

Are you prepared for disasters?

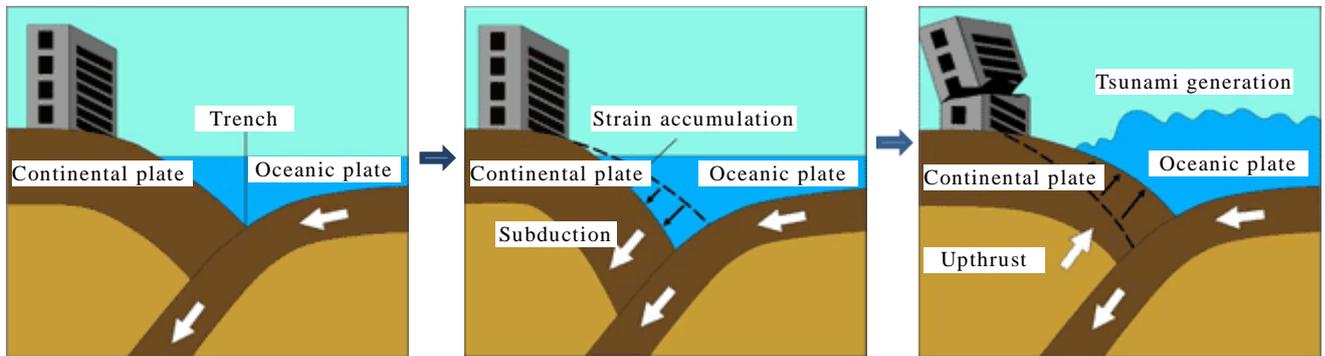


1. Earthquakes

Earthquakes can't be prevented, but the damage they cause can be minimized with precautionary measures and mental preparation.

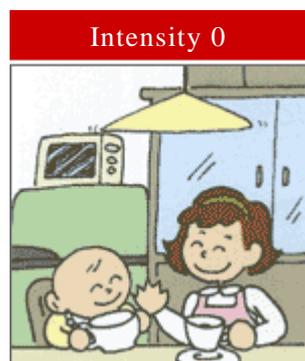
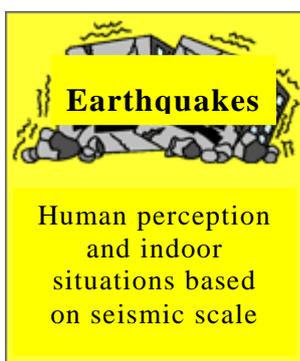
Why do earthquakes occur?

The earth's surface is covered with a dozen or so huge slabs of rock called tectonic plates, which move several centimeters a year in different directions. At the boundaries, these plates come into contact and slide past one another, or one plate may be driven beneath another. Around Japan, oceanic plates subduct below continental plates. At boundaries like these, large earthquakes occur. The accumulation of strain energy caused by subduction also affects interior parts of continental plates, causing earthquakes in shallow underground areas.

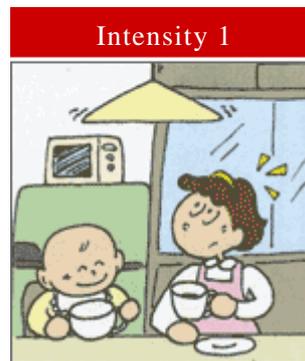


Human perception of seismic intensity

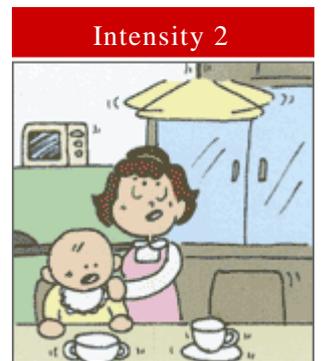
Seismic intensity values describe the scale of ground motion, and are determined using data from seismic intensity meters installed nationwide. The Japan Meteorological Agency seismic intensity scale runs from 0 to 7 with two divisions for levels 5 and 6 (5 lower/upper and 6 lower/upper) due to the wide range of damage they can cause. Accordingly, there are 10 levels of intensity on the scale.



Perception:
Imperceptible to people.



Perception:
Felt slightly by some people in buildings.



Perception:
Felt by many people in buildings. Sleeping people may be awoken.

