



## Lightening Can Kill



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Each year in Canada, lightning kills an average of 16 people and causes more than 20 per cent of all forest fires (40 per cent in British Columbia.) Lightning also starts about 2000 fires annually on private property (about 2.5 per cent of all recorded fires.) You have a one in 350 000 chance of being killed by lightning; your chances of being killed in a car accident are 50 times greater.

### Thunder

Thunder is the sound of the lightning moving rapidly and explosively through the atmosphere. The air expands and then compresses violently, producing sound waves.

The waves are heard as a single thunder crash when the lightning bolt is straight and short. When the bolt is long and forked, there is a succession of crashes and rumbles.

To judge how close lightning is, count the seconds between the flash and the thunder clap. Each second represents about 300 m.

### What to do when:

- *You hear a severe thunderstorm watch for your area* (this means that conditions are favourable for the development of severe thunderstorms.) You should secure or put away loose objects such as outdoor furniture, put your car in the garage, and bring livestock and pets to shelter.

Prepare and maintain emergency packs containing food, clothing, blankets, a first aid kit and medication, a battery-powered radio with fresh batteries, a flashlight, lantern and tools for emergency repair jobs. Keep one pack in your home and another in your car.

- *You hear a severe thunderstorm warning* (this means that severe thunderstorms are highly probable or are occurring.) Keep calm and take shelter. If boating or swimming, head for land and shelter immediately.

Note that lightning may strike several kilometres away from the parent cloud. Take precautions even if the thunderstorm is not directly overhead.

- *You are caught outdoors in a thunderstorm.* Go inside if you can. If not, move, if possible, to a canyon, or under a cliff.

Stay clear of high ground and open spaces, including golf courses and sports fields. Also keep away from isolated trees, and avoid the edge of a forest or



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woods. Low trees located well within a forest, but not close to tall trees, are less dangerous than trees in open country.

Stay away from objects that conduct electricity, such as tractors, golf carts, golf clubs, motorcycles, lawn-mowers and bicycles. Swinging a golf club or holding an umbrella or fishing rod are particularly dangerous activities. Take off shoes with metal cleats. Never get closer than 30 m to any wire fence, because you might receive a jolt from a lightning discharge that has hit a section of the fence as far as a kilometre away.

During a severe storm, don't travel. If caught in your car, open the windows slightly and park off the road away from power lines. Set the brakes. Be wary of downed power lines and don't try to step outside the car if they are near or touching the car.

- *You are indoors during a thunderstorm.* It serves no purpose to close the doors and windows, except to keep the rain out. Lightning can come through a brick wall as easily as through an open window.

Radio aerials, electrical lines, telephone lines and water pipes are excellent conductors of electricity and lightning. If properly installed and grounded, they are not hazardous, and there is no need to disconnect plugs and aerials. But don't tempt fate. Just postpone that hot bath, telephone call or last bit of ironing.

- *Someone is struck by lightning.* Victims of lightning receive an electrical shock but do not carry an electric charge and can be safely handled. They may be suffering from burns or shock and should receive medical attention immediately. If breathing has stopped, administer mouth-to-mouth resuscitation. If breathing and pulse are absent, perform cardio-pulmonary resuscitation.