

Lightning Safety

For Rural Communities

DON'T GET CAUGHT OUTSIDE

No place outside is safe when a thunderstorm is in the area. Get inside of a substantial building as soon as you hear thunder. **When Thunder Roars Go Indoors!**

If you can't get to a safe building:

- ◆ **Avoid open areas.** Don't be the tallest object in the area. If you are caught outside without shelter, and you feel the hair start to raise on your neck, crouch down low, with only the balls of your feet touching the ground if possible. Do NOT lie on the ground! Lightning can travel through the ground, so minimize your contact with it.
- ◆ **Stay away from isolated tall trees, towers or utility poles.** Lightning tends to strike the taller objects in an area.
- ◆ **Stay away from conductors such as water and metal wires or fences.** Water and metal do not attract lightning, but lightning can travel long distances through it.
- ◆ **If you are with a group of people, spread out.** While this actually increases the chance that someone might get struck, it tends to prevent multiple casualties, and increases the chances that someone could help if a person is struck.

IF SOMEONE IS STRUCK

It could lead to death, with cardiac arrest being the immediate cause. Lightning victims do not carry an electrical charge and may need first aid immediately.

- ◆ **Call 9-1-1 for help if possible.**
- ◆ **Don't become a victim too.** If possible, move the victim to a safer place. Lightning can strike the same location twice.
- ◆ **Give first aid.** Begin CPR if you are trained.
- ◆ **Use an Automatic External Defibrillator if one is available and you are trained to use it.** These units are lifesavers!

WHEN THUNDER ROARS, GO INDOORS!

Each year in the United States, there are about 25 million cloud-to-ground lightning flashes and about 300 people struck by lightning. Of those struck, about 30 people are killed and others suffer lifelong disabilities. Most of these tragedies can be prevented. When thunderstorms threaten, get inside a sturdy enclosed building!

Many lightning victims say they were "caught" outside in the storm and couldn't get to a safe place. Other victims simply waited too long before seeking shelter. With proper planning, similar tragedies can be avoided.

Some people were struck because they went back outside too soon. **Stay inside a safe building for at least 30 minutes after you hear the last thunder.** While 30 minutes may seem like a long time, it is necessary to be safe.

Finally, some victims were struck inside homes or buildings while they were using corded phones. Others were in contact with plumbing, outside doors, or window frames. Avoid contact with these electrical conductors when a thunderstorm is nearby!



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WHAT YOU MIGHT NOT KNOW ABOUT LIGHTNING

- ◆ **All thunderstorms produce lightning and are dangerous.** Thunder is caused by lightning, therefore if you hear thunder, lightning is present. Fortunately, people can be safe if they follow some simple guidelines when thunderstorms are forecast.
- ◆ **Lightning often strikes outside the area of heavy rain and may strike as far as 10 miles from any rain-fall.** Many lightning deaths occur ahead of storms before any rain arrives or after storms have seemingly passed and the rain has ended.
- ◆ **If you can hear thunder, you are in danger.** Don't be fooled by blue skies. If you hear thunder, lightning is close enough to pose an immediate threat.
- ◆ **Those who work outdoors in open spaces, near tall objects, or near conductive materials such as water and metal have significant exposure to lightning risk.** Some work activities at higher risk for lightning hazards include:
 - Farming and field labor
 - Logging
 - Roofing
 - Construction
 - Building maintenance
- ◆ **Lightning leaves many victims with permanent disabilities.** While only about 10% of lightning victims die, many survivors must live the rest of their lives with intense pain, neurological disabilities, depression, and other health problems.
- ◆ **Lightning is hotter than the surface of the sun and can reach temperatures around 50,000°F**

AVOID THE LIGHTNING THREAT

- ◆ **Have a lightning safety plan.** Know where you'll go for safety and ensure you'll have enough time to get there.
- ◆ **Monitor the weather.** Once outside, look for signs of

a developing or approaching thunderstorm such as towering clouds, darkening skies, or flashes of lightning.

- ◆ **Get to a safe place.** If you hear thunder, even a distant rumble, seek safety immediately. Fully enclosed buildings are best. **Stay inside until 30 minutes after the last rumble of thunder.** Sheds, picnic shelters, tents or covered porches do NOT protect you from lightning.
- ◆ **If you hear thunder, don't use a corded phone except in an emergency.**
- ◆ **Keep away from electrical equipment and plumbing.** Lightning will travel through any wiring and plumbing if your building is struck. Don't take a bath or shower, or wash dishes during a storm.

ESTIMATING Your Distance from Lightning:

The speed of light is faster than the speed of sound. Therefore, you will see lightning before you hear the associated thunder. To estimate your distance from lightning, count the number of seconds between the flash of lightning and the sound of thunder, then divide by 5 to get the approximate distance in miles. See the table below for examples:

Seconds between seeing lightning hearing thunder	Estimated distance between you and lightning
20	4
15	3
5	1
0	Near 0 (very close)

