



LIGHTNING BEST PRACTICES

Lightning is a capricious, random, and unpredictable event. Lightning kills more people each year on average than hurricanes and tornadoes combined. There are about 100 lightning fatalities annually in the US. Beyond the tragic loss of life, however, are the many injuries. Injury from a lightning strike may occur in any of these ways:

1. Direct strike: Lightning directly strikes a person.
2. Contact strike: A person is touching an object (such as a tree) that has been struck by lightning.
3. Side splash: Lightning jumps from the primary strike object on its way to the ground.
4. Ground strike: Lightning strikes the ground, and the current spreads out in a circle from that spot.
5. Blunt injury: A person is thrown violently from the lightning strike or from the explosive force that occurs as the surrounding air is superheated and rapidly cooled.

Lightning safety should be practiced by all people during thunderstorms. Preparedness includes: getting indoors or in a car; avoiding water and all metal objects; getting off the high ground; avoiding solitary trees; staying off hard wire telephones.

The 30/30 Rule for lightning safety could save your life. The first 30 means that you must take cover if you hear thunder within 30 seconds of the lightning flash (flash-to-bang ratio). Then wait at least 30 minutes after the last lightning flash or thunder to resume normal activity.

Lightning can strike 10 to 15 miles from the rain portion of the storm. Measuring lightning's distance from you is easy. Use the "Flash/Bang" (F/B) Technique. For every count of five from the time of seeing the lightning flash to hearing the associated thunder, lightning is one mile away. A F/B of 10 = 2 miles; an F/B of 20 = 4 miles, etc.

All deaths from lightning are from cardiac arrest and stopped breathing at the time of the strike. Only about 10% of lightning strike victims are killed; 90% survive. But many of the estimated 1000 survivors suffer severe, life-long injuries and disabilities.

The victims are not electrified and are safe to touch. Lightning may cause numerous other injuries:

- Up to two-thirds of the seriously injured people struck by lightning have a temporary paralysis unique to a lightning strike. Victims may experience superficial burns. Contrary to common belief, deep burns are rare. They occur in fewer than 5% of lightning injuries
- If caught outdoors during nearby lightning, adopt the Lightning Safety Position (LSP). LSP means staying away from other people, taking off all metal objects, crouching with feet together, head bowed, and placing hands on ears to reduce acoustic shock.

A safe building is fully enclosed with a roof, walls, and floor, such as a home, school, office building, or shopping center. Picnic shelters, deck overhangs, and other partially open structures are NOT safe unless a lightning protection system (i.e., lightning rods and ground wires) is installed.

ASK: Which of our facilities would be safe?

