

Did you know?

Over 60% of British Columbians now live in a region where some of the largest earthquakes in the world occur.



Over the years, there has been an increase in the number of extreme weather-related incidents.



WHAT TO DO:
BEFORE
DURING
AFTER



KNOW THE TERMS
IDENTIFY THE
HAZARDS

ESSENTIAL EARTHQUAKE GUIDE



BE READY

The forces of plate tectonics have shaped the earth over many years, as the huge plates that form the earth's surface slowly move over, under and past each other. Sometimes, the movement is gradual. At other times, the plates are locked together, unable to release accumulated energy. When the accumulated energy grows strong enough, the plates break free. If the earthquake occurs in a populated area, it can cause many deaths and injuries,

[Learn the best practices for before, during and after an earthquake](#)



as well as extensive property damage.

While earthquakes are widely believed to be only a West Coast occurrence, there are actually areas all throughout Canada that are at moderate to high risk for earthquakes.

The best defences against emergencies are education and preparation. Learn what you can do to protect yourself and your family.

Before an Earthquake

Here are some things you can do to protect yourself, your family and your property in the event of an earthquake:

- ▶ Build an emergency kit and make a family communication plan.
- ▶ Fasten shelves securely to walls.
- ▶ Place large or heavy objects on lower shelves.
- ▶ Store breakable items such as bottled foods, glass and china in low, closed cabinets with latches.
- ▶ Fasten heavy items such as pictures and mirrors securely to walls and away from beds, couches and any other places people sit.
- ▶ Brace overhead light fixtures and top-heavy objects.
- ▶ Repair defective electrical wiring and leaky gas connections. These are potential fire risks. Get appropriate professional help. Do not work with gas or electrical lines yourself.
- ▶ Install flexible pipefittings to avoid gas or water leaks. Flexible fittings are more resistant to breakage.
- ▶ Secure your water heater, refrigerator, furnace and gas appliances by strapping them to the wall studs and bolting them to the floor. If your gas company recommends it, install an automatic gas shut-off valve that is triggered by strong vibrations.
- ▶ Repair any deep cracks in ceilings or foundations. Get expert advice if there are signs of structural defects.
- ▶ Be sure the residence is firmly anchored to its foundation.
- ▶ Store weed killers, pesticides and flammable products securely on bottom shelves in closed cabinets with latches.

Know the Terms



Aftershock - An earthquake of similar or lesser intensity that follows the main earthquake.

Earthquake - A sudden slipping or movement of a portion of the earth's crust, causing a series of vibrations on the earth's surface.

Epicentre - The place on the earth's surface directly above the point on the fault where the earthquake began. Once fault slippage begins, it continues along the fault during the earthquake and can extend hundreds of kilometres before stopping.

Fault - A fracture in the earth's surface where land slipped during an earthquake. The slippage may range from a couple of centimetres to more than 4 metres in a severe earthquake.

Magnitude - The amount of energy released during an earthquake. A magnitude of 7.0 on the Richter scale indicates an extremely strong earthquake. Each whole number on the scale represents an increase of about 30 times more energy released than the previous whole number represents. Therefore, an earthquake measuring 6.0 is about 30 times more powerful than one measuring 5.0.

Seismic waves - Vibrations that travel outward from the earthquake fault at speeds of several kilometres per second. Although fault slippage directly under a structure can cause considerable damage, the vibrations of seismic waves cause most of the destruction during earthquakes.



- ▶ Locate safe spots in each room under a sturdy table or against an inside wall. Reinforce this information by moving to these places during each drill.
- ▶ Hold earthquake drills with your family. Remember to drop, cover and hold on.

During an Earthquake

Drop, cover and hold on. Minimize your movements to a few steps to a nearby safe place.

If Indoors

- ▶ DROP to the ground; take COVER by getting under a sturdy table or other piece of furniture; and HOLD ON until the shaking stops. If there isn't a table or desk near you, cover your face and head with your arms and crouch in an inside corner of the building.
- ▶ Stay away from glass, windows, outside doors and walls, and anything that could fall, such as lighting fixtures or furniture.
- ▶ Stay in bed if you are there when the earthquake strikes. Hold on and protect your head with a pillow, unless you are under a heavy light fixture that could fall. In that case, move to the nearest safe place.
- ▶ Do not use a doorway unless you know it is a strongly supported, load-bearing doorway and it is close to you. Many inside doorways are lightly constructed and do not offer protection.
- ▶ Stay inside until the shaking stops and it is safe to go outside. Do not exit a building during the shaking. Research has shown that most injuries occur when people inside buildings attempt to move to a different location inside the building or try to leave.



