

Lightning Facts and Safety for SAR Teams
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Spring is here and many SAR teams are eager for warm weather training—day or night. For many parts of the United States Spring is also the start of the severe weather season. Severe weather creates favorable conditions for a host of environmental emergencies for SAR teams—tornados, flash flooding, hypothermia, and lightning. As a Wilderness Medical Associates® Lead Instructor one of the areas that I find students have the most misconceptions about is lightning. A few things to keep in mind about lightning.

- Lightning is the number two weather related killer in the US. Second to flash flooding.
- Thousands of people are injured, but not killed by lightning every year. Many of the injuries have disabling long term consequences.
- During a thunderstorm there is NO safe place outside. Safe places include buildings with walls, closed doors and closed windows. Standing in a garage, under an awning, in a cargo trailer, or in a tent is not adequate protection.
- Your life time chance of being struck is 1 in 3000.
- Lightning seeks a path to the ground by connecting to the nearest tallest object (but not always). Your risk of being struck increases with the square of your height.
- Lightning can directly strike a person, splash on to a person off a roof or tree, or travel to a person via direct contact or ground current.

If you are caught outdoors during a thunderstorm:

- Evacuate high risk areas—ridges, peaks, open fields, cliffs, and get off the water.
- Seek shelter in a building or vehicle with windows and doors closed.
- If no shelter is available insulate yourself from the ground with a pack, foam pad, or life jacket.
- Crouch or sit in a small compact position and stay as low as possible.
- Insulate your canine companion from the ground and stay compact.

Lightning myths

- Lightning is attracted to metal. No, it is attracted to the nearest, tallest object, which is often metal.
- Lightning strike victims are electrified and can not be touched. No, assess and treat the patient immediately.
- Lightning strike victims have internal burns. Highly unlikely, burns are usually superficial or partial thickness skin burns.
- Lightning strike survivors do not need hospital treatment. No, many injuries are delayed and any patient should receive hospital evaluation after field care.

If a thunderstorm conflicts with training or a search:

- Move to an indoor location
- Use indoor time to practice other skills or prepare for field redeployment

Fortunately in most areas severe weather is often short duration and predictable. Protect yourselves and dogs by minimizing risk of a lightning strike.

Safe searching,

Earn one hour of CECBEMS Advanced or Basic CE credit on the topic of Lightning. Go to <http://emsed.com> to watch a multimedia lecture on lightning and complete the CE test for a low fee.

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