

THUNDERSTORMS AND LIGHTNING

All thunderstorms are dangerous and every thunderstorm produces lightning. The key to safety is awareness!



Alerting Systems

Severe Thunderstorm Watch

A thunderstorm WATCH tells you when and where severe thunderstorms are likely to occur. Watch the sky and stay tuned to NOAA Weather Radio, commercial radio, or television for information.

Severe Thunderstorm Warning

A WARNING is issued when severe weather has been reported by spotters or indicated by radar. Warnings indicate imminent danger to life and property to those in the path of the storm.

What Should I Do?

If Indoors

- If lightning isn't present, secure outdoor objects such as lawn furniture that could blow away or cause damage or injury. Take light objects inside.
- Shutter windows securely and brace outside doors.
- Listen to a battery operated radio or television for the latest storm information.

- Do not handle any electrical equipment or telephones because lightning could follow the wire. Television sets are particularly dangerous at this time.
- Avoid bathtubs, water faucets, and sinks because metal pipes can transmit electricity.

If Outdoors

- Attempt to get into a building first, or a car.
- Be aware of the potential for flooding in low-lying areas.
- Avoid tall structures such as towers, tall trees, fences, telephone lines, or power lines.
- Stay away from natural lightning rods such as golf clubs, tractors, fishing rods, bicycles, or camping equipment.
- Stay away from rivers, lakes, or other bodies of water.
- If you are isolated in a level field or prairie and you feel your hair stand on end (which indicates that lightning is about to strike), bend forward, putting your hands on your knees. A position with feet together and crouching while removing all metal objects is recommended. Do not lie flat on the ground.

If you're In a Car

- Pull safely onto the shoulder of the road away from any trees that could fall on the vehicle.
- Stay in the car and turn on the emergency flashers until the heavy rains subside.
- Avoid flooded roadways.

Estimating the Distance from a Thunderstorm

Because light travels much faster than sound, lightning can be seen long before the resulting thunder is heard. Estimate the number of miles you are from a thunderstorm by counting the number of seconds between a flash of lightning and the next clap of thunder. Divide this number by five.

NOTE: You are in danger from lightning if you can hear thunder.

Facts

Lightning

- Lightning's unpredictability increases the risk to individuals and property.
- Lightning often strikes outside of heavy rain and may occur as far as 10 miles away from any rainfall.
- "Heat lightning" is actually lightning from a thunderstorm too far away for thunder to be heard. However, the storm may be moving in your direction!

- Most lightning deaths and injuries occur when people are caught outdoors in the summer months during the afternoon and evening.
- Your chances of being struck by lightning are estimated to be 1 in 700,000 but could be reduced even further by following safety precautions.
- Lightning strike victims carry no electrical charge and should be attended to immediately.
- Rubber-soled shoes and rubber tires provide NO protection from lightning. However, the steel frame of a hard-topped vehicle provides increased protection if you are not touching metal. Although you may be injured if lightning strikes your car, you are much safer inside a vehicle than outside.
- Causes several hundred million dollars in damage to property and forests annually.

Thunderstorms

- They may occur singly, in clusters, or in lines.
- Some of the most severe occur when a single thunderstorm affects one location for an extended time.
- Thunderstorms typically produce heavy rain for a brief period, anywhere from 30 minutes to an hour.
- Warm, humid conditions are highly favorable for thunderstorm development.
- About 10 percent of thunderstorms are classified as severe—one that produces hail at least three-quarters of an inch in diameter, has winds of 58 miles per hour or higher, or produces a tornado.
- Over 40,000 thunderstorms occur each day throughout the world
- Lightning is not confined to thunderstorms. It's been seen in volcanic eruptions, extremely intense forest fires, surface nuclear detonations, heavy snowstorms, and in large hurricanes.
- Hail normally accompanies severe thunderstorms and tornadoes, but has in some instances been known to occur independently of other storms.