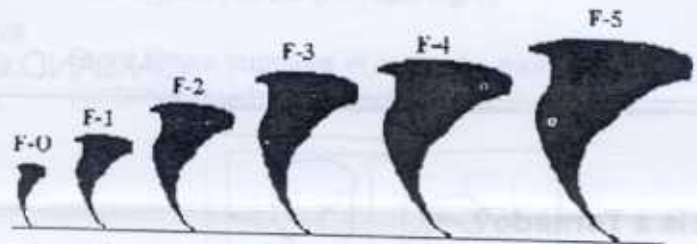
The average Michigan tornado is on the ground for less than 10 minutes and travels a distance of about five miles. However, they do not always follow the norm, and have been known to stay on the ground for more than an hour and travel more than 100 miles.

## **Can there be a tornado after dark?**

Tornadoes are most likely to occur between 3 and 9 p.m. but have been known to occur at all hours of the day or night.

What does a **TORNADO WATCH** mean? Weather conditions are right for tornadoes to develop. However, a watch does not necessarily mean a tornado will develop. Watches give you time to plan and prepare. Keep children under close supervision. Keep an eye on the sky and listen for later statements and warnings.

What does a **TORNADO WARNING** mean? A tornado has been sighted or is strongly indicated by radar. Seek shelter immediately and listen to radio or television for additional information.



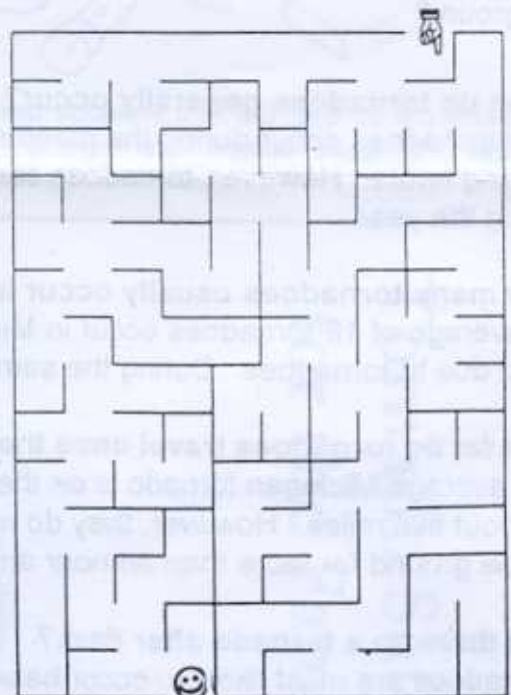
**Fujita - Pearson Tornado Scale**

- F-0 40-72 mph, chimney damage, tree branches broken
- F-1 73-112 mph, mobile homes pushed off foundation or overturned
- F-2 113-157 mph, considerable damage, mobile homes demolished, trees uprooted
- F-3 158-205 mph, roofs and walls torn down, trains overturned, cars thrown
- F-4 206-260 mph, well-constructed walls leveled
- F-5 261-318 mph, homes lifted off foundations and carried considerable distances, autos thrown as far as 100 meters

**UNSCRAMBLE THE WORDS**

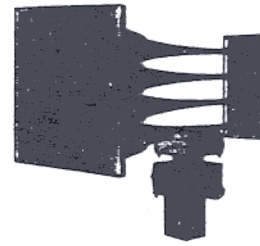
1. RSETAISD \_\_\_\_\_
2. OTNDAOR \_\_\_\_\_
3. NULENF DULOC \_\_\_\_\_
4. KESE TLEHRES \_\_\_\_\_
5. GNANRIW \_\_\_\_\_
6. DARONOT RINES \_\_\_\_\_
7. WSERASAEN \_\_\_\_\_
8. TRUDOSNHMET \_\_\_\_\_
9. ALIH \_\_\_\_\_
10. SAEDNPREP \_\_\_\_\_

**Severe Weather Awareness Maze**



ANSWERS: 1) DISASTER 2) TORNADO 3) FUNNEL CLOUD 4) SEEK SHELTER 5) WARNING 6) TORNADO SIREN 7) AWARENESS 8) THUNDERSTORM 9) HAIL 10) PREPAREDNESS

Oakland County has instituted a **Tornado Siren Warning program** in order to warn the citizens who are outdoors that a tornado warning is in effect. This has been accomplished in conjunction with local municipal units of government by installing sirens throughout Oakland County.



