NEWS RELEASE

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Misconceptions about lightning

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According to the Weather Channel, lightning kills or injures hundreds of people every year, mainly because the victims are not aware of the danger they face. Myths and misperceptions about lightning can add to the confusion. Take this short quiz from weather.com and let's test your lightning knowledge:

True or False?

- Lightning always strikes the tallest object.
  False. Lightning strikes the best conductor on the ground, not necessarily the tallest object. In some cases, the best conductor might be a human being.

- A car's rubber tires give protection from lightning.
  False. Actually, the car itself is very well insulated and offers more protection than being outside in the storm. Of course, the exception to this is the convertible, which provides virtually no protection.

- Lightning never strikes the same place twice.
  False. Tell that one to the Empire State Building, which is struck by lightning many times every year.

The first step to reduce the risk of being struck by lightning is education. Sadly, many people don't realize the dangers of lightning. There are several ways to prepare yourself for a thunderstorm: keep a watchful eye to the sky, listen to a National Oceanic and Atmospheric Administration weather radio or local radio or television for current forecasts, and watch for lightning flashes.

Lightning is the result of the build up and discharge of electrical energy. If you can see lightning or hear thunder, you could be in the danger. You can tell how close you are to a lightning strike by counting the seconds between seeing the flash and hearing thunder. For every five seconds you count, the lighting is one mile away. If you can see a flash and instantly hear thunder, the lightning strike is very close and you should seek shelter immediately.

The two most common types of lightning are cloud-to-ground and intra cloud. Cloud-to-ground lightning is the most dangerous form of lightning. This type of lightning occurs during the dissipating stage of a thunderstorm. Intra cloud lightning is the most common. It occurs between oppositely charged centers within the same cloud.

The 30/30 rule relates to the duration between the flash of lightning and clap of thunder, which describes the proximity of a storm cell. It's used as a measure of the imminence of the storm and therefore as a denominator in deciding whether to suspend outdoor activities. The rule of thumb is that every three seconds of delay between a lightning flash and the audible thunder associated with the flash equates to a distance of approximately one kilometer. Accordingly, the 30 seconds flash-to-thunder time interval suggests that the lightning activity is approximately 10

kilometers away. The safest location during a thunderstorm is inside a large enclosed structure, preferably with electrical/telephone wiring and plumbing (to provide a safe pathway to the ground for any current), but keeping away from doors, windows, metal fittings and devices connected to the electricity supply. Also, an enclosed metal vehicle (such as a car, van or bus) is a safe location if an enclosed structure isn't available.

Avoid unnecessary exposure to the lightning during thunderstorm activity. Follow safety recommendations to reduce the overall number of lightning casualties. An individual ultimately must take responsibility for his or her own safety and should take appropriate action when threatened by lightning. A weather radio and the use of lightning detection data in conjunction with an action plan are prudent components of a lightning warning policy, especially when larger groups and/or longer evacuation times are involved.

The seemingly random nature of thunderstorms cannot guarantee an individual absolute protection from lightning strikes, however, being aware of, and following proven lightning safety guidelines can greatly reduce the risk of injury or death.

Tips to help you stay safe

The Red Cross reports that every year, people are killed or seriously injured by severe thunderstorms despite advance warning. While some do not hear a warning, others do but they don't pay attention to it. The following information, combined with timely thunderstorm watches and warnings about severe weather, may help save lives. During thunderstorms, always remember to:

-Listen to local news or NOAA Weather Radio for emergency updates. Watch for signs of a storm, like darkening skies, lightning flashes or increasing wind.

-Postpone outdoor activities if thunderstorms are likely to occur. Many people struck by lightning are not in the area where rain is occurring.

-If a severe thunderstorm warning is issued, take shelter in a substantial building or in a vehicle with the windows closed. Get out of mobile homes that can blow over in high winds.

-If you can hear thunder, you are close enough to be in danger from lightning. If thunder roars, go indoors! The National Weather Service recommends staying inside for at least 30 minutes after the last thunder clap.

-Avoid electrical equipment and telephone. Use battery-powered TVs and radios instead.

-Shutter windows and close outside doors securely. Keep away from windows.

-Do not take a bath, shower or use plumbing.

-If you are driving, try to safely exit the roadway and park. Stay in the vehicle and turn on the emergency flashers until the heavy rain ends. Avoid touching metal or other surfaces that conduct electricity in and outside the vehicle.

-If you are outside and cannot reach a safe building, avoid high ground; water; tall, isolated trees; and metal objects such as fences or bleachers. Picnic shelters, dugouts and sheds are not safe.

For more information on how to prepare before a thunderstorm and what to do afterward, visit www.redcross.org.