



Severe Weather & Lightning

This document represents the USA Rugby policy with regard to lightning

In the United States, there are an estimated 25 million cloud-to-ground lightning flashes each year (Orville and Huffines, 2001). Furthermore, lightning has been the second greatest cause of storm-related deaths (after floods) in the United States during the past 40 years. This is a serious issue with severe consequences given the correct precautions are not taken.

In an attempt to educate the public about dangers relating to severe weather the National Weather Service has established a multi-level awareness plan.

Level 1 – If you are planning outdoor activities, obtain the weather forecast beforehand. Know your local weather patterns.

Level 2 – If you are planning to be outdoors, identify and stay within traveling range of a proper shelter. Employ the “30-30 Rule” to know when to seek a safer location. The “30-30 Rule” 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.

Level 3 – When lightning strikes, go to a safer location. Do not hesitate.

What is a safer location? The safest place commonly available during a lightning storm is a fully enclosed substantially constructed building. Substantial construction also implies the building has wiring and plumbing, which can conduct lightning current safely to ground. Once inside, stay away from corded telephones, electrical appliances, lighting fixture, microphones, electric sockets and plumbing. 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. 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.

Level 4 – If you cannot flee to a safer location, take action to minimize the threat of being stuck. Proceed from higher to lower elevations. Avoid wide-open areas, including sports fields. Avoid tall, isolated objects like trees, poles, and light posts. Do not consider unprotected open structures such as picnic pavilions, rain shelters and bus stops. Avoid contact with metal fences, metal bleachers, or other metal structures.

Level 5 – If circumstances or a series of bad decisions have found you outside of a shelter, far removed from a safer place when lightning is occurring; there are still measures to be taken. Put your feet together, squat down, tuck your head, and cover your ears. When the immediate threat of lightning has passed, continue heading to the safest place possible.



Level 6 – If the worst happens, there are key Lightning First Aid guidelines. First call “9-1-1” immediately. Since all deaths from lightning strikes result from cardiac arrest and/or stopped breathing, begin treatment as soon as possible. CPR or mouth-to-mouth resuscitation is the recommended first aid, respectively.

The threat of injury due to a lightning strike is very prevalent. We unfortunately cannot control the weather, however can decrease the possibility of injury through education and proper precautions. By understanding and utilizing the five levels identified in the National Weather Service plan we can be assured that our teams are safe at all USA Rugby events.

Lightning Safety Education Resources

National Weather Service

www.LightningSafety.noaa.gov

45th Weather Squadron, US Air Force

<https://www.patrick.af.mil/45ws/45og/LightningSafety/index.html>

National Severe Storms Laboratory

www.nssl.noaa.gov/researchitems/lightning.html

National Lightning Safety Institute

www.LightningSafety.com/index.html

National Collegiate Athletic Association

http://www.ncaa.org/sports_sciences/sports_med_handbook/1d.pdf

National Athletic Trainer’s Association

<http://www.nata.org/publications/orhterpub/lightning.pdf>