



# LIGHTNING SAFETY AND PREPAREDNESS

#### When thunder roars, GO INDOORS!

Every year in Canada, lightning can cause as many as 10 deaths and 164 injuries. You can avoid a tragedy like this by taking a few simple precautions.

If you can hear thunder, you can get hit by lightning. Take shelter immediately. If you cannot find a sturdy, fully enclosed building with wiring and plumbing, get into a metal-roofed vehicle. Stay inside for 30 minutes after the last rumble of thunder.

Direct strikes are responsible for only 5% of lightning-related deaths and injuries. Two other types of hazardous phenomena are caused by lightning. Ground current and side flash account for 60 to 80% of lightning-related injuries and deaths. A ground current is set up when lightning hits the ground, spreads out and sends a current through a victim. Side splash occurs when lightning hits a tall object, travels partly down the object and then jumps to a nearby victim.

#### Avoid the threat of lightning

To plan for a safe day, check the weather forecast first. If thunderstorms are forecast, avoid being outdoors at that time or make an alternate plan. Identify safe places and determine how long it will take you to reach them.	Do not handle electrical equipment, telephones or plumbing. These are all electrical conductors. Using a computer or wired video game system, taking a bath or touching a metal window frame all put you at risk of being struck by lightning. Use battery-operated appliances only.
Watch the skies for developing thunderstorms and listen for thunder. As soon as you hear thunder, quickly get to a safe location. If you can hear thunder, you are in danger of being hit by lightning. More people are struck before and after a thunderstorm than during one.	If on water, get to shore as quickly as possible. The high waves and strong gusts of wind associated with sudden fast-moving storms can make it difficult for swimmers, boaters and water skiers to reach shore safely. Lightning that hits water travels well beyond its point of contact. Small boats with no cabin provide less protection than boats with enclosed cabins.
<b>Get to a safe place.</b> A safe location is a fully enclosed building with wiring and plumbing. Sheds, picnic shelters, tents or covered porches do NOT protect you from lightning. If no sturdy building is close by, get into a metal-roofed vehicle and close all the windows.	If caught outdoors far from shelter, stay away from tall objects. This includes trees, poles, wires and fences. Take shelter in a low-lying area but be on the alert for possible flooding.



#### **Outdoor events**

It is impossible to issue accurate local forecasts months in advance. Since summer storms can develop quickly, you should have a weather safety plan ready for any large gathering. In your plan, you should

- adopt an emergency alerting strategy;
- schedule activities at times less likely to experience thunderstorms, such as the morning; and
- ensure participants know the location of a safe place that is close enough for them to reach quickly.

## First aid for lightning victims

# On the day of the activity

- Have a knowledgeable person monitor the weather, forecasts and warnings;
- be prepared to cancel or delay the event well before any storm threatens;
- inform organizers and volunteers of emergency plans; and
- do not resume outdoor activities until at least 30 minutes after the last rumble of thunder is heard.

- Lightning victims do not carry an electrical charge and can be safely handled.
- **Call for help.** Victims may be suffering from burns or shock and should receive medical attention immediately. Call 9-1-1 or your local ambulance service.
- **Give first aid.** If breathing has stopped, administer cardio-pulmonary resuscitation (CPR). Use an automatic external defibrillator if one is available.

### Stay informed: follow the most recent forecasts

Canada receives over two million lightning strikes a year on average. Many lightning deaths and injuries are associated with smaller local storms. It takes only one lightning bolt to change your life.

Environment Canada's Meteorological Service of Canada issues severe thunderstorm watches and warnings for storms that can produce damaging winds, heavy rain and hail. The service does NOT specifically warn for lightning. Watch the skies for threatening clouds and listen for thunder. Stay up to date with the latest weather forecasts and warnings by monitoring your favourite broadcast outlet, Weatheradio or a hand-held mobile device.

Remember: in a thunderstorm, no place outdoors is safe.

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#### For more information on lightning, visit Environment Canada's Lightning in Canada website at www.ec.gc.ca/foudre-lightning