A tornado siren will activate for three minutes which warns the community that a tornado has been sighted somewhere in Oakland County. Seek shelter immediately and listen to a radio or television for more information.

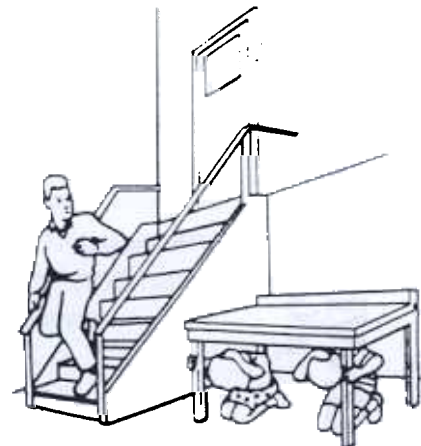
**Where do I seek Shelter?**

**In a Home:** A basement offers the greatest safety. Seek shelter under sturdy furniture if possible. In a home without a basement, take cover in the center of the house on the lowest floor in a small room such as a closet or bathroom or under sturdy furniture.

**In a Manufactured home or a Vehicle:** Leave and go to a substantial structure before the storm arrives. If there is no shelter nearby, lie flat in the nearest ditch, ravine or culvert with your hands shielding your head

**At Work or at School:** Follow plans to move to interior hallways or small rooms on the lowest floor. Avoid areas with glass and wide free-span roofs. (Schools, factories, and office buildings should designate someone to look for severe weather and initiate an alarm.)

**In Open Country:** Get into a sturdy building if possible or lie flat in a ditch or depression and hold onto something on the ground.



**Tornado Safety Word Search**

M I P S R N R V L R A W W M J  
P L Q A D E I I K E W A A W P  
R R D E T U G A D T A R T G P  
B A E L Y H O E R S R N C A B  
R G E P T C B L H A E I H X N  
Z H H N A R N Z C S N N O A U  
S O I M I R Q E C I E G L F F  
X N J S N O E I G D S P V L A  
G P O T H U N D E R S T O R M  
T O R N A D O K N L E O O T H  
T S R U B N W O D E D M P R P  
O Y T E F A S R N N S U E V M  
L I A H P V E S I N H S F O G  
F V K G D T P B W U S I R E N  
Y W B L M F F R E F O I C V C

- |              |              |           |
|--------------|--------------|-----------|
| AWARENESS    | CLOUDS       | DEBRIS    |
| DISASTER     | DOWNBURST    | EMERGENCY |
| FLOOD        | FOG          | FUNNEL    |
| HAIL         | LIGHTNING    | PLAN      |
| PREPAREDNESS | RADAR        | RAIN      |
| SAFETY       | SHELTER      | SIREN     |
| STORM        | THUNDERSTORM | TORNADO   |
| WARNING      | WATCH        | WIND      |



## It's Up To YOU!

Each year, many people are killed or seriously injured by tornadoes despite advance warning.

~~Some did not hear the warning while others~~ received the warning but did not believe a tornado would actually affect them. The information in this brochure, combined with timely severe weather watches and warnings, could save your life in the event a tornado threatens your area. After you have received the warning or observed threatening skies, you must make the decision to seek shelter before the storm arrives. It could be the most important decision you will ever make.

### Create a Family Disaster Plan

Plan how your family will stay in contact if separated by disaster.

- Pick two meeting places:
  - 1) A location a safe distance from your home.
  - 2) A place outside your neighborhood in case you can't return home.

#### **Complete these steps:**

- Post emergency telephone numbers by every phone.
- Show responsible family members how and when to shut off water, gas and electricity at main switches.
- Learn first aid and CPR.

### Create a Disaster Supplies Kit

- A 3 day supply of water
- First aid kit and essential medications
- ~~Battery-powered radio and extra batteries~~
- Canned food & a manual can opener
- Special items for infant, elderly or disabled family members
- Emergency tools (i.e. flashlight)

Store these supplies in a sturdy, easy to carry container, such as a backpack or duffle bag.



We can keep supplies that will help us if a disaster happens. Put together a disaster supplies kit today!

**Tornado Safety  
for the Family**



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