

# NOTES

## SAFETY AND SURVIVAL IN AN EARTHQUAKE

*(Extracted below are excerpts from a pamphlet issued by the U. S. Geological Survey. It is advisable that a similar document with emphasis on local conditions be prepared for wide circulation among the educational institutions in this country.—Ed.)*

### What You Can Do Before an Earthquake Occurs

You can take many actions to reduce the dangers from earthquakes to yourself, your family, and others.

#### As a citizen

- \* Support local safe building codes that provide for efficient inspection and firm enforcement in those areas where damaging earthquakes can be expected. Modern engineering can build structures that resist earthquake damage very much better than older masonry buildings. If no such regulations or codes exist in your community, you should encourage their enactment.
- \* Support school building programs that provide for the strengthening of old, weak school buildings or their replacement with earthquake-resistive structures on the ground which is reasonably safe from failure during a strong earthquake.
- \* Support community efforts to replace old weak buildings and to ensure that loose objects on building exteriors (for example, cornices) are either removed or securely fastened.
- \* Organize and support programs to prepare for future earthquakes. Schools and Civic Organizations can provide a very beneficial community service by holding earthquake drills and training sessions to prepare citizens to react properly when earthquakes occur.
- \* Support research to learn more about the earthquake problem and to supply information needed to plan wisely the siting, design, and construction of man-made structures.

#### As a homeowner or tenant

- \* Check your home for earthquake hazards. Bolt down or provide other strong support for water heaters and other gas appliances because fire damage can result from broken gaslines and appliance connections. Use flexible connections wherever possible. Place large and heavy objects on lower shelves. Securely fasten shelves to walls. Brace or anchor high or topheavy objects.
- \* Follow building codes to minimize earthquake hazards in new construction and alterations. Sites for construction should be selected and engineered to reduce the hazard of damage from an earthquake.

**As a parent or head of a family**

- \* Hold occasional home earthquake drills to provide your family with the knowledge of how to avoid injury and panic during an earthquake.
- \* Teach responsible members of your family how to turn off electricity, gas and water at main switches and valves. Check with your local utilities office for instructions.
- \* Provide for responsible members of your family to receive basic first aid instruction because medical facilities may be overloaded immediately after a severe earthquake. Call your local Red Cross or civil defense director for information about classes.
- \* Keep a flashlight and a battery-powered transistor radio (and television) in the home, ready for use at all times.
- \* Keep immunizations up to date for all family members.
- \* Conduct family discussions about earthquakes and other possible disasters. Do not promote frightening accounts about disasters.

**As an individual**

- \* Think about what you should do if an earthquake strikes when you are at home ; driving your car ; at work ; in a store, a public hall, a theater, or a stadium ; visiting friends ; or involved in any of your other regular activities. Your planning may enable you to act calmly and constructively in an emergency.

**What You Can Do During an Earthquake**

Above all remain calm, try to reassure others, and think through the consequences of any action you may take.

- \* If indoors, watch for falling plaster, bricks, light fixtures, and other objects. Watch for high book cases, china cabinets, shelves, and other furniture which might slide or topple. Stay away from windows, mirrors, and chimneys. If in danger, get under a table, desk, or bed ; in a corner away from windows ; or in a strong doorway. Encourage others to follow your example. Usually, it is best not to run outside.
- \* If in a high-rise office building, get under a desk. Do not dash for exits, since stairways may be broken and jammed with people. Power for elevators may fail.
- \* If in a crowded store, do not rush for a doorway since hundreds may have the same idea. If you must leave the building, choose your exit as carefully as possible.
- \* If outside, avoid high buildings, walls, power poles, and other objects that could fall. Do not run through streets. If possible, move to an open area away from all hazards. If in an automobile, stop in the safest place available, preferably an open area.

## What You Can Do After an Earthquake

Check for injuries to your family, to those around you, and to others in your neighbourhood. Do not attempt to move seriously injured persons unless they are in immediate danger of further injury.

- \* Check for fires or fire hazards.
- \* Wear shoes in all areas near debris or broken glass.
- \* Check utility lines and appliances for damage. If gas leaks exist, shut off the main gas valve. Shut off electrical power if there is damage to your house wiring. Report damage to the appropriate utility companies and follow their instructions. Do not use matches, lighters, or open-flame appliances until you are sure that there are no gas leaks. Do not operate electrical switches or appliances if gas leaks are suspected.
- \* Avoid downed powerlines or objects touched by the downed wires.
- \* Immediately clean up spilled medicines, drugs, and other potentially harmful materials.
- \* Obtain emergency water from water heaters, toilet tanks, melted ice cubes, and canned vegetables if the water is off. Permitting continued flushing of toilets.
- \* Do not eat or drink anything from open containers near shattered glass. Liquids may be strained through a clean handkerchief or cloth if danger of glass contamination exists.
- \* Check your freezer and plan meals to use foods that will spoil quickly if the power is shut off.
- \* Use outdoor charcoal boilers for emergency cooking.
- \* Do not use your telephone except for genuine emergency calls. Turn on your radio and television for damage reports and information.
- \* Check your chimney over its entire length for cracks and damage, particularly in the attic and at the roofing. Unnoticed damage could lead to a fire. The initial check should be made from a distance. Approach chimneys with caution.
- \* Check closets and storage shelf areas. Open closet and cupboard doors carefully and watch for objects falling from shelves.
- \* Do not spread rumors. They often do great harm after disasters.
- \* Do not go sightseeing, particularly in beach and waterfront areas where seismic sea waves may strike. Keep the streets clear for passage of emergency vehicles.
- \* Be prepared for additional earthquake shocks called 'aftershocks.' Although most of these are smaller than the main shock, some may be large enough to cause additional damage.
- \* Respond to requests for help from police, fire fighting, civil defence, and relief organizations, but do not go into damaged areas unless your help has been requested. Cooperate fully with public-safety officials. In some areas, you may be arrested for getting in the way of disaster operations.

There are no rules that can eliminate all earthquake danger. However, damage and injury can be greatly reduced by following the simple rules contained in this article.

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