

Frequently Asked Questions:

Lightning In Canada!

Lightning FAQs

- **Frequently Asked Questions**
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Questions And Answers

Frequently Asked Questions

- **Where can I find historical lightning information?**

At this time, Environment Canada does not have a website for historical lightning. However, by [contacting your weather service](#) a request for historical lightning data can be made.

- **How many people are killed or injured by lightning in Canada each year?**

Canada averages over 2 million lightning strikes each year. And, despite our relatively short lightning season, 9 to 10 people are killed and between 100 and 150 people are injured each year by lightning in Canada. This compares to an average of 57 deaths per year in the United States.

- **Where is the safest place to be during a thunderstorm?**

Inside a house which has plumbing and wiring or an all-metal vehicle (not a convertible). Stay away from electrical appliances and equipment, doors, windows, fireplaces, and anything else that will conduct electricity, such as sinks, tubs and showers. Picnic shelters, dugouts, small buildings without plumbing or electricity are **NOT** safe.

- **How long do I need to stay inside after a lightning storm?**

Once you are in a safe location either in a house or a car, stay inside for 30 minutes after the last rumble of thunder. Every time you hear thunder rumble you need to restart the clock until 30 minutes has passed and there had been no thunder heard.

- **Can I use my cordless telephone (cell phone, headset) during a thunderstorm if I am inside a house or a car?**

Yes. As long as you are not directly connected to a telephone line you are safe. However if a lightning strike occurs nearby, the noise that is produced from the lightning strike could damage your ear drums. Only use a corded telephone in an emergency.

- **Is it safe to work on my computer during a storm?**

Is your computer directly connected to a power source and feed? If you are directly connected to a power source and or internet feed, then you are not safe. You will want to turn off your computer and perhaps disconnect it from its power source in order to protect your computer. Only the most powerful surge protectors usually used in large business' can protect computers from a spike in energy caused by a lightning strike. If you are on a wireless laptop with no wire connecting it to a power source, then the computer and you are safe from the risk of being hit by lightning.

- **Will I be safe if I play electronic games (Wii, Playstation, Xbox) on my TV during a storm?**

This depends on your set up you have for your video game system and your TV. If your hand held remote has a wired connection to a television or base station drawing power from the house's electrical circuit, then it is not safe. On the other hand, if your remote is wireless and you do not touch the television, then you will be safe. But remember if a lightning strike does hit your building or close by, your television and any other plugged in electrical equipment are at risk of being damaged. Best to unplug your equipment before the storm arrives.

- **Will rubber boots protect me if I'm outside during a thunderstorm storm?**

No place is safe outdoors during a thunderstorm. Lightning is extremely powerful hazard and can reach temperatures as high as 30,000C. Rubber is an electrical insulator, but even the strongest ceramic insulators on power lines are damaged when struck by lightning. The thin layer of rubber (1 cm or less) on your boots is insignificant to protect you compared to the power of lightning.

Plan ahead and be in a safe location before the storm arrives.

- **Will the rubber tires on my bicycle/car protect me during a thunderstorm?**

No the rubber tires won't protect you. If you are on a cycling trip, plan ahead and keep an eye on the weather. You may have to end your day early in order to stay safe from a thunderstorm. If you are on your bike at the start of a thunderstorm, quickly get to a safe location, and then stay there for 30 minutes after the last rumble of thunder.

A car's tires do not help insulate the car. Lightning will flash over the frame of the car and not hurt any one inside the vehicle. However, electronic equipment may be damaged in the car. That is why you shouldn't touch anything metal or electrical inside the vehicle.

- **How do you calculate how far away the lightning is?**

Light travels at 300,000 km/sec whereas sound travels at 0.3 km/sec. Once in a safe location, either in a house or car, you can calculate the distance of the lightning strike. After the flash of lightning, begin counting off the seconds until the thunder is heard. Divide the seconds by three to arrive at the distance in km.

For example: $15 \text{ seconds} / 3 = 5 \text{ km away.}$

Remember to stay in a safe location for 30 minutes after the last rumble of thunder is heard