Did You Know...

HOW LIGHTNING STRIKES PEOPLE

Thunderstorms are commonplace in the hot weather. During the summer months, lightning flashes occur about once every 3 seconds in Canada. Up to a million times more powerful than household current, lightning bolts can be deadly. A lightning bolt can cause cardiac arrest when the current enters the body. It can also lead to organ damage and burns, sometimes with long-term effects.

In Canada, lightning takes an average of 10 lives every year and seriously injures 100-150 people. The number of strikes is highest in southern Ontario: Windsor receives the most, followed by Toronto and Hamilton. Lightning usually strikes higher ground and prominent objects, especially those that conduct electricity.

It is not always possible to know exactly how a victim has been struck, but here are ways that lightning strikes its victims. Any of these types of strikes can be deadly. Immediate medical attention, including calling 911, starting CPR, and using an AED, may be critically important to keep the person alive until more advanced medical care arrives.

- **DIRECT STRIKE:** Most often occurs in open areas. The heat produced when lightning moves over the skin can produce burns, but the current moving through the body is of greatest concern.
- **SIDE FLASH**: Occurs when lightning strikes a taller object near the victim and a portion of the current jumps from taller object to the victim. In essence, the person acts as a "short circuit" for some of energy in the lightning discharge. Side flashes generally occur when the victim is within a foot or two of the object that is struck.
- **GROUND CURRENT:** When lightning strikes a tree or other object, much of the energy travels outward from the strike in and along the ground surface and anyone outside near the strike is a potential victim.
- **CONDUCTION:** Whether inside or outside, anyone in contact with anything connected to metal wires, plumbing, or metal surfaces that extend outside is at risk. This includes anything that plugs into an electrical outlet, water faucets and showers, corded phones, and windows and doors.
- **STREAMERS:** Streamers develop as the downward-moving leader approaches the ground. If a person is part of one of these streamers, they could be killed or injured during the streamer discharge even though the lightning channel was not completed between the cloud and the upward streamer.