

The Disaster Prevention Manual for International Students

University of Yamanashi

This manual is made for international students living in dormitories and apartments to protect themselves from disasters. Keep the following information in mind for emergency responses.

I Earthquake

1 What is earthquake?

An earthquake is a phenomenon of a sudden shaking of the Earth's surface that often causes a lot of damage. There may be many damages from an earthquake, such as falling down of bookshelves, window glass broken, building collapse.



In Japan we use “Shindo” to measure the force of an earthquake. The levels of Shindo are as follows.

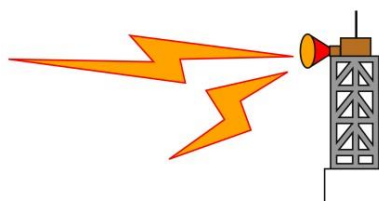
Levels of Shindo

Shindo 3	Most people can feel shaking inside buildings.
Shindo 4	People may be woken up by the shaking.
Shindo 5-low	Many people become scared and need to grab onto something.
Shindo 5-high	Most people cannot walk or act without holding onto something.
Shindo 6-low	It becomes extremely difficult to stand.
Shindo 6-high	It is almost impossible to move without crawling.
Shindo 7	The force is so strong that you cannot move.

2 The Earthquake Early Warning

The Earthquake Early Warning system provides advance announcement of the estimated seismic intensities and expected arrival time of principal motion. These estimations are based on prompt analysis of the focus and magnitude of the earthquake using wave form data observed by seismographs near the epicenter.

The Earthquake Early Warning is aimed at mitigating earthquake-related damage by allowing countermeasures such as promptly slowing down trains, controlling elevators to avoid danger and enabling people to quickly protect themselves in various environments such as factories, offices, houses and near cliffs.



3 Response to an earthquake

In March 2011 Great East Japan Earthquake caused the following damages.

- ① Power outage
- ② Mobile phone interruption
- ③ Water outage
- ④ Gas explosion
- ⑤ Shortage of water, food, kerosene, gasoline, etc.

The Initial response to an earthquake

★ Earthquake occurrence

- Protect yourself (Get under a desk or table to protect your head)
- Turn off a kitchen stove
- Get ready to evacuate (open the door/entrance)



★ 1-2 minutes after the earthquake

- If a fire starts, try to put off the fire with a fire extinguisher.

★ 3 minutes after the earthquake

- Be careful with aftershock and leave the building if there is a risk of collapse.

★ Actions after you secure yourself

- Keep water into buckets and bathtub before water outage
- Collecting information related to the earthquake.



★ Evacuation ← Shindo 6-low

- Turn off the breaker and the gas valve.
- Get your emergency bag, if you have a time.
- Reply to the emergency confirmation email, when you receive it from the University.

★ Return from the evacuation

- After confirming no gas leakage, turn on the breaker.
- Turn on the gas valve according to the gas manual.



4 Recommended Emergency kit

Mask	Flashlight	Headgear, hat, cap	Gloves
Mobile phone	Mobile phone charger	Portable radio	Battery
Money	Bankbook, Credit card, Stamp	Blanket, Sleeping bag	Toilet paper
Plastic bag	Disposable warmer	Lighter, Match	Writing utensils
Foods	Water	Sanitary pad for women	First aid kit, Household medicine
Sneakers	Rainwear	Clothes	Towel

Other useful items:

- Emergency radio with built-in manual power generator.
- Head lamp, Gummed tape, Ground sheet



II Fire

1 Initial response to fire

According to the fire situation, the response differs as below.

★Fire outbreak, report to others

- ① If you see a fire, shout "Fire!" to alert others.
- ② If there is a fire alarm around, use it.
- ③ To call 911 the Fire department.



★Initial fire extinguishing

- ④ Use a fire extinguisher, water, and blanket, etc. within 3 minutes from the outbreak.

★Evacuation

- ⑤ Escape from the building the flames reach the ceiling.
 - Run away quickly empty-handed and do not return.
 - Do not use an elevator.
 - Lower your body while escaping in smoke.
 - Cover your face with a wet towel or handkerchief.
 - Close doors and windows to prevent the spread of fire.



2 Fire prevention

- (1) Do not leave the kitchen when you use gas stove.
- (2) Do not smoke in bed and do not throw a cigarette away.
- (3) Do not put anything burnable around the rooms and buildings.
- (4) Use electric devices properly and avoid overloaded sockets.
- (5) Keep the burnable away from a stove (curtain, laundry)



How to use a fire extinguisher

- ① Pull out the stopper
- ② Direct a hose to the fire
- ③ Squeeze the levers for shooting the fire



◆ Important points

Get to windward of the fire. Shoot chemicals to the burning object from a low angle with shaking the hose side to side.