- ▶DO NOT use the elevators.
- ▶Remember that the electricity may go out or the sprinkler systems or fire alarms may turn on.

If Outdoors

- ▶Stay there.
- ▶Move away from buildings, streetlights and utility wires.
- ▶Once in the open, stay there until the shaking stops. The greatest danger exists directly outside

buildings, at exits and alongside exterior walls. Ground movement during an earthquake is seldom the direct cause of death or injury. Most earthquake-related casualties result from collapsing walls, flying glass and falling objects.

If in a Moving Vehicle

- ▶ Stop as quickly as safety permits and stay in the vehicle. Avoid stopping near or under buildings, trees, overpasses and utility wires.
- ▶ Proceed cautiously once the earthquake has stopped. Avoid roads, bridges or ramps that might have been damaged by the earthquake.

If Trapped Under Debris

- ▶ Do not light a match.
- ▶ Do not move about or kick up dust.
- ▶ Cover your mouth with a handkerchief or clothing, if available.
- ▶ Tap on a pipe or wall so rescuers can locate you. Use a whistle if one is available. Shout only as a last resort. Shouting can cause you to inhale dangerous amounts of dust.

After an Earthquake

- ▶ When the shaking stops, look around to make sure it is safe to move. Then exit the building.
- ▶ Expect aftershocks. These secondary shockwaves are usually less violent than the main quake but can be strong enough to do additional damage to weakened structures. Aftershocks can occur in the first hours, days, weeks or even months after the quake.
- ▶ Help injured or trapped persons. Remember to help people who may require special assistance, such as infants, the elderly and people with access and functional needs. Give first aid where appropriate. Do not move seriously injured persons unless they are in immediate danger of further injury. Call for help.
- ▶ Look for and extinguish small fires. Fire is the most common hazard after an earthquake.
- ▶ Listen to a battery-operated radio or television for the latest emergency information.
- ▶ Be aware of possible tsunamis if you live in coastal areas. These are also known as seismic sea waves (mistakenly called "tidal waves"). When local authorities issue a tsunami warning, assume that a series of dangerous waves is on the way. Stay away from the beach.

72 HOUR EMERGENCY ESSENTIALS KIT



- ✓ Batteries
- ✓ Bottled water (4 litres/ person)
- ✓ Can opener (manual)
- ✓ Candles
- ✓ Cash
- ✓ Clothing (extra shirt, pants, socks, underwear)
- ✓ Duct tape
- ✓ Emergency plan and list of phone numbers
- ✓ First-aid kit
- ✓ Flashlight (wind-up or battery-powered)
- ✓ Food (canned beans or meat, dried fruit and nuts, crackers, protein bars)
- ✓ Multi-tool (e.g. Swiss Army Knife)
- ✓ Pet supplies
- ✓ Prescription medication
- ✓ Radio (wind-up or battery powered)
- ✓ Sleeping bags or blankets
- ✓ Spare keys to your car and your house
- ✓ Toiletries (toothpaste, toothbrushes, toilet paper, feminine hygiene products, soap and sanitizer)
- ✓ Waterproof matches



- ▶ Use the telephone only for emergency calls.
- ▶ Go to a designated public shelter if your home has been damaged and is no longer safe.
- ▶ Stay away from damaged areas unless your assistance has been specifically requested by police, fire or relief organizations. Return home only when authorities say it is safe.
- ▶ Be careful when driving after an earthquake and anticipate traffic light outages.
- ▶ After it is safe to return, your safety should be your primary priority as you begin clean up and recovery.
- ▶ Open cabinets cautiously. Beware of objects that may fall off shelves.
- ▶ Put on long pants, a long-sleeved shirt, sturdy shoes and work gloves to protect against injury from broken objects.
- ▶ Clean up spilled medicines, bleaches, gasoline or other flammable liquids immediately. Leave the area if you smell gas or fumes from other chemicals.
- ▶ Inspect the entire length of chimneys for damage. Unnoticed damage could lead to a fire.
- ▶ Inspect utilities.
 - Check for gas leaks. If you smell gas or hear a blowing or hissing noise, open a window and quickly leave the building. Turn off the gas at the outside main valve if you can and call the gas company from a neighbour's home. If you turn off the gas for any reason, it must be turned back on by a professional.
 - Look for electrical system damage. If you see sparks or broken or frayed wires, or if you smell hot insulation, turn off the electricity at the main fuse box or circuit breaker. If you have to step in water to get to the fuse box or circuit breaker, call an electrician first for advice.
 - Check for sewage and water line damage. If you suspect sewage lines are damaged, avoid using the toilets and call a plumber. If water pipes are damaged, contact the water company and avoid using water from the tap. You can obtain safe water by melting ice cubes.

In addition to insuring your home, we are committed to helping you and your loved ones stay safe when disaster strikes. If you would like more information on developing a family emergency plan or building a disaster supply kit, please contact Schill Insurance Brokers Ltd at 604-591-3341 or schillinsurance.com today.

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Officials have given me the okay to return home. What's next?

- Continue listening to the radio for information and instructions; also check in at the local evacuation centre for the most up-to-date information.
- Do not re-enter the house unless an authorized person has told you it is safe to do so.
- Be cautious when re-entering your home; structures may have shifted or been damaged.
- Have a battery-operated flashlight on hand for light.
- Check food and water supplies for contamination and spoilage before using them.
- Wear proper shoes when walking through broken glass or debris, and use heavy gloves when removing debris.
- Let your family and friends know you are safe.
- Once you are safely back into your home, call your Intact Insurance Representative to walk you through the next steps regarding any property damages that may have occurred.

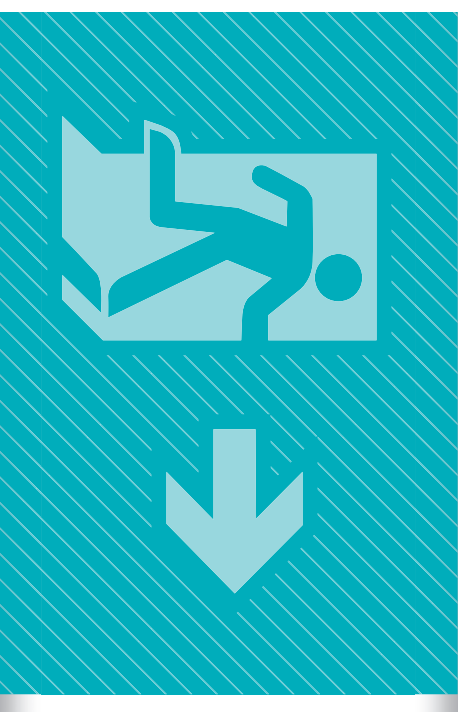
About Intact Insurance Company

Intact Insurance is Canada's largest home, auto and business insurance company protecting over 4 million customers. We are the industry leader and a financially strong and stable company. Our coast-to-coast presence, fortified by our strong relationship with insurance brokers, means we can provide the outstanding service and stability you deserve.

Our name is our promise

At Intact Insurance we are here to protect the things you care about. Our strength is our ability to get you back on track when an unforeseen event occurs. And you have our word that we will do it in a fair, respectful and easy manner.

Questions? Call your trusted insurance broker, your best source for information and advice.



my Evacuation Checklist

24/7 Claims Line

1-866-464-2424

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I've just been ordered to evacuate. Now what?

Over the years, there has been an increase in the number of extreme weather-related incidents. In some cases, these events lead to individuals having to vacate their homes. Follow these important steps to help protect your family and home both before and after an evacuation.

- Keep in mind that local authorities won't ask you to leave your home unless they have a reason to believe you are in danger.
- Unplug electrical equipment such as radios, televisions and small appliances.
- Leave freezers and refrigerator's plugged in unless there is a risk of flooding.
- Only shut off water, gas and electricity if officials tell you to do so.
- Secure your home by closing and locking doors and windows.
- Depending on how fast the evacuation happens, you may have time to pack a small bag of toiletries and clothes. If time permits, also be sure to take enough basic supplies with you to last 72 hours (this includes food, water, and other essentials such as a first-aid kit).
- Take your wallet/purse, personal identification for each family member, and copies of essential family documents (i.e. passports, etc.).
- Take a cell phone and charger.
- Take any essential medications for your family.
- Take your pets with you.
- Check in at the local evacuation centre.
- Once you are safe, call or email an out of town contact to let them know where you are going and when you expect to return.
- Follow instructions from local authorities. They will not only provide you with recommendations on which evacuation routes to take, but also, they'll be the ones to let you know when it is safe to return home.

Sources:
<http://www.gripresponse.ca/get/press/abstracts/yourdressof/indexen.aspx>
http://www.safj.gov/evacuating_yourself_and_your_family

http://www.emergency.ca.gov/arc/emg/esc/pdf/1981EMO_Prepare_for_Disasters_Evacuation_Kit_Lit.pdf
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