

Winter Tornadoes – Be Prepared, Stay Informed, Be Safe!

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The winter tornado season in central Florida usually peaks from February to early April. However, our winter tornadoes can strike as early as December.

The 2019-2020 winter severe weather season in east central Florida is predicted to be near normal. However, in a normal season, severe weather can occur. Even if there is only one tornado, but it hits your house, it was a bad season for you. Are you prepared?

Neutral El Niño conditions are currently in place (as of Nov) and are expected to persist through spring. An El Niño is above average water temperature in the eastern and central equatorial Pacific. An El Niño causes the jet stream to move further south than normal, guiding winter storms toward Florida and causing the storms that make it to Florida to be stronger than normal. As a result, more frequent and stronger tornadoes may occur. However, under the expected neutral El Niño, this is less likely so the normal amount of storminess should occur.

East central Florida has been fortunate that the past twelve winters had fewer tornadoes than normal. However, this period of calmer weather may lull people into complacency. Newer residents may not even know that our worst tornadoes occur during the winter to spring months. For example, the top-2 deadliest tornado outbreaks in east central Florida were both in winter: 21 deaths in February 2007 and 42 deaths in February 1998.

The following is a 2-step process for tornado safety.

STEP-1 -- Have A Plan: Identify the safest room in your building and ensure everyone knows it. This applies at both home and at work. The safest rooms are on the lowest floor, farther inside with as many inside walls between you and the outside as possible, and no windows. Small rooms with solid construction like restrooms and closets are best. A strong table and thick pads, such as a mattress, can protect you against falling debris. Helmets for motorcycles or sports can protect your head. People in mobile homes or other weak buildings should seek proper shelter elsewhere. These people need to pay special attention to possible tornado threats earlier to give themselves plenty of time to go to safety while it's still safe.

STEP-2 -- Stay Informed: The 45th Weather Squadron (45 WS) gives the potential for severe weather at Patrick Air Force Base (PAFB), Cape Canaveral Air Force Station (CCAFS) and the Kennedy Space Center (KSC) in their daily 24-hour and weekly forecasts. Both of these forecasts can be found at www.patrick.af.mil/about-us/weather. The 45 WS can usually predict the conditions for severe weather a few days in advance in winter. If the threat continues, 45 WS then issues a Severe Weather Watch with a desired lead-time of a few hours. Finally, if tornadoes are imminent or observed, 45 WS issues a Tornado Warning with a desired lead-time of 5 minutes. Follow your local procedures for adverse weather. Keep your AtHoc account up to date, especially your cell phone numbers, to ensure you receive notifications.

At home, stay informed about approaching weather. When not on PAFB, CCAFS, or KSC, the best source of weather information is the National Weather Service in Melbourne. They give the potential for severe weather in their general forecasts, especially their graphical hazards, which can be found by logging onto www.weather.gov/mlb. They issue a Tornado Watch when tornadoes may develop, and issue a Tornado Warning when a tornado is imminent or observed.

If severe weather is likely, ensure you and your family review your safety plan, and know where your safest room is located. If there is time before the high winds start, secure any loose outside materials and close protective shutters, but don't put yourself in danger to do so. If a Tornado Watch or Severe Weather Watch is issued, listen for weather warnings and be ready to act. If a warning is issued for your area, go to your safe room immediately. Regardless of whether a warning is issued, go to your safe room if threatening weather approaches – there may not be time for an official warning to get to you. You can also monitor local TV and radio for weather information.

When not on PAFB, CCAFS, or KSC, one of the best ways to be alert to severe weather is to buy a 'National Oceanic and Atmospheric Administration (NOAA) All Hazards Radio'. This is essential if you live in a location without a tornado siren. However, even if you live near a tornado siren, it may not be loud enough to wake you while asleep. Most of the winter tornadoes in central Florida occur at night. Tornadoes between midnight and dawn are 2.5 times more likely to kill than tornadoes during the day because people are sleeping and either do not hear the warning or do not react quickly enough. A NOAA Radio by your bed is easily loud enough to wake you. They provide alternatives for the hearing and visually impaired. These radios do not cover 2% of the country, so test your reception to be sure you're covered.

When not on PAFB, CCAFS, or KSC, having a second way to receive severe weather warnings is recommended. For example, Wireless Emergency Alerts (WEA) send local tornado warnings directly to your mobile phone. This free service is available from all major service providers and uses a loud audible alert. WEA does not require manual set-up or a subscription; it is automatically configured and ready to receive tornado warnings on modern smart phones. Many smart phones and other mobile devices have free or low cost apps for weather information like tornado warnings and weather radar. The FEMA weather app is a very good example (www.fema.gov/mobile-app).

Rainfall is also expected to be normal earlier in the season, then above normal later this winter. Temperatures are expected to be higher than normal, though an occasional freeze is still be possible.

Our current winter tornado season is expected to be near normal. Are you prepared?

Tornado safety is easy and effective: be prepared, stay informed; be safe! The 45 WS developed a brochure to help remind PAFB, CCAFS, and KSC of tornado safety (www.patrick.af.mil/about-us/weather).

For more weather safety training, contact the 45 WS at 45WS@us.af.mil or 853-8410.