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PRESS RELEASE

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SEVERE WEATHER: Don't Ignore the Risks

They happen frequently during summer months, severe thunderstorm warnings. And it can be easy to disregard their potential to threaten our lives. However, the power of summer thunderstorms should never be underestimated.

Jonathan Erdman, The Weather Channel Senior Digital Meteorologist, says the exact location and intensity of summer thunderstorms is somewhat unpredictable. That means, when conditions are right, a severe storm can pop up quickly and intensify in a matter of minutes.

“Anytime thunderstorms are possible in your location, you need to keep an eye to the sky and look for weather updates on your phone’s weather app,” Erdman says. “Storms that will affect your location tend to develop in the western sky. If the sky begins to look dark, it’s likely that thunderstorms are developing.”

Ordinary midsummer thunderstorm can produce lightning. However, severe thunderstorms can produce more frequent cloud-to-ground lightning. This especially true with long squall lines of severe thunderstorms.

Most weather apps feature lightning alerts and using them can provide ample warning of an approaching storm. Knowing that lightning strikes are near and it's time to take shelter could save your life.

Lightning strikes can occur up to 25 miles ahead of an approaching storm. When you hear the sound of thunder, you are within the range of lightning strikes.

Tractor cabs or even barns do not provide adequate lightning protection.

"I personally experienced a slow-moving storm that produced lightning every 30 to 60 seconds," Erdman says. "It wasn't a severe storm, but it contained a lot of lightning, which can be terrifying."

Lightning strikes don't always kill a victim but they can cause lifelong physical impairment.

When taking shelter from a storm producing lightning, avoid contact with electrical devices, corded phones, metal pipes, etc. Stay inside for at least 30 minutes after hearing the last clap of thunder.

Hail and high winds are often produced by severe thunderstorms. Criteria for designating a storm as severe includes hail from .25-inch to 1-inch in diameter and wind gusts of at least 58mph. Either element of the storm can damage trees, take down power lines or produce a tornado.

"One of the most dangerous elements of a severe thunderstorm is the potential for a tornado that

forms with little advance warning,” Erdman says. “That can happen so quickly that the weather service can’t get a tornado warning out before it strikes.”

Tornadoes that form quickly on the leading edge of a long line of severe thunderstorms may occur during the night or may be wrapped in rain and difficult to see.

Even if a severe storm doesn’t spawn a tornado, the straight winds it produces can do comparable damage. The most common form of severe weather in the United States is from strong and/or damaging straight-line winds which aren’t associated with tornadoes.

“When a trained meteorologist evaluates wind damage, they can tell the difference between straight winds and tornadoes. Straight winds produce a starburst pattern in debris whereas tornado winds cause a spiral pattern.”

Hail, especially when driven by wind, can smash car windows and windshields and cause severe damage to buildings. These types of storms can travel either from west to east or from east to west.

“If you’re in your house when a severe storm strikes, go to your basement,” Erdman says. “If you remain in an upstairs room or on the main floor of the house, there’s potential for injury or death caused by a tree falling on the home.”

In late spring or summer, thunderstorms may form a long-lived fast-moving complex of high winds known as a derecho. These types of storms are capable of widespread tree damage and power outages. They may also cause some structural damage from wind gusts that top 100mph, the equivalent of an EF1 tornado.

Severe thunderstorms tend to develop from the afternoon hours into the evening, overnight and early morning. In some years, thunderstorms are more frequent or intense. Some areas of the United States see severe storms, hail and high winds more often than others.

“When a forecast says there’s a 30% chance of severe thunderstorms, intense storms can quickly form and sweep through an area,” Erdman says. “Other times there’s a larger percentage of potential for severe storms, but they don’t develop. We just need to be aware of the risks they pose.”

Weather apps can play an important role in helping agricultural workers keep up with weather conditions and alerts.

“Be aware of the threats severe thunderstorms pose before you’re caught in one,” Erdman says. “The more time you have to prepare to take shelter from a storm, the better off you will be.”

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