

## **TAKE THE THREAT OF LIGHTNING SERIOUSLY**

The United States experiences on average 20 million cloud-to-ground lightning flashes per year, and while the majority of deaths occur in the Southeast, lightning can happen in any state and on any campus. The states with the second highest number of lightning fatalities so far in 2016 are Louisiana and *New York*.

Additionally, lightning can strike as far as 10 miles away from a storm. There have even been reports of extreme cases where its range has been as much as 20 miles.

### **How Will You Be Alerted?**

Lightning cannot be prevented, but the LMU campus weather alert system will sound one steady tone on the siren and an E-2 Campus alert will be sent out to indicate the threat of a severe weather incident is near. Doing so will ensure your outdoor activities are optimally protected from electrical storms.

### **The Alert Has Been Issued. Now What?**

Once an alert has been received that indicates lightning has been detected within 10 miles, it's important for schools and universities to respond quickly. That means officials should immediately clear the area and instruct everyone to take shelter (preferably in shelters that are designed and designated as safe structures). Other appropriate measures include ceasing the playing of music, displaying warning messages on scoreboards and other available electronic signage, and making repeated verbal announcements about the threat of lightning. The outdoor area should remain clear until 30 minutes after the last lightning strike. Then activities can resume.

The National Weather Services also advises adults to teach children the rhyme “When thunder roars, head indoors,” because if you can hear thunder, you are close enough to be struck by lightning. This simple rhyme can also be taught to college students.

#### **4 Easy Steps To Protect Yourself**

# 1

Pay attention to the weather. The best way to avoid being struck by lightning is to stay away from storms. Always check the weather forecast before heading outdoors. If you notice that it may rain, be sure to arrive home as soon as possible or cancel the event. Even if there are no predictions of a storm, keep an eye on the clouds, as the forecast is not always accurate.

- When participating in outdoor activities, such as camping or hiking, be aware of the weather. Depending on your location, the weather may quickly change.

Always be prepared to escape from a storm.

# 2

**Avoid open areas and tall objects.** The taller the object, the more likely lightning will hit it, and the electricity might jump to you. Elevated or watery areas are also unsafe, as there is a higher chance of you being hit by lightning. It's recommended that you take shelter in lower, dry areas. Stay low by crouching with your head in between your knees and covering your ears with your hands. Press your heels together, as this will prevent electricity from reaching your heart if you're struck. Avoid completely flattening yourself on the ground.

# 3

**Stay away from objects that may conduct electricity.** Fences and metal poles are examples that are commonly found outdoors. If you're carrying metal objects that stick out, quickly remove them. While smaller metal items, such as piercings or electronic devices, are of no risk, the ones that protrude from you and are isolated endanger you. Umbrellas are an example.

# 4

**Take shelter in a car.** Although they're mostly made of metal, they're one of the safest places to be during storms. If the car is struck by lightning, it will travel through the metal in the car and around your body (not through it) and safely into the ground. Place your hands in your lap, and don't let your body come into contact with the items inside, such as the steering wheel or door handles.

**Campuses should also address the common myths associated with lightning:**

• **MYTH:** If you are caught outside in a thunderstorm, you should seek refuge under something taller than you, like a tree. **THE TRUTH:** Being under a tall tree makes you extremely vulnerable to lightning. Height, point shape and isolation are dominant factors controlling where a lightning bolt will strike.

• **MYTH:** Metal objects, like umbrellas, baseball bats and bleachers attract lightning. **THE TRUTH:** Metal does not attract lightning. Lightning is attracted to tall, pointy objects. It is the shape and height of the object that attracts lightning, not the material.

However, metal does conduct electricity, so if metal is struck and you are touching it, your risk of electrocution is maximized.

• **MYTH:** Using a mobile app is good enough to monitor lightning. **THE TRUTH:** An app's ability to monitor lightning is limited by its proximity to a cell phone tower. If multiple people are monitoring lightning, there may be differences in their readings, which could cause confusion.

• **MYTH:** Lightning electrifies its victims. If you touch them, you will be electrocuted.

**THE TRUTH:** The human body doesn't store electricity. If someone is struck by lightning, it is safe and encouraged to administer first aid

• **MYTH:** Sometimes it's just heat lightning. **THE TRUTH:** There is no such thing as heat lightning. All lightning originates from a thunderstorm. If you can see lightning but don't hear thunder, it is simply because the storm is far away but could be moving towards you. Lightning can strike more than 10 miles from the storm. You should still take precautions.