

Earthquakes

What you need to know

Overview

Between 1985 and 2011, Alberta has experienced 605 earthquakes. Most were along the foothills and Rocky Mountains.

What to expect

Small or moderate earthquakes last only a few seconds and there is no risk. You may experience the ceiling lights moving and objects shaking, a quiver under your feet and a loud bang, followed by shaking if you are close to the source.

Large earthquakes can last up to several minutes and you will most likely experience the following:

- ground or floor will moving; shaking followed by a rolling motion
- seeing buildings sway or hear roaring
- dizziness and inability to walk
- if you are in a high-rise or a multi-story building, you may experience swaying. Lower floors will shake rapidly.
- falling or sliding furniture and unsecured objects
- unsecured ceiling fixtures and panels falling
- windows breaking
- activated fire alarms and sprinkler systems
- lights and power may go off

During an earthquake

- **Drop** under heavy furniture such as a table, desk, bed or solid furniture.
- **Cover** your head and torso to prevent being hit by falling objects.
- **Hold** onto the object you are under so you remain covered.
- If you can't get under something strong, or if you are in a hallway, flatten yourself or crouch against an interior wall.

- If you're in a mall, go into the nearest store.
- Stay away from windows, and shelves with heavy objects.
- If you are at school, get under a desk or table facing away from windows, and hold on.
- If you are in a wheelchair, lock the wheels and protect the back of your head and neck.
- If you are **outdoors**, go to an open area away from buildings and power lines. If you are in a crowded public place, take cover where you will not be trampled.

Vehicles

- Pull over, stop your car and stay inside. Keep roads clear for rescue and emergency vehicles.
- Avoid bridges, overpasses, underpasses and buildings that could collapse.
- Listen to radio for instructions.
- Stay in your car if power lines are across it. Place a "HELP" sign in your window and wait to be rescued.
- If you are on a bus, stay in your seat until the bus stops. Take cover if you can. If you can't, sit and crouch while protecting your head from falling debris.

Tips:

Do not shut off the gas unless there is a leak or fire. Once turned off, a qualified tradesperson must turn it on again.

Check your insurance. It could affect your financial ability to recover after an earthquake.

Apartment/multi-story buildings

Work with your building manager or condominium board to "quake-safe" your unit. Seek advice from building engineers, emergency preparedness authorities if you are unsure about what to do.

Mobile homes

Keeping the wheels on and installing a bracing system can reduce the chance your unit will fall off its supports. Ensure the awning on your home is securely supported and fastened to the unit. For information on the best way to brace your unit, contact your local mobile home dealer or a mobile home owner's association.

After an earthquake

- Stay calm. Help others if you can.
- Be prepared for aftershocks.
- Only use the phone if you need emergency help.
- Put on sturdy shoes and clothes to protect yourself from debris and broken glass.
- If you think your home is unsafe, do not enter. If you're not sure, ask a professional to inspect it.
- If you need to leave, take your [emergency kit](#) and essential items with you.
- Do not light matches or turn on light switches until you're sure there are no gas leaks or spilled flammable liquids. Use a flashlight to check utilities. Do not shut them off unless damaged. Smell for leaking gas.
- If tap water is available immediately after, fill a bathtub and containers in case it gets cut off. If there's no running water, you may have water available in a toilet reservoir and hot water tank.
- Don't flush toilets if you think sewer lines are broken.
- Clean up spilled hazardous materials.
- Check on neighbours, organize rescue measures, or call for assistance.
- If you have pets, find and comfort them. If you evacuate, take them to a pre-identified pet-friendly shelter in their carrier.
- If you need, place a "HELP" sign in your window.

Preparedness checklist:

- Ensure everyone in your home knows how to turn off the water and electricity.
- Clearly label on-off positions for the water, electricity and gas. If your home is equipped with natural gas, tie or tape the appropriate wrench on or near the pipe, to turn off the gas.
- Repair loose roof shingles.
- Secure your water heater and heavy appliances to studs.
- Secure top-heavy furniture and shelving units; place heavy items on lower shelves.
- Securely fasten mirrors, paintings and hanging.
- Move all beds and chairs away from chimneys and windows.
- Do not hang heavy pictures above bed.
- Close all curtains and blinds to help stop broken window glass from falling onto beds.
- Secure all televisions, computers and other small appliances with anti-skid pads or Velcro.
- Child-proof/safety-latch cupboards to stop contents from spilling out.
- Keep flammable items and household chemicals away from heat.

Stay informed

- Download the [Alberta Emergency Alert](#) app.
- Refer to [Alberta Energy Regulator](#) earthquake monitoring.
- Earthquakes Canada provides up-to-date information on [earthquake activity](#) in your area.
- Listen to radio or television for instructions.