

# RISK MANAGEMENT

## SHOCKING NEWS ABOUT LIGHTNING AND POOLS

In Australia, lightning accounts for five to ten deaths and well over one hundred injuries annually. A large percentage of lightning strike victims survive but many of these suffer from severe life-long injury and disability. Statistics show that approximately 25% of people killed by lightning are playing sport. When thunderstorms threaten, officials and coaches must not let the desire to start or complete a carnival or a coaching session hinder their judgment when the safety of athletes, officials or spectators is in jeopardy. If you see lightning or hear thunder, you are a potential target for a lightning strike. Lightning fatalities or injuries occur most often when you are:

- ◆ **Near or in water** – indoor & outdoor pools, including showers
- ◆ **Near or under trees and tall objects** – diving boards, towers, lifeguard stands, poles, etc.
- ◆ **Near vehicles or buildings, instead of in them** – under awnings or un-enclosed buildings
- ◆ **At recreational facilities and open areas** – pools, football fields, golf courses, and parks
- ◆ **Near the storm, especially before the storm arrives and after the storm has passed**



You can determine the distance between you and the lightning strike by using the flash-to-bang rule: **For each five seconds you count between seeing the lightning flash and hearing the thunder, there is approximately 1.5 kilometers between you and that lightning strike.** If your evacuation building is nearby and nothing obstructs the view at the pool, a 30-second flash-to-bang time should be your bare minimum for evacuating the pool. Pools that have obstructed views should evacuate anytime thunder is heard. Thunder usually becomes audible within 15 kilometers of the thunderstorm (flash-to-bang of 50 seconds). A developing storm may provide no advance warning before the first lightning strike.

Reduce the risk of electrocution near pools by identifying who has the authority to call for the suspension and subsequent resumption of activities, and by following the HANDY rule:

### HANDY RULE

**Hand** – The five fingers of the hand stand for the five seconds per 1.5 kilometer, flash-to-bang rule. There should be a well-grounded, enclosed and sturdy building handy for everyone. If not, evacuate the pool sooner. Include the extra time needed to get people out of the pool and to the building in your evacuation plan. Wait thirty minutes from the last time thunder is heard before reopening the pool.

**Awareness** – Know the weather forecast, stay informed and have a safety plan ready to enact. If thunderstorms are forecast, be alert for storm development and be prepared to carry out your plan.

**Notify** – Tell people that the pool is closed. Do not allow them to use showers, sinks or stand outside, especially under awnings and trees. The locker room may not be safe. In fact, a wet locker room floor is an ideal conductor of electrical energy.

**Direct patrons** to safe structures or hard-topped vehicles. Convertibles are not safe from lightning.

**Your own safety** – The pool area is dangerous for everyone. Be in a safe building or vehicle and remain there until thunder is no longer heard. The pool filter room is not safe due to the water and plumbing. Blue sky, sunshine or lack of rain is not a reason to return to the pool area.

The pool environment is extremely vulnerable to lightning strikes. Every pool should have an evacuation plan and recognize when a lightning threat exists. Planning is extremely important in saving lives. Remember that your plan has to adapt for your pool's peculiarities and that the safety rules below are general in nature.

Evacuation times will vary from pool to pool depending on how well the staff (or club officials) can determine flash-to-bang times. If dry buildings are distant or unavailable, the pool may be evacuated when lightning is seen or thunder is heard. Some pools will be able to track storms from far away and will have more lead-time before evacuating. Pools where objects block the view of the storm or noise covers the sound of thunder will be unable to use the flash-to-bang method and will have to devise other methods to aid in their decision process. If a very dark and ominous cloud develops near the pool, the staff might close the pool until the threat of a first lightning strike from that storm has passed or the cloud appears to have weakened in intensity.

Do not depend on a severe thunderstorm warning to clear the pool. Non-severe thunderstorms are just as serious a lightning threat as severe thunderstorms. Devise a plan of action for each of several threatening events. Several thunderstorms could have large hail and strong wind gusts in addition to lightning and may require a different plan of action. Fast moving thunderstorms will arrive quickly and will allow less time to complete your evacuation.”

