

## Lightning Facts & Safety

### Lightning Safety Week, June 24-30, 2012

Lightning is the second largest storm-killer and the most common thunderstorm threat. Lightning causes an average of 80 fatalities and 300 injuries each year (mostly from people caught outside in the summer months in the afternoon and evening). Lightning occurs in all thunderstorms and strikes the earth 20 million times per year.



Some common lightning myths include:

**Myth:** If it is not raining, there's no danger from lightning.

- Truth: Lightning often strikes outside of heavy rain & can occur 10 miles away from rainfall.

**Myth:** Rubber soles of shoes or tires of a car will protect you.

- Truth: They provide NO protection. It is the steel frame of a hard-topped vehicle that protects. Do not touch any metal parts.

**Myth:** People struck by lightning carry an electrical charge and shouldn't be touched.

- Truth: They do not carry a charge and should be attended to immediately!
- If a fatality occurs from lightning, it is usually a result of cardiac arrest.

**Myth:** Heat lightning poses no threat.

- Truth: Heat lightning is still lightning. Heat lightning is lightning from a thunderstorm too far away for the thunder to be heard.

#### Lightning can occur:

- Cloud-to-cloud
- Within a cloud
- Cloud-to-ground
- Cloud-to-air

To help determine distance of storms, these theories may help when working in the field:

#### Flash to Bang:

- This is a method to determine the distance from lightning.
- Count the number of seconds from the lightning flash until the bang of thunder.
- Divide by 5 to get the distance in miles.
- Example: If counted 10 seconds from the flash to the bang:  $10/5 =$  lightning is 2 miles away.

#### 30-30 Rule

- If thunder occurs within 30 seconds (6 miles) of the lightning, it is close enough to be a danger. Stay protected until 30 minutes after the last lightning and/or thunder occurred.

#### If lightning is imminent:

- Postpone activity.
- Move to sturdy building or car.
- Avoid shelter in small sheds, under isolated trees or convertible cars.
- Stay away from tall objects (towers, fences, telephone poles, power lines).
- Unplug appliances/equipment.
- Avoid using a land phone.
- Avoid water use/exposure.



#### If there's no shelter and you are outside:

- Find a low spot away from trees, fences, poles.
- If you feel your skin tingle or hair stand on end, squat low to the ground on the balls of your feet. Place your hands over your ears with your head between your knees.
- Make yourself the smallest target and minimize contact with the ground.
- DO NOT LIE DOWN!