

【国際交流 PR アソシエイトからの発信★】Preparing for Disasters – General Advice

災害は突然起こるものです。そのとき、どのように対処すればよいのかを事前に知っておくことが大切です。留学生の Xu さんが、日本に住む外国人の方にも知っていただきたい防災対策について調べてくれました。ぜひご覧ください！

(言語: 英語・中国語)

Disasters strike suddenly. It is important to know in advance how to respond when they occur. Xu, an international student, has researched disaster preparedness measures that she hopes will be helpful for foreigners living in Japan. Please take a look!

Preparing for Disasters – General Advice

Japan is a country prone to natural disasters. Earthquakes, typhoons, blizzards, and tsunamis frequently strike this island nation in the North Pacific. Therefore, it is extremely important to know how to protect yourself from disasters. Below we will introduce some practical tips to protect yourself from disasters. Pay attention to the changing weather.

Be vigilant

You should always be prepared for a natural disaster. Study precaution advice on natural disasters in advance, and plan for contingency measures in case of a natural disaster or emergency.

Pay attention to the changing weather

Nature is unpredictable and global warming has increased the probability of extreme weather events. Since many natural disasters are caused by extreme weather, you should always pay attention to weather forecasts to learn about the latest weather information, especially when you are outdoors so that you will be able to respond to the changeable weather in a timely manner.

Stay calm and seek help

When a natural disaster or an emergency occurs, stay calm. Choose the most appropriate escape method. If necessary, you should seek help from the police or relevant authorities as soon as possible. If you are in a foreign place on a pleasure or business trip, you should obtain local emergency telephone numbers in advance to meet any urgent need.

Prepare emergency survival kit

Whether you are staying at home, going on a pleasure or business trip, you should prepare an emergency survival kit to include a mobile telephone (or satellite telephone) and the charger, a portable radio, a flashlight and batteries, a whistle or sounding device, first-aid supplies, regular drugs, ready-to-eat food and drinking water sufficient for a 3-day supply to help you survive during an evacuation.



Fig1 Emergency kit

Rainstorm and Flash Flood

When a rainstorm occurs, water level of brooks, man-made or natural channels, stormwater channels or drainage ways may rise rapidly within a very short period of time, resulting in river overflow that may intensify to a flash flood causing casualties and losses.

Precautions

✔ During a rainstorm, you should stay at home or move to safe areas. Those who outdoors should go indoors as soon as possible.

✔ Stay away from the waterways and move to high grounds quickly. Do not seek shelter from the

rain under a bridge or attempt to cross a bridge which has been flooded.

✔ Keep away from stormwater drainage facilities. Torrential flow of turbid water with mud and sand are signs of a flash flood. Keep away from the waterway immediately.

✔ If you unfortunately fall into a rapid flowing river, you should firmly grasp onto or embrace a boulder, tree trunk or vine, etc. along the riverbanks and try to crawl back to land and wait for rescue.

✘ Do not walk along a brook or waterway especially during rainy season or after a rainstorm.

✘ Never walk into a stormwater culvert.

