



Tornado Instructional Guide

Porter County Emergency Management Agency



What To Do In the Event of a Tornado

Tornados can reach wind speeds in excess of 300 miles per hour. Devastating damage occurs when a tornado touches down onto land, often destroying everything in its path. Most injuries and deaths are the result of flying debris and building collapse. The National Weather Service categorizes the intensity of tornados using the enhanced Fujita-Pearson scale, which uses 28 indicators to classify them. This scale rates tornados from EF-0 to EF-5, with EF-5 being the most destructive.

Enhanced Fujita-Pearson Tornado Scale		
Category	Conditions	Effects
EF-0	65-85 mph	Minor to light damage to structures & vegetation
EF-1	85-110 mph	Moderate damage to structures & vegetation
EF-2	111-135 mph	High damage to structures & vegetation
EF-3	136-165 mph	Severe damage to structures & vegetation
EF-4	166-200 mph	Extreme damage to structures & vegetation
EF-5	Over 200 mph	Complete destruction of structures & vegetation

Although they can occur at any time, tornado season typically falls between the months of March and August, with almost 80% occurring between the hours of noon and midnight. Two terms used by the National Weather Service, **tornado watch** and **tornado warning**, are commonly confused. A tornado watch indicates the conditions are right for a tornado and people should be ready to take shelter if a tornado warning is issued or a suspected tornado is approaching. A tornado warning indicates that a tornado has actually been sighted or indicated on weather radar. During a tornado warning, people should take shelter immediately. Tornado warnings give, on average, 13 minutes' notice. So, what should you do if you find yourself in a tornado situation?

Inside a Building:

Go to the basement or cellar if there is one. Getting to a place that is below ground level is significantly safer. Otherwise, get to the lowest level possible. Put as many walls between you and the outside as you can. Find an interior room or hallway, preferably without outside walls or windows. Never open or partially open windows. This **does not** equalize the pressure as many people think and provides a portal for debris to blow through. Resist the temptation to go to a window to look out and never attempt to video a tornado. You may be putting yourself in a deadly situation. Closing interior doors that lead to rooms with windows can serve as an additional barrier for debris that may be thrown through them. However, do not sacrifice significant time in order to do so, thereby delaying you getting to the shelter area. Bathrooms and other areas containing plumbing can provide added protection, since the piping can act as an anchor point for the building. If you have biking or motorcycle helmets available, put them on. Note: These should be stored in the shelter area and be readily available if you intend to use them. Don't waste time running around to obtain them. Place small children in car seats if you have them available and secure the seat's restraints. Place pets on a leash to keep them under as much control as possible or put them in a crate. Attempt to get under a table or other object that can offer some





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protection from falling debris and use your arms to protect your head and neck. Note: Mobile homes offer little to no protection from tornadoes, even when tied down.

In a Vehicle:

Buckle your seat belt and attempt to drive to the nearest sturdy building you can enter. Avoid buildings with long roof spans, such as school gymnasiums, arenas or shopping malls. These are typically supported by outside walls only. When hit by a tornado, these buildings can collapse, because they cannot withstand the pressure of the storm. If no building is nearby or the tornado is too close, consider putting the vehicle in an area significantly lower than the road. Do not attempt to outrun a tornado that is nearby. Leave the vehicle running so the airbags will still deploy. When vehicles are turned off or the key is not turned to the “on” position, airbags normally won’t deploy. Get as low as possible, without removing your seatbelt, covering your head with something to protect you from possible flying glass and other debris. A blanket, coat, cushion or your arms are possible options.

Outside with No Vehicle or Structure Nearby:

Lie flat in an area significantly lower than the roadway, covering your head with a blanket, coat, cushion or your arms.

Things **Not** to Do:

1. Do not get into an elevator. The building may lose power causing you to become trapped there. You are better to travel between floors using stairwells, which also offer better structural support.
2. Never open or partially open windows. This **does not** equalize the pressure as many people think and provides a portal for debris to blow through.
3. Do not position yourself under an overpass or bridge. These structures act as wind tunnels and can actually accelerate the wind only amplifying the situation. These structures can also collapse, creating a deadly situation.
4. Do not attempt to hold a child in your arms when inside a vehicle. Secure the child in their seat belt, using a car seat if they are small enough.

Preparing for a Tornado: At Home

1. Create a go-bag for your home with key items that may be necessary during and after a tornado. The go-bag should be portable so it can be quickly taken with you in the event you must change locations or evacuate after the tornado. The Porter County Emergency Management Agency has developed a Tornado Go-Bag Home Checklist, which can be used as a guide to prepare your go-bag as well as your home’s designated shelter area. The checklist can be downloaded from our website.
2. Develop a tornado action plan for your home. Ensure everyone who lives in the home understands the plan and what to do in the event of a tornado. The plan should include communicating the existence of a tornado as well as methods for communication afterward in the event you are separated. Remember that when you are unable to make voice calls using a mobile phone it is sometimes caused by the system being overwhelmed with numerous people trying to make calls. During these times, you still may have the ability to send a text.
3. Practice the plan with all members of the household just as you would a fire drill.



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Preparing for a Tornado: At Work

1. Establish designated internal shelter areas for the business. It is wise to consult a building engineer to determine the safest structural locations for the shelter areas.
2. Clearly mark internal shelter areas with signage.
3. Include the locations of internal shelter areas on emergency evacuation maps so they are apparent to the building occupants.
4. Stock designated shelter areas with equipment and provisions which may be necessary in the event of a tornado. The Porter County Emergency Management Agency has developed an Internal Shelter Area Business Checklist, which can be used as a guide. The checklist can be downloaded from our website.
5. Develop a written emergency action plan relative to Severe Storms. Ensure the plan includes accountability of employees as well as contractors and vendors working on the property. The plan must also include a means of communicating the potential emergency to employees, contractors/vendors and customers who are on the property. Remember that when you are unable to make voice calls using a mobile phone it is sometimes caused by the system being overwhelmed with numerous people trying to make calls. During these times, you still may have the ability to send a text.
6. Train all applicable personnel on the emergency action plan. This training should include an explanation of the plan's content, tabletop exercises and drills to ensure everyone can demonstrate the competencies involved. Employers must ensure that emergency action plans are covered in their new-employee orientation to ensure personnel are trained prior to beginning employment.
7. Review emergency action plans yearly to ensure they are current and applicable.
8. Contact all personnel on the written emergency action plan a minimum of once per year or any time the plan is revised.
9. Conduct tabletop exercises and drills a minimum of once per year to keep personnel proficient with the practical application of the plan.