

PRECAUTIONS IN DEALING WITH LIGHTNING

Lightning is a serious danger to everyone during a football match. Thus lightning safety requires a large standoff from thunderstorms and a long standoff time after apparent thunderstorm decay. Thunder produced by a lightning strike travels 1,6 km every five seconds. Thus, counting the number of seconds between the visible “flash” and the audible “bang” and dividing by 5, provides the distance in kilometres.

The 30-30 rule

Employ the “30-30 rule” to know when to seek a safer location. The “30-30” states that when you see lightning, count the time until you hear thunder. If this time is 30 seconds or less, go immediately to a safer place. If you can’t see the lightning, just hearing the thunder means lightning is likely within striking range. After the storm has apparently dissipated or moved on, wait 30 minutes or more after hearing the last thunder before leaving the safer location or returning to the field of play.

First Strike Advice

The “30-30 rule” is best suited for existing thunderstorms moving into the area. However, it cannot protect against the first lightning strike. Be alert to changes in sky conditions portending thunderstorm development directly overhead. Larger outdoor activities, with longer evacuation times, may require a longer lead-time than implied by the “30-30 rule”.

When lightning threatens, go to a safer location. Do not hesitate.

What is a Safe Location?

What is a safer location? The safest place commonly available during a lightning storm is a large, fully enclosed, substantially constructed building, e.g. dressing room, typical house, School building, Library, or other public building. Substantial construction also implies the building has wiring and plumbing, which can conduct lightning current to ground. However, any metal conductor exposed to the outside must not be touched precisely because it could become a lightning conduit. Once inside, stay away from corded telephones, electric appliances, lighting fixtures, ham radio microphones, electric sockets and plumbing. Don’t watch lightning from open windows or doorways. Inner rooms are generally preferable from a safety viewpoint.

If you can’t reach a substantial building, an enclosed vehicle with a solid metal roof and metal sides is a reasonable second choice. As with a building, avoid contact with conducting paths going outside. Close the windows, lean away from the door, put your hands in your lap and don’t touch the steering wheel, ignition, gear shifter or radio. Convertibles, cars with fiberglass or plastic shells, and open-framed vehicles are not suitable lightning shelters.

If no safe structure or location is within a reasonable distance, find a thick grove of small trees surrounded by taller trees or a dirty ditch. Assume a crouched position on the ground with only the balls of the feet touching the ground, wrap your arms around your knees and lower your head. Minimize contact with the ground because lightning current often enters a victim through the ground rather than by a direct overhead strike. Minimize your body’s surface area and the ground. Do not lie flat! If unable to reach safe shelter, stay away from the tallest trees or objects such as light poles or flag poles, metal objects (such as fences or bleachers), individual trees, standing pools of water, and open fields. Avoid being the highest object on the field. Do not take shelter under a single, tall tree.

Avoid using the telephone, except in emergency situations. People have been struck by lightning while using a land-line telephone. A cellular phone or a portable remote phone is a safe alternative to land-line phones, only if the person and the antenna are located within a safe structure or location, and if all other precautions are followed.

People who have been struck by lightning do not carry an electrical charge. Therefore, cardiopulmonary resuscitation (CPR) is safe for the responder. If possible, an injured person should be moved to a safer location before starting CPR. Lightning-strike victims who show signs of cardiac or respiratory arrest need emergency help quickly. Prompt, aggressive CPR has been highly effective for the survival of victims of lightning strikes.