

# Keene State College Lightning Safety Plan

Lightning is the most consistent and significant weather hazard for intercollegiate athletics. There are 60-70 fatalities and 10 times as many injuries from lightning strikes every year in the U.S. The following steps are recommended by the NCAA and NOAA to mitigate lightning hazard (*NCAA Guideline 1d—Lightning Safety, July 1997—revised June 2007*):

**Monitor local weather reports each day**—especially when conditions are right for potential thunderstorms:

- “Watch” means conditions are favorable for severe weather to develop.
- “Warning” means that severe weather has been reported in an area.

Keene State College also uses DTN (Data Transmission Network) to receive text messages for lightning and other severe weather alerts. Advisories, warnings, and all clear messages are sent to specified users via cell phones. The College will determine who has access to this service. DTN text messages will be sent as follows:

- Lightning advisory—lightning has been detected within 15 miles).
- Lightning warning—lightning has been detected with 8 miles.
- All clear messages (for both warnings and advisories) when the storm has moved out of the target radius.

**Know where the closest “safer structure or location”** is to the field or playing area. A safer structure/location includes:

1. Any building normally occupied or used by people (e.g. a building with plumbing and/or electrical wiring that acts as a ground to lightning). **Avoid using the shower/plumbing facilities and contact with electrical appliances during a thunderstorm. Evacuate the Spaulding in-door pool room.**
2. **Any vehicle with a hard metal roof** (does not include a convertible or golf cart), with the windows shut. (Note: The hard metal frame and roof, not the rubber tires, protect the occupants by dissipating lightning around the vehicle and not through the occupants—suggestion: rent school buses as safer shelters to place around fields).

**Dangerous locations are:**

1. Small covered shelters (dugouts, rain shelters, golf shelters, and picnic shelters—unless they have been properly grounded for lightning). They may actually increase the risk of lightning injury.
2. Areas connected to or near light poles, towers, and fences.
3. Any location that makes the person the highest point in the area.
4. In-door pools (near electrical conductors and equipment, metal objects (lifeguard stands, ladders, diving board stanchions), and water (including showers)).

**If you receive a DTN advisory or hear thunder, begin preparation** for evacuation. When you receive a **DTN warning alert**, suspend activities and head for your designated safer locations.

**If you do not have access to a DTN alert, but see lightning, consider suspending activities** and heading for your designated safer locations. Count the number of seconds from when you see lightning until you hear thunder, and then divide by 5 to calculate the distance in miles. Specific lightning guidelines (NLSI, NCAA and NOAA) include:

## Keene State College Lightning Safety Plan

1. By the time the monitor observes **30 seconds between seeing the lightning flash and hearing its associated thunder** (the storm is approximately 6 miles away), all individuals should have left the athletics site and reached a safer structure or location (note that thunder may be hard to hear during an event).
2. When lightning is within 6 to 8 miles, **evacuate people from the in-door pool room** to dry areas (National Lightning Safety Institute ([http://www.lightningsafety.com/nlsi\\_pls/indoor\\_pools.html](http://www.lightningsafety.com/nlsi_pls/indoor_pools.html))).
3. Blue sky and absence of rain are not guarantees that lightning will not strike (at least 10 percent of lightning occurs when there is no rainfall and there is some blue sky). Lightning can strike as much as 10 miles away from the rain shaft.
4. Do not use landline telephones—cell phones and cordless phones are safe as long as they are not connected to power.

**To resume activities**, if possible, check the DTN future weather radar to evaluate the potential for additional storms advancing toward your location. If the future cast is favorable, you may resume activities after you receive the all clear warning alert from DTN, otherwise, wait until you receive the advisory all clear alert before resuming activities. If you do not have access to a DTN alert, wait 30 minutes after the last sound of thunder **and** last flash of light before resuming athletic activities.

**People who have been struck by lightning** do not carry an electrical charge. If a lightning strike victim shows signs of cardiac or respiratory arrest:

1. Call 911
2. If possible, move an injured person to a safer location before starting CPR.
3. Initiate CPR
4. Use an automatic external defibrillator (AED) as soon as possible.