

Avalanches

Thousands of avalanches occur in Canada each year. They happen in all regions of Canada, but are more frequent in the mountains of British Columbia, Yukon and Alberta. Avalanches can be triggered by wind, rain, warming temperatures, snow and earthquakes. They can also be triggered by skiers, snowmobiles, hikers, vibrations from machinery or construction. Avalanches can travel up to 90 km/h per hour. After one hour, only one in three victims buried in an avalanche is found alive. The most common causes of death are suffocation, wounds and hypothermia.

SEVERE STORMS

Blizzards

A blizzard, in general, is a winter storm with winds exceeding 40 km/h with visibility reduced by falling or blowing snow to less than a kilometre and lasting for at least three hours.

Blizzards come in on a wave of cold arctic air, bringing snow, bitter cold, high winds and poor visibility in blowing snow. While these conditions must last for at least three hours to be designated a blizzard, they may last for several days.

When a winter storm hits, stay indoors. If you must go outside, dress for the weather. Outer clothing should be tightly woven and water-repellent. The jacket should have a hood. Wear mittens – they are warmer than gloves – and a hat, as most body heat is lost through the head.

Hail

Hailstorms occur across Canada, though they are most frequent in Alberta, the southern Prairies and in southern Ontario. Hailstorms occur mostly from May to October. Parts of the Prairies can expect up to 10 hailstorms a year. Some hailstones are the size of peas while others can be as big as grapefruits.

When a hailstorm hits, stay indoors, and keep yourself and your pets away from windows, glass doors and skylights which can shatter if hit by hailstones. Avoid using the telephone during a storm, and do not touch metal objects like stoves, radiators, metal pipes, and sinks.

Ice storms

Freezing rain is tough, clings to everything it touches and is more slippery than snow. A little freezing rain is dangerous, a lot can be catastrophic.

Ice from freezing rain accumulates on branches, power lines and buildings. If you must go outside when a significant amount of ice has accumulated, pay attention to branches or wires that could break due to the weight of the ice and fall on you. Ice sheets could also fall on you.

Never touch power lines. A hanging power line could be charged (live) and you would run the risk of electrocution. Remember also that ice, branches or power lines can continue to break and fall for several hours after the end of the precipitation.

Lightning

Lightning occurs when the air becomes charged with electricity during a thunderstorm. Bolts of lightning travel at about 40,000 kilometres per second.

Always take shelter during lightning. To estimate how far away the lightning is, count the seconds between the flash of lightning and the thunderclap. Each second is about 300 metres. If you count fewer than 30 seconds: look for shelter. If you count fewer than 5 seconds: take shelter immediately.

Wait 30 minutes after the last lightning strike in a severe storm before venturing outside again. If you are caught in the open, do not lie flat. Crouch down with your feet close together and your head down (the “leap-frog” position). By minimizing your contact with the ground, you reduce the risk of being electrocuted by a ground charge. Do not ride bicycles, motorcycles, tractors, golf carts or use metal shovels or golf clubs because they may conduct electricity.

Thunderstorms

Thunderstorms are often accompanied by high winds, hail, lightning, heavy rain and tornadoes. Thunderstorms are usually over within an hour, although a series of thunderstorms can last for several hours.

Before a severe thunderstorm, unplug radios and televisions – listen for weather updates on your battery-powered radio. During thunderstorms, you should also stay away from items that conduct electricity, such as telephones, appliances, sinks, bathtubs, radiators and metal pipes.

If you are outdoors when a thunderstorm hits, take shelter immediately, preferably in a building but, failing this, in a depressed area such as a ditch, culvert or cave. Never go under a tree.

Power outages

Most power outages will be over almost as soon as they begin, but some can last much longer – up to days or even weeks. Power outages are often caused by freezing rain, sleet storms and/or high winds which damage power lines and equipment. Cold snaps or heat waves can also overload the electric power system.

During a power outage, you may be left without heating/air conditioning, lighting, hot water, or even running water. If you only have a cordless phone, you will also be left without phone service.

If you do not have a battery-powered or crank radio, you may have no way of monitoring news broadcasts. In other words, you could be facing major challenges.

Knowing the types of storms coming to your region can help you prepare for an emergency. When a severe storm is coming, Environment Canada will issue weather warnings through their Weatheroffice website. Radio and television stations will also broadcast Environment Canada weather statements. Pay attention to this information.

Step 2

Make a family emergency plan

Every household in Canada should have an emergency plan. Before an emergency occurs, all family members should sit down and discuss what will happen in case of an emergency. They should write down and exercise their plan at least once a year with the entire family.

The family may not all be together when a severe storm or emergency happens, but identifying a safe place where everyone should meet in case of an emergency will help. Make sure everybody has a copy of the emergency plan and keeps it close at hand.

Emergency Plan

- Draw up a floor plan of your home that shows all possible exits from each room. Plan a main exit route and an alternate exit route from each room.
- If you live in an apartment, use the stairs instead of the elevators.