



# TORNADO SAFETY TIPS

## Facts

- Tornadoes may strike quickly, with little or no warning.
- They may appear nearly transparent until dust and debris are picked up or a cloud forms in the funnel.
- There are several indications a storm is likely to produce a tornado. These indicators include:
  - \* large hail
  - \* dark green or blackish sky
  - \* the presence of a rotating wall cloud
  - \* a loud roar similar to a freight train
- A wall cloud is a lower lying cloud formation with an area of rotation. The area below a wall cloud is usually rain-free.
- The funnel cloud may be obscured by heavy rains, or it may not appear to reach the ground.
- Debris being pulled upwards is a sure sign a tornado is present.
- The peak for tornadoes in the Southern Plains is during the month of May to around early June. The Gulf Coast's peak is during early spring. The Northern Plains and Midwest region have tornadoes peak around the June or July time period.
- Between 1991 and 2010, the average number of tornadoes during the month of May has been 276.
- The United States leads the count of over 1000 tornadoes per year with Canada being second at 100 tornadoes per year.
- Around 77 percent of US tornadoes are considered relatively weak (EFO-EF1). However, given the number of tornadoes experienced on average, around 20 would be considered violent and one might be incredible (EF5).
- Tornadoes are most likely to occur between 4pm and 9pm, but can occur at any time.
- Tornadoes can form and move from any direction. Most tornadoes move from southwest to northeast, or west to east, but that does not mean that they cannot move any other way. Some tornadoes have changed directions during destruction, even back tracking.

## Prepare + Protect Yourself

To prepare yourself for tornadoes, follow these safety tips:

- Know your area's warning signals for tornado watches and warning. As soon as you hear the signal, take cover.
- Carry a first aid kit with a flashlight and battery operated radio on all farm equipment, particularly the equipment you use far from home.
- Carry a cellular phone or portable radio to keep you connected with family or farm employees.
- Develop an emergency communication plan to warn people working in the field of pending severe weather and to report in after severe weather strikes.

If you are in the field, far from your home or other shelter, follow these safety tips to protect yourself:

- Take cover as soon as a tornado warning is announced or anytime you see a funnel cloud.
- Never try to outrun a tornado. Get off of farm machinery and get as far away from it as possible
- If at all possible, get inside a sturdy building in an interior room. Get under a sturdy table or work bench if one is available. Long span buildings on farms can be dangerous and should be avoided. The entire weight of the structure is often supported solely by the outside walls.
- If you are not within sight of shelter, lie in a ditch or other low-lying area. Cover your head and neck with your arms. Thunderstorms often accompany tornadoes so be aware of the potential for flooding in these areas. Stay away from trees and do not get under a vehicle no matter what size.

### References

- Ref. 1 – NOAA National Climate Data Center, State of Climate: Tornadoes for May 2013, published online June 2013, retrieved on February 13, 2014 from <http://www.mcdc.noaa.gov/sotc/tornadoes/2013/5>.
- Ref. 2 – NOAA National Climate Data Center U.S. Tornado Climatology. <http://www.nssl.noaa.gov/climate-information/extreme-events/us-tornado-climatology>
- Ref. 3 – NOAA National Severe Storm Laboratory. Severe Weather 101. Tornado Basics. <http://www.nssl.noaa.gov/education/svrwx101/tornadoes/>
- Ref. 4 – NOAA National Climate Data Center. Tornado Alley. <http://www.ncdc.noaa.gov/climate-information/extreme-events/us-tornado-climatology/tornado-alley>
- Ref 5 – The Online Tornado FAQ - <http://www.spc.noaa.gov/faq/tornado/>
- Ref. 6 - Thunderstorms and Severe Weather Spotting. <http://www.erh.noaa.gov/lwx/swep/Spotting.html>