

Thunderstorms, lightning, and hail

Overview

Seasonal weather such as thunderstorms, lightning and hail can develop quickly and threaten life and property. Severe storms occur across Alberta in all seasons.

Be prepared

Individuals and families should be prepared to take care of themselves for at least 72 hours. The following steps will assist you in building your preparedness plan.

- **Build a kit:** By taking a few simple steps you can become better prepared to face a range of emergencies. Be sure your kit includes a battery-powered/crank radio/flashlight or [Weatheradio](#) in case of a power outage.

Find out where your community will post information and updates during an emergency, and make sure to download the [Alberta Emergency Alert](#) app for critical, life-saving alerts.

When individuals are prepared to the best of their ability, this allows first responders, such as police, fire, and ambulance, to focus on the emergency and provide assistance to those who need the help most.

Heavy rain

There are two types of summer heavy rains: Large-scale weather systems with long-term rainfall, and short thunderstorms with heavy rainfall.

Heavy rain facts

- Large weather systems can often last several days.
- Heavy rainfall can cause floods in a short period of time, especially when the ground is frozen or already wet.

Heavy rain survival tips

- Avoid roadway underpasses, drainage ditches, low lying, and water collection areas because they can flood or overflow.
- Stay away from power lines or electrical wires.
- Check the drainage around your house to reduce the possibility of basement flooding.

Thunderstorms

Thunder is the noise created when the air suddenly expands from the heat of a lightning discharge. All thunderstorms are potentially deadly electrical storms, whether or not there is severe weather.

Thunderstorm facts

- Severe thunderstorms could bring damaging conditions such as strong winds, hail, lightning, heavy rain, and tornadoes.
- A series of thunderstorms can last for several hours.
- Straight-line winds cause most thunderstorm wind damage. These winds move horizontally along the ground away from the storm.

Thunderstorm survival tips

- Before any thunderstorm, unplug radios and televisions.
- During a thunderstorm, stay away from shattered glass and tall objects that could topple.

Lightning

Lightning is an electrical discharge caused by a buildup of static electricity, which can deliver up to 100 million volts of electricity.

Lightning facts

- Each year lightning kills approximately 10 Canadians and injures even more.
- On average, lightning causes more fatalities in Canada annually than hail, rain, flooding, wind, tornados and hurricanes combined.
- If you can hear thunder, consider it a threat.
- Rubber footwear and tires do not offer any significant protection from lightning.

Lightning survival tips

- Seek shelter in fully enclosed building with wiring and plumbing.
- Stay away from anything that has an electrical cord, and avoid doors, windows, fireplaces, sinks, tubs, and showers.

- If you are caught outside, do not stand near tall objects or anything made of metal, and avoid open water. Take shelter in a low lying area.
- Wait 30 minutes after you hear the last rumble of thunder before going outside.

Hail

Hail forms in storm clouds and is most common in summer, but can also occur during colder times of the year. Large hail occurs more in the warmer seasons and requires specific conditions. Nearly all areas of Alberta can be affected by large hail.

Hail facts

- Hailstorms occur mostly from May to October.
- Hailstones can be as small as peas or as big as grapefruits.
- A hailstorm can be a financial disaster because of damage to homes and property (including crops).
- Hail can fall to the ground at speeds of 100 km/h or more.
- When combined with heavy rain, hail can clog storm drains and create unexpected local flooding.

Hail survival tips

- Take cover when hail begins to fall. Do not go out to cover plants, cars, or to rescue animals.
- Keep yourself and your pets away from windows, glass doors, and skylights, which can shatter.
- If outdoors without shelter, crouch down with your face away from the wind. Protect your head and neck with your hands.

Financial preparedness

- Speak to an insurance agent about your specific needs.
- Know your insurance policy. Make sure your home, vehicle, business and belongings are protected.
- If possible, consider an emergency savings account to cover temporary expenses while you are out of your home.
- If you can, keep emergency cash handy in case banking services are unavailable.
- If you are evacuated, keep all receipts for additional expenses.
- Prepare a [detailed list](#) of all your belongings.
- Know the [7 steps](#) for making a home insurance claim.

The Insurance Bureau of Canada is ready to answer your questions. Connect with them by email at askibcwest@ibc.ca or by telephone 1-844-227-5422. For more information on insurance preparedness visit ibc.ca.

For more information

Read our other fact sheets on:

- Tornadoes
- Hazard specific preparedness information including wildfire, flooding, power and water outage, and more.

You can find more information about preparedness through Alberta.ca, or and [Environment and Climate Change Canada](#).