Indoor situation:
Light fittings and other hanging objects swing slightly.

Intensity 3



Perception:
Felt by most people in buildings. Some people may be startled.

Indoor situation:
Light fittings and other hanging objects swing slightly.

Intensity 4



Perception:
Most people are startled. Some may try to shelter in a safe place. Most sleeping people are awoken.

Indoor situation:
Hanging objects swing considerably and dishes in cupboards rattle. Unstable ornaments may fall.

Intensity 5 lower



Perception:
Many people try to shelter in a safe place. Some may have difficulty moving.

Indoor situation:
Hanging objects swing violently. Dishes in cupboards and items on bookshelves may fall. Many unstable ornaments fall. Unsecured furniture may move.

Intensity 5 upper



Perception:
Many people are frightened and have difficulty moving.

Indoor situation:
Dishes in cupboards and items on bookshelves fall. TVs may fall from their stands, and heavy furniture such as chests of drawers may topple over. Frame deformation may make it impossible to open doors. Some doors may become detached from their frames.

Intensity 6 lower



Perception:
It is difficult to remain standing.

Indoor situation:
Unsecured heavy furniture moves or topples over. Doors become stuck and do not open.

Intensity 6 upper



Perception:
It is impossible to remain standing or move without crawling.

Indoor situation:
Most unsecured heavy furniture moves or topples over. Some doors may become separated from their frames and be thrown through the air.

Intensity 7



Perception:
People have difficulty moving as intended.

Indoor situation:
Most furniture moves and topples over, or may even be thrown through the air.

Preparations for earthquakes

Securement of indoor safety



- Fasten furniture to walls or ceilings to prevent it from falling over. Keep heavy objects in low places.
- Keep sleeping areas, porches and other spaces clear of items or objects that could fall over.
- Place shatterproof film on glass surfaces.
- Keep a flashlight and slippers at hand to aid safe movement.

Stocks of essentials (emergency kit)

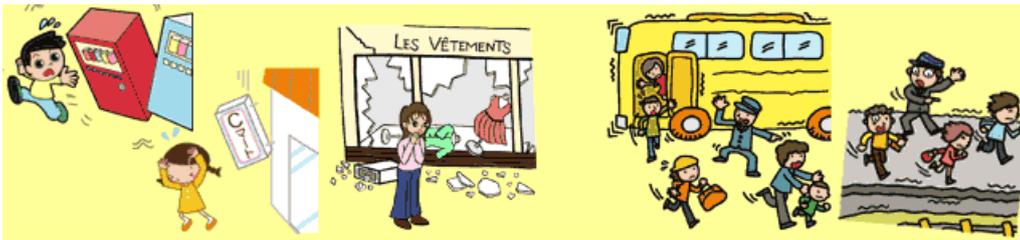


- Water: Each person needs three liters of water per day. Make sure there is enough for you and your family.
- Food: Store at least three days worth of non-perishable food (e.g., canned/pouched rice or processed quick-cooking rice, canned/bottled items).
- Camping stove and fuel
- Flashlight: Each person should have a flashlight in case of blackouts.
- Radio for accurate information
- Valuables, first-aid medicine, underwear, rainwear and other necessities. These should be placed in an emergency kit bag and kept in an easily retrievable place.

When an earthquake strikes

Indoors

- If you feel a tremor, don't rush outside. Ensure your own safety first: protect your head with a cushion or similar, and shelter under a sturdy desk or table.
- Turn off gas, stoves and similar.
- In mid-to-high-rise buildings (e.g., condominiums), open the entrance door and/or the door to the evacuation passage to secure an escape route.



Outdoors

- Move away from walls, vending machines and other things that may fall over. Protect your head from falling signboards and other objects.
- Move away from buildings to avoid broken glass from windows in shops and other buildings, falling signboards/walls, and the like.
- On buses and trains, follow the instructions of the staff. If you are at a station or on a train when an earthquake strikes, do not go near the railway tracks.
- In department stores, supermarkets, hotels, underground shopping malls and other public/commercial areas with many people, do not rush toward emergency exits/stairs, and follow the instructions of the staff.



While driving

- If you feel a tremor while driving, pull over to the left and stop. Get information from your car radio and follow the directions given by the authorities.