



Lightning strikes are unpredictable and always a hazard during thunderstorms or severe weather. The National Weather Service estimates there are 25 million cloud-to-ground strikes each year in the United States, and lightning kills 49 people annually. If you are anywhere outside a safe vehicle or safe building, you are at risk in a thunderstorm. Participants in outdoor Scouting activities should prepare by staying alert to local weather forecasts and knowing where to find safe shelter.

When thunder roars, go indoors! And wait at least 30 minutes after the storm has passed before going back outside.

Incident Review #1

Two 12-year-olds attending their first summer camp were struck by lightning while walking back to the campsite, which was located on a ridge. One was killed; the other was knocked unconscious.

Key Points

- The youth could have sought shelter in a dining hall, but they didn't feel at risk because the rain started slowly. However, it quickly turned into an intense storm.
- If no shelter is available, stay in a low elevation in the landscape or at least away from any open fields.

Incident Review #2

A 15-year-old was killed and three 13-year-olds received burns when a three-sided shelter they were sleeping in was struck by lightning.

Key Points

- Adirondack "lean-to" structures, just like tents, are not considered safe shelters.
- People are often slow to evacuate to a safe vehicle or building when a storm occurs while they are sleeping.
- If you must stay in a tent during a storm, sit up on the foam pad and pull your knees in. It's important to have as little contact as possible with the ground.

Incident Review #3

Three Boy Scouts were sitting on a picnic table under a metal carport during a severe thunderstorm. They were struck by lightning, and one of the Scouts, age 16, went into cardiac arrest. Staff were notified immediately, called 911, and began CPR. An EMS crew transported the cardiac victim to a local hospital, where he began his recovery. The other two youth were treated and released.

Key Points

- While a metal carport may provide protection from sun or rain, it could create a hazard in a thunderstorm.
- Staff preparedness and beginning CPR immediately upon arrival led to a positive outcome for all three victims.

Incident Review #4

More than 100 NYLT staff and participants were told by the course director to seek cover under the canopies provided in their campsites as a storm rolled into camp. Half an hour into the storm, lightning struck a pine tree about 30 feet from one of the canopies, and the ground flash affected 29 participants, a Scoutmaster, and six staff members. Twenty-three youth and one adult were transported to hospitals for treatment.

“ A safe building during a storm is one that is fully enclosed with a roof, walls, floor, plumbing, and wiring.”

Key Points

- NYLT leadership initially thought that a 10-minute hike down from the campsites on the hill to basecamp would be too dangerous.
- The ground current had a large impact because all the participants were huddled together. If safe shelter is not available in a storm, try to spread everyone out at least 30 feet apart. Ground current accounts for 50 to 55 percent of lightning fatalities.
- Several camps in lightning-prone areas have built fully enclosed structures as storm shelters near participant areas. Know the location of the nearest safe area.

“ Fully enclosed, metal-topped vehicles are safe in a storm, but be careful not to touch any metal parts of the interior. Do not leave the vehicle during the storm.”

Discussion Questions

- For your next camp or event, where is the nearest safe building and are safe vehicles available for shelter? How much time would it take to reach those shelter options if a storm were coming?
- What weather apps do you have on your smartphone? Have you tested them in a storm?

- When was the last time you took Weather Hazard training?
- Besides lightning, what other weather conditions might be of concern at your next event?
- Does your unit, camp, or event have an emergency action plan? Where would you find it? When was the last time you practiced an evacuation?

Resources

- “BSA Lightning Risk Reduction Policy” —Guide to Safe Scouting, <https://www.scouting.org/health-and-safety/gss/gss03/#g>
- National Weather Service lightning safety resources, www.lightningsafety.noaa.gov
- Weather Hazards Training, online at www.my.scouting.org or the E-Learning Portal (coming soon)
- “Lightning Safety: An Interview with Sam Cloud,” www.lds.org/callings/church-safety-and-health/training-and-video-resources/lightning-safety?lang=eng (During this interview, “Sam Cloud” unwittingly shares lightning safety tips with his audience.)
- Your camp’s emergency action plan

“ There is no safe place outside during a thunderstorm.”

