



**NATIONAL LIGHTNING SAFETY WEEK**

**JUNE 22-28, 2008**

**By Julia Dian-Reed, National Weather Service,  
Jeff Walker, Licking County  
Emergency Management Agency/Homeland Security,  
and  
Jim Mickey, Licking County Planning Department**

**The week of June 22-28, 2008, has been designated National Lightning Safety Week.**

**The theme for 2008 is "When Thunder Roars, Go Indoors!"**

**TOP 10 MYTHS OF LIGHTNING SAFETY**

1. MYTH: Lightning Never Strikes The Same Place Twice

TRUTH: Lightning often strikes the same place repeatedly, especially if it's a tall pointy isolated object. The Empire State Building used to be used as a lightning laboratory, since it is hit nearly 25 times a year. Places prone to lightning are places to avoid when thunderstorms are nearby!

2. MYTH: If It's Not Raining, Or If Clouds Aren't Overhead, I'm Safe From Lightning

TRUTH: Lightning often strikes more than three miles from the thunderstorm, far outside the rain or even thunderstorm cloud. 'Bolts From The Blue', though infrequent, can strike 10-15 Miles from the thunderstorm. Anvil lightning can strike the ground over 50 Miles from the thunderstorm, under extreme conditions. Lightning in clouds has traveled over 100 miles from the thunderstorm.

3. MYTH: Rubber Tires Protect You From Lightning In A Car By Insulating You From The Ground

TRUTH: Lightning laughs at two inches of rubber! Most cars are reasonably safe from lightning. But it's the metal roof and metal sides that protect you, not the rubber tires. Thus convertibles, motorcycles, bicycles, open shelled outdoor recreational vehicles, and cars with plastic or fiberglass shells offer no lightning protection. Likewise, farm and construction vehicles with open cockpits offer no lightning protection. But closed cockpits with metal roof and sides are safer than going outside. And don't even ask about sneakers!

4. MYTH: A Lightning Victim Is Electrified. If You Touch Them, You'll Be Electrocuted.

TRUTH: The human body doesn't store electricity. It is perfectly safe to touch a lightning victim to give them first aid. This is the most chilling of lightning myths. Imagine someone dying needlessly, for want of simple CPR or mouth-to-mouth resuscitation, when their chances of survival was ~90%!

5. MYTH: If Outside In A Thunderstorm, Go Under A Tree To Stay Dry

TRUTH: Being underneath trees is the second leading activity for lightning casualties – enough said?!

6. MYTH: I'm In A House, I'm Safe From Lightning

TRUTH: While a house is a good place for lightning safety, just going inside isn't enough. You must avoid any conducting path leading outside, such as corded telephones, electrical appliances, wires, TV cables, plumbing (including plastic pipes with water in them), metal doors or window frames, etc. Don't stand near a window to watch the lightning. An inside room is generally best.

7. MYTH: When Playing Sports And Thunderstorms Threaten, It's Okay To Finish The Game Before Seeking Shelter

TRUTH: Sports is the activity with the fastest rising rate of lightning casualties. No game is worth death or life-long severe injury. All people associated with sports should have a lightning safety plan and stick to it strictly. Seek proper shelter immediately when lightning threatens. Adults are responsible for the safety of children!

8. MYTH: Structures With Metal, Or Metal On The Body (Jewelry, Watches, Glasses, Backpacks, Etc.), Attract Lightning

TRUTH: Height, pointy shape, and isolation are the dominant factors controlling where a lightning bolt will strike. The presence of metal makes virtually no difference on where lightning strikes. Mountains are made of stone, but receive many strikes each year. When lightning threatens, take proper protective action immediately. Don't waste time shedding metal off your body, or seeking shelter under inadequate structures. But while metal doesn't attract lightning, touching or being near long metal objects (fences, railings, bleachers, vehicles, etc.) is still unsafe when thunderstorms are nearby. If lightning does happen to hit it, the metal can conduct the electricity a long distance (even over 100 yards) and still electrocute you.

9. MYTH: If Trapped Outside And Lightning Is About To Strike, Lie Flat On The Ground

TRUTH: This advice is decades out of date. Better advice is to use the 'Lightning Crouch': put your feet together, squat low, tuck your head, and cover your ears. Lightning induces electric currents along the top of the ground that can be deadly over 100 Feet away. While lying flat on the ground gets you as low as possible, which is good, it increases your chance of being hit by a ground current, which is bad. The best combination of being low and touching the ground as little as possible is the 'Lightning Crouch'. But the 'Lightning Crouch' should be used only as a last resort. Much better would be to plan outdoor activities around the weather to avoid thunderstorm exposure and to have proper shelter available.

10. MYTH: Go near a tall pointy isolated object when thunderstorms threaten, to be within the 45° "cone of protection"

TRUTH: The "cone of protection" is a myth! While tall pointy isolated objects are statistically more likely to be struck by lightning, it's not nearly reliable enough to rely on for safety. Lightning can still strike you near the tall object. Besides, the lightning electricity will likely spread out along the surface of the ground and can still kill you over 100 Ft from the "protecting" object. Also, if you are close to or touching the tall object, you can be electrocuted via side flash or contact voltage.

**NO PLACE OUTSIDE IS SAFE NEAR A THUNDERSTORM!**

In lightning safety, a "myth" is not as good as a mile. Distance and proper shelter is your best protection from lightning.

This list is for information only. No guarantee of lightning safety is stated or implied for this list. For a full description of personal lightning safety, see the Lightning Safety Group recommendations.

Mr. Roeder/45 WS/SYR/4-6807/wpr/3 Mar 02