# PENTAGON EMERGENCY MANAGEMENT

## Severe Weather Preparedness

**Batten Down the Hatches!** Pretty flowers, pollen, and warmer weather aren't the only things the spring season brings. Tornadoes, high winds, lightning, and torrential rain are the dominant hazards associated with the change in seasons. This year has been unseasonable cool pushing the beginning of severe weather from February to April. The recent severe weather outbreak in the Plains states has resulted in 131 tornadoes, 112 high wind events, and 125 hail reports in one day. This storm system has killed at least 16 people and accounted for millions of dollars' worth of damage. The tornado was a half mile wide leaving an 80 mile long trail of destruction. This system is slowly moving east and will likely impact the Washington Metropolitan area. This newsletter outlines the type of damage a tornado can cause based on the intensity level along with how to spot a tornado (environmental clues), and what to do if you're area is under a tornado warning.

### Enhanced Fujita Scale and Damage

The Storm Prediction Center at the NWS assesses the type of damage a storm leaves behind to determine if in fact it was a tornado and if so, the intensity level. Remember, our area typically sees EF-0 to EF-2 intensity levels which cause anywhere from Minor to Considerable damage. That's not to say this area won't experience an EF-3 to EF-5. Always prepare for the worst when making a plan.
**Seconds matter.**

**Tornado Ratings**

The Enhanced Fujita Scale

| SCALE | SPEED (MPH) | FREQUENCY | DAMAGE |
|---|---|---|---|
| EF0 | 65–85 | 53.5% | **Minor or no damage.** Peels surface off some roofs; some damage to gutters or siding; branches broken off trees; shallow-rooted trees pushed over. |
| EF1 | 86–110 | 31.6% | **Moderate damage.** Roofs severely stripped; mobile homes overturned or badly damaged; loss of exterior doors; windows and other glass broken. |
| EF2 | 111–135 | 10.7% | **Considerable damage.** Roofs torn off well-constructed houses; foundations of frame homes shifted; mobile homes completely destroyed; large trees snapped or uprooted; light-object missiles generated; cars lifted off ground. |
| EF3 | 136–165 | 3.4% | **Severe damage.** Entire stories of well-constructed houses destroyed; severe damage to large buildings such as shopping malls; trains overturned; trees debarked; heavy cars lifted off the ground and thrown. |
| EF4 | 166–200 | 0.7% | **Extreme damage.** Well-constructed and whole frame houses completely leveled; cars and other large objects thrown and small missiles generated. |
| EF5 | >200 | <0.1% | **Total Destruction.** Strong framed, well built houses leveled off foundations and swept away; steel-reinforced concrete structures are critically damaged; tall buildings collapse. |

Picture: Tornado in Oklahoma (Wikimedia Commons)

## Environmental Clues (Know the Signs; Seconds Matter)

Sign #1 – Dark, greenish sky

Sign #2 – Formation of a wall cloud

Sign #3 – Occurrence of large hail

These signs can lead up to the formation of a tornado and knowing them will afford you additional time to seek cover whether you're indoors or out. The final sign, short of seeing an actual tornado, is a continuous rumble like thunder; the difference is that it doesn't stop. Some people have described the sound as similar to a freight train. If you hear this, **SEEK SHELTER IMMEDIATELY**.

## Sheltering from a Tornado

Indoors

1. The safest place to be is in a basement or cellar.

2. If the structure has no basement or cellar, go to a small, centrally located room with no windows on the lowest floor of the facility or house. Get under a sturdy structure and cover your head until the storm passes. A bathroom or closets are just a few examples.

3. If you are in a trailer or mobile home, get out immediately and go to the lowest floor of a sturdy, nearby building or storm shelter. Mobile homes, even those that are tied down, offer little or no protection from tornadoes no matter the intensity level.

Outdoors - Without a Vehicle

1. If caught outdoors, seek immediate protection in a basement, shelter, or sturdy building.

2. If no shelter is available, lie flat in a nearby ditch or depression; cover your head with your hands. Be aware of potential flooding in the ditch. This is a last resort option because it provides little protection.

Outdoors - With a Vehicle

1. If in your vehicle, buckle your seat belt, drive to the nearest shelter, and go to the basement or lowest floor to seek protection.

2. If no shelter is available or you experience flying debris while driving, immediately pull the car over and park. You must quickly choose from the following options; however, both are considered last resort because they provide little protection:

- Stay in the vehicle with your seat belt buckled. Put your head down below the windows covering your head with your hands. Use a blanket or jacket, if available.

- If you can safely get noticeably lower than the level of the roadway, exit your vehicle and lie in that low-lying area, covering your head with your hands.

This is a great time to review your **Plan** and **Emergency Kit** to ensure it's up to date. Preparedness is the cornerstone to mitigate any crisis.

Useful Links

Washington Metropolitan Area Alert

- http://www.capitalert.gov/signup/

Weather Forecasts/Watches & Warnings

- http://www.weather.gov/

Tornado FAQs

- http://www.spc.noaa.gov/faq/tornado/

Preparedness

-- FEMA:

http://www.fema.gov/hazard/tornado/index.shtm

-- Red Cross

http://www.redcross.org/www-files/Documents/pdf/Preparedness/checklists/Tornado.pdf

(Provided in 8 languages including English)

Mobile Phone App - http://www.redcross.org/mobile-apps/tornado-app/

PFPA Social Media sites

-- Social Media:
https://www.facebook.com/PentagonForceProtectionAgency
http://twitter.com/ThePFPA

Point of Contact:

PFPA Office of Emergency Management
703-571-7737
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