

LIGHTNING

Lightning is the result of the building and discharge of electrical energy. The air in a lightning strike is heated to 50,000 degrees Fahrenheit. It is this rapid heating of the air that produces the shock wave that results in thunder. Severe thunderstorms are those storms with winds in excess of 58 mph or hail larger than 3/4 inches in diameter. If severe thunderstorms and lightning are forecast, plan an alternate activity or know where you can take cover quickly.



SEEK SAFE SHELTER

A house or other substantial building offers the best protection from lightning. For a shelter to provide protection, it must contain a mechanism for conducting electrical current from point of contact to the ground. On the outside, lightning can travel along the outer shell of the building or follow metal gutters and downspouts to the ground. Inside, lightning can follow conductors such as electrical wiring, plumbing, and telephone lines to the ground.

AVOID UNSAFE SHELTERS

Unless specifically designed to be lightning safe, small structures do little, if anything, to protect occupants from lightning. Many small open shelters on athletic fields, golf courses, parks, picnic areas, schoolyards and elsewhere are designed to protect people from rain and sun, but not lightning.

IF YOU ARE OUTDOORS

- Look for darkening skies, flashes of lightning, or increasing wind, which may be signs of an approaching thunderstorm.
- When lightning is seen or thunder is heard, or when dark clouds are observed, postpone activities promptly. Do not wait for rain. Lightning often strikes as far as 10 miles away from any rainfall. Go quickly inside a completely enclosed building. If no enclosed building is convenient, get inside a hard-topped all-metal vehicle.
- The principle lightning safety guide is the 30-30 rule. The first 30 represents 30 seconds. If the time between when you see the flash and hear the thunder is 30 seconds or less, the lightning is close enough to hit you. If you haven't already, seek shelter immediately. The second 30 stands for 30 minutes. After the last flash of lightning, wait 30 minutes before leaving your shelter.

- Be the lowest point. Lightning hits the tallest object. In the mountains, if you are above the tree line, quickly get below the tree line and get into a grove of small trees. Crouch down if you are in an exposed area.
- If you can't get to a shelter, stay away from trees. If there is no shelter, crouch in the open, keeping twice as far away from a tree as it is tall.
- Avoid leaning against vehicles. Get off bicycles and motorcycles.
- Get out of the water, off the beach and out of small boats or canoes. If caught in a boat, crouch down in the center of the boat away from metal hardware. Avoid standing in puddles of water, even if wearing rubber boots.
- Avoid metal! Drop metal backpacks and stay away from clothes lines, fences, and exposed sheds. Don't hold on to metal items such as golf clubs, fishing rods, tennis rackets or tools.

IF YOU ARE INDOORS

- Avoid contact with corded phones. Lightning can travel long distances in both phone and electrical wires, particularly in rural areas.
- Stay away from windows and doors and stay off porches as these can provide the path for a direct strike to enter a home.
- Avoid contact with electrical equipment or cords. If you plan to unplug any electronic equipment, do so well before the storm arrives.
- Avoid contact with plumbing. Do not wash your hands, do not take a shower, do not wash dishes, and do not do laundry.
- Avoid contact with concrete walls which may contain metal reinforcing bars.
- Bring your pets indoors before the storm.

IF SOMEONE IS STRUCK BY LIGHTNING

Call for help. Call 9-1-1 or your local ambulance service. Get medical attention as quickly as possible. Give first aid. If the victim has stopped breathing, begin rescue breathing. If the heart has stopped beating, a trained person should give CPR. If the person has a pulse and is breathing, address any other injuries, i.e., burns.