



Thunderstorm/Lightning Facts

Summertime is the peak season for one of the nation's deadliest weather phenomena – lightning. In the U.S. over the last 10 years, lightning strikes have killed an average of 31 people a year.

Unlike other weather hazards that often involve sophisticated watches and warnings from the National Weather Service, lightning can occur anywhere there is a thunderstorm – which is why the NWS conducts annual campaigns to educate the public about lightning risks.

In 2015, there were 26 lightning fatalities in a total of 14 states. There were no lightning strike fatalities in Ohio last year.

Of the 26 lightning-strike fatalities:

- All but one incident occurred outside. One person was driving in her car and was hit by a fallen tree.
- 16 were male; 10 female, including a 12-year-old girl and a 17-year-old boy.
- Eight deaths occurred near or under a tree.

While most lightning casualties occur at the beginning of an approaching storm, a significant number of lightning deaths occur after the thunderstorm has passed. If thunder is heard, then the storm is close enough for a lightning strike. It is important to seek safe shelter immediately.

Watch for Developing Thunderstorms

Thunderstorms are most likely to develop on spring or summer days but can occur year round. As the sun heats the air, pockets of warmer air start to rise and cumulus clouds form. Continued heating can cause these clouds to grow vertically into towering cumulus clouds, often the first sign of a developing thunderstorm.

How far away was that lightning?

The sound of thunder travels about one mile every 5 seconds. If you count the seconds between the flash of lightning and the crack of thunder, and divide by 5, you get the number of miles the lightning is from you (10 seconds is 2 miles)

Know Lightning Safety

There is no safe place outside when thunderstorms are in the area. If you hear thunder, you are likely within striking distance of the storm. Just remember: ***When thunder roars, go indoors!***

The best way to protect yourself and others from lightning or any severe storm is to avoid the threat. Have a lightning safety plan. Cancel or postpone outdoor activities early, if thunderstorms are expected. Monitor weather conditions and get to a safe place before the weather becomes threatening. Substantial buildings and hard-topped vehicles are safe options. Rain shelters, small sheds and open vehicles are not safe.



A **safe building** is one that is fully enclosed with a roof, walls and floor, and has plumbing or wiring. Examples include a home, school, church, hotel, office building or shopping center. Once inside, stay away from showers, sinks, bathtubs, and electronic equipment such as stoves, radios, corded telephones and computers.

Unsafe buildings include car ports, open garages, covered patios, picnic shelters, beach pavilions, golf shelters, tents of any kind, baseball dugouts, sheds and greenhouses.

A **safe vehicle** is any fully enclosed, metal-topped vehicle, such as a hard-topped car, minivan, bus, truck, etc. While inside a safe vehicle, do not use electronic devices such as radio communications during a thunderstorm. If you drive into a thunderstorm, slow down and use extra caution. If necessary, pull off the road into a safe area. Do not leave the vehicle during a thunderstorm.

Unsafe vehicles include golf carts, convertibles, motorcycles, or any open cab vehicle.

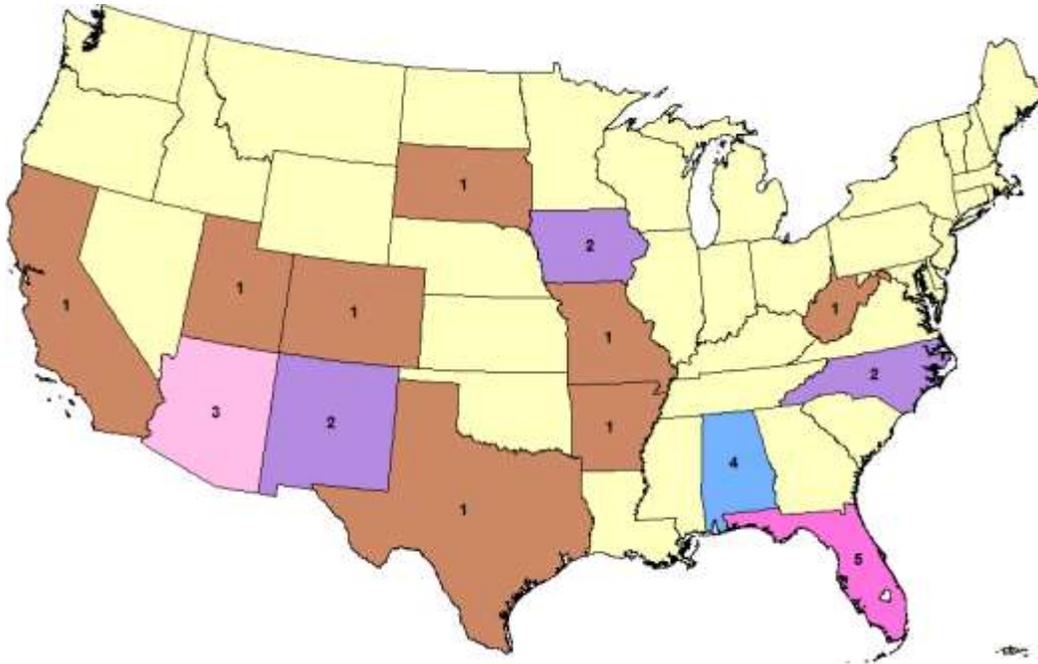
Protect your pets. Outside dog houses are not lightning-safe. Dogs that are chained to trees or wire runners can easily fall victim to lightning strikes. Consider bringing your pets inside the home or garage during thunderstorms.

Helping a Lightning-Strike Victim

If someone is struck by lightning, call 911 and seek immediate medical attention. Lightning victims do not carry an electrical charge and are safe to touch. Knowing first aid measures, which include cardiopulmonary resuscitation (CPR), can help lightning-strike victims survive. American Red Cross chapters and local fire departments often offer first aid and CPR classes.



2015 Lightning Fatalities by State (NOAA graphic)



Homeowners' insurance claims and lightning payout losses

According to the Insurance Information Institute, total insured losses from lightning strikes were up 9.7 percent from 2013, though overall incurred losses between 2010 and 2014 were down 28.5 percent. An analysis of homeowners' insurance data by the I.I.I and State Farm ® found there were 99,871 insurer-paid lightning claims in 2014, down 13 percent from 2013. But the average lightning paid-claim amount was up from \$5,869 in 2013 to \$7,400 in 2014.

The I.I.I will have 2015 data available in June 2016 – www.iii.org.

For additional information on lightning safety and protection:

[National Weather Service](#)

[Lightning Protection Institute](#)

[Insurance Information Institute](#)