

Thunderstorms and Lightning

Lightning strikes the ground somewhere in the U.S. nearly every day of the year. Thunderstorms and lightning occur most commonly in moist warm climates. Data from the National Lightning Detection Network shows that over the continental U.S. an average of 20,000,000 cloud-to-ground flashes occur every year. Around the world, lightning strikes the ground about 100 times each second, or 8 million times a day.

According to NOAA, an average of 67 people are killed by lightning each year and about 300 are injured. Only flash floods and river floods cause more weather-related deaths.

Following are a few best practices to consider:

- Monitor the weather conditions and forecast for the next day of operation. In addition, an inexpensive portable weather radio is recommended for obtaining current storm data.
- Suspension and resumption of operations should be well planned out and part of the staff training procedures.
- Patrons and employees should take shelter when lightning is seen or thunder is heard. Wait a minimum of 30 minutes from the last observed lightning or thunder before resuming operations. Be extra cautious during this phase as the storm may not be over. Lightning can strike as far as 10 miles from a thunderstorm.
- If you are outside during an electrical storm and you begin to feel your hair standing on end, and/or hear a crackling noise, you may be in the lightning's electric field. Immediately remove metal objects, car keys, backpacks, even baseball caps and place your feet together, duck your head, and crouch down low in baseball catcher's stance with hands on knees.
- People who have been struck by lightning do not carry an electrical charge and are safe to handle. Apply first aid immediately if you are qualified to do so. Get emergency help promptly by calling 911 or the local emergency service number.

Lightning Safety Tips

1. The 30/30 Rule - If lightning precedes thunder by less than 30 seconds, then the storm is close and you need to take cover. After the storm, wait at least 30 minutes before leaving shelter and resuming outside activities.
2. Seek shelter in an enclosed building if possible. Open shelters, like those at campsites and picnic areas provide very little protection. Avoid small wooden

or metal sheds. If a building is not available, get in a vehicle with a metal roof and close all windows and doors.

3. Stay away from water. Water is an excellent conductor of electricity. Electrical current can easily transmit pass through water including lakes, ponds, rivers and standing water such as puddles.
4. Do not wait for rain to take shelter. Take shelter as soon as lighting is seen or thunder is heard.
5. Place yourself at the lowest point possible. Lightning often strikes tall objects first. If no sturdy shelter is available, crouch as low as possible with feet together and place hands over ears to minimize hearing damage from thunder. Keep your distance from other people, allowing 15 feet between.
6. Stay away from trees and tall metal poles. Keep twice as far from a tree as it is tall to avoid current traveling through the ground.
7. Listen to NOAA Weather Radio or other weather sources to keep up with changing weather conditions.
8. Lightning can enter a building directly, through the ground, or through pipes or wires that extend outside.
9. Stay away from windows and doors.
10. Stay off phones and avoid touching electrical equipment and plumbing.
11. Protect property. Typical store bought surge protectors will not protect electrical equipment from a direct lightning strike. Unplug all valuable electronics as soon as you hear thunder.

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