



The Safety Chain

April 2018

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Well, it's that time of the year again as the new season begins. The season you may ask is "Thunderstorms." So, how much do you really know? You are more than welcome to scan the Internet for the answers. First question, "How hot can a lightning flash be?" A thousand degrees; 6,000 degrees, or five times hotter than the surface of the Sun? The correct answer, 5 times hotter than the surface of the sun. Now that is hot.

Ready for another question. How many times does lightning strike the earth's surface? 100 strikes every day, 100 strikes every hour, 100 strikes every minute, or 100 strikes every second? Did you know that there are 100 lightning strikes somewhere on the earth's surface every second.

How about this question. Lightning strikes can cause cardiac arrests and severe burns. How many people actually survive these events? Is it 10%, 50%, 90% or 100%. The answer is that about 9 out of 10 people (90%) actually survive these events. Now that doesn't mean that we need to play outside while there are thunderstorms.

You heard the old saying, lightning never strikes in the same place twice. Is this fact or myth? Actually it is a myth. Lightning has and can strike in or near to the same place more than once. After all, think about cloud-to-cloud lightning. Have you ever seen multiple strikes between the same cloud? I have.

How about this one. Are you a lottery player or a gambler? What are your chances of being hit by lightning during your lifetime. Is it one in 5,000, one in 500,000, one in a 1,000,000 or one in a 100,000,000? The answer is one in 5,000. You have a better chance of being hit by a bolt-of-lightning than winning the ultimate Power Ball jackpot.

Now let's play MacGyver. What simple device can you use to make a thunderstorm detector? A portable television, an ISR or FRS radio, a laptop computer, or an AM radio? The answer is, an AM radio. You can tune the radio to the low end of the dial. When lightning strikes you will hear static from the discharge. If you are in an airplane and happen to have an ADF radio, (a radio for receiving non-directional-beacon signals,) the needle points to the direction where lightning is striking. You may not know the distance but you do know the direction.

Next, how can you determine the distance you are from lightning? When we see a lightning flash and immediately hear the thunder we are way too close. You can count the number of seconds and then divide the number of seconds by 5. This will approximate how far you are from the lightning in miles. This works because light is traveling 186,000 miles per second while sound is traveling much slower. So you will see the flash before you hear the thunder as both events begin at the same time.

One last question. How can you tell that you probably are in an area that is about to be struck by lightning? Lightning is a static discharge, similar to the shock you can get when you build up a static charge in the winter time after walking across some carpet. You may notice the hair on your head and/or arms may be standing up, or you may feel tingling in your body. If you do, it is time to act immediately. If you are in an open field you might not have enough time to run and seek shelter. It may be best to lay flat on the ground or in a ditch. Don't seek shelter around trees. Lightning usually strikes the tallest object in the area of the strike. Don't be that object. If there is a car nearby, get into the car with the windows rolled up. It is important for the windows to be up and not down. Glass is an insulator to the flow of electricity and also blocks the outside air should it become ionized. Ionized air conducts electricity very easily. If lightning hits the car you are sheltering inside of, the lightning will most likely pass around the vehicle and discharge to the earth. Also, do not get into a pool of water. Water conducts electricity and this includes lightning.

What is best? Stay indoors during thunder storms and wait at least thirty minutes after the storm passes before returning to the outdoors.

Stay safe have a great spring and summer during the thunderstorm season.

Semper Vigilans