

Protect your home

Inside your home

Most injuries during an earthquake occur because objects fall. Take time to make your home safer.

- ❖ Anchor bookcases and filing cabinets to nearby walls.
- ❖ Install latches on drawers and cabinet doors so they are less likely to swing open.
- ❖ Install ledge barriers on shelves, place heavy objects on lower shelves, and secure large, heavy breakables directly to shelves.
- ❖ Use closed eyescrews and wire to securely attach framed pictures and mirrors to the walls.
- ❖ Attach computers and small appliances to desks, tables or countertops.
- ❖ Secure ceiling lights, suspended ceilings and other hanging items to the permanent structure of your house.
- ❖ Apply safety film to windows and glass doors.
- ❖ Anchor large appliances to walls using safety cables or straps.
- ❖ Lock the rollers of any large appliances or pieces of furniture.
- ❖ Secure your water heater to nearby walls.
- ❖ Fit all gas appliances with flexible connections and/or a breakaway gas shut-off device, or install a seismic main gas shut-off device. (Check your local building codes to determine whether you may install flexible connectors yourself or whether a professional must install them.)



The home itself

An earthquake severely tests your home's structure. Your home must absorb the earthquake's energy and provide a stable path to transfer these forces back into the ground. Your home is more likely to escape damage when the roof is attached tightly to the walls, the walls are fastened to each other and, finally, when the walls are braced and anchored to a strong foundation. For structural changes, consult your local building officials and hire a registered design professional, such as an architect, engineer, or licensed building contractor to do the work. If the structural elements of your home need reinforcing, some of the most important retrofits include:

- ❖ Adding anchor bolts or steel plates between your home and its foundation.
- ❖ Using sheathing to brace the inside of your home's cripple wall – the short wood-stud wall between the top of the foundation wall and the first floor.
- ❖ Bracing unreinforced chimneys, masonry and concrete walls and foundations.

Outside your home

In addition to your home, you may have other structures vulnerable to earthquake damage. Periodically check your garage and other structures to assess their capacity to withstand an earthquake.

Protect yourself

Earthquakes strike without warning, so learn before the quake strikes how to protect yourself and your family as fully as possible.

If you are indoors

- ❖ Drop to the floor, take cover under something strong like a desk or table, and hold on to it. "*Drop, cover and hold*" until the shaking stops.
- ❖ Move away from windows, skylights, doors and things that can fall.
- ❖ Stay inside, and do not leave the building – you may be hit by falling debris.

If you are outdoors

- ❖ Move quickly and safely into the open, away from electrical lines, trees and buildings.
- ❖ Drop to the ground and cover your head with your arms until the shaking stops.

If you are in a vehicle

- ❖ Carefully bring your vehicle to a stop at the side of the road, away from traffic.
- ❖ Do not stop on or under bridges, under power lines or near roadway signs that might fall.
- ❖ Once the shaking has stopped you can continue driving, but watch carefully for damage to the roadway.

Earthquakes cannot be predicted, although some scientists are working on this. Because earthquakes strike without warning, it is important that every member of your family knows what to do when an earthquake strikes. Learn about your disaster safety plans in the workplace and at your children's school and/or childcare centre.

Create a family disaster safety plan. Assemble a disaster safety kit. Together, identify escape routes from your home and neighbourhood. Choose an emergency meeting place for the family. Be prepared!

Research, the foundation for action

The Institute for Catastrophic Loss Reduction (ICLR) is a world-class centre for multi-disciplinary disaster prevention research and education. Through research, ICLR is working to strengthen the foundation for effective action to achieve its mission to reduce the loss of life, injuries and property damage due to natural hazards.

Building disaster research capacity

ICLR is an independent, not-for-profit research institute founded by the Canadian insurance industry. It is affiliated with The University of Western Ontario. Institute research networks are building the capacity of the research community. ICLR staff and research associates are internationally renown for their expertise in wind and seismic engineering, atmospheric science, risk perception, hydrology, economics, geography, health sciences and public policy.

Many losses are preventable

Worldwide, natural disasters killed more than 650,000 people during the 1990s, and caused more than C\$1 trillion in damage. Disaster damage payments by insurance companies, governments and international aid organizations has been doubling every five to seven years since the 1950s, an alarming international trend. Perhaps the greatest tragedy is that many disaster losses are preventable.

Community and individual safety

Nature's extreme events are remarkable forces. They can be relentless and unforgiving, but they do not need to cause disasters. Hazards deserve respect. They demand that individuals prepare, and that communities invest in resilience. Resilient communities and knowledgeable individuals can best prevent hazards from becoming disasters, but are often not doing so.



building resilient communities

Be prepared.
Disasters can strike at any time.

Visit www.ICLR.org
and learn how to protect your family
and home.

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Disaster prevention research saves lives
Disaster prevention research protects property

Earthquakes



Protect yourself
and
your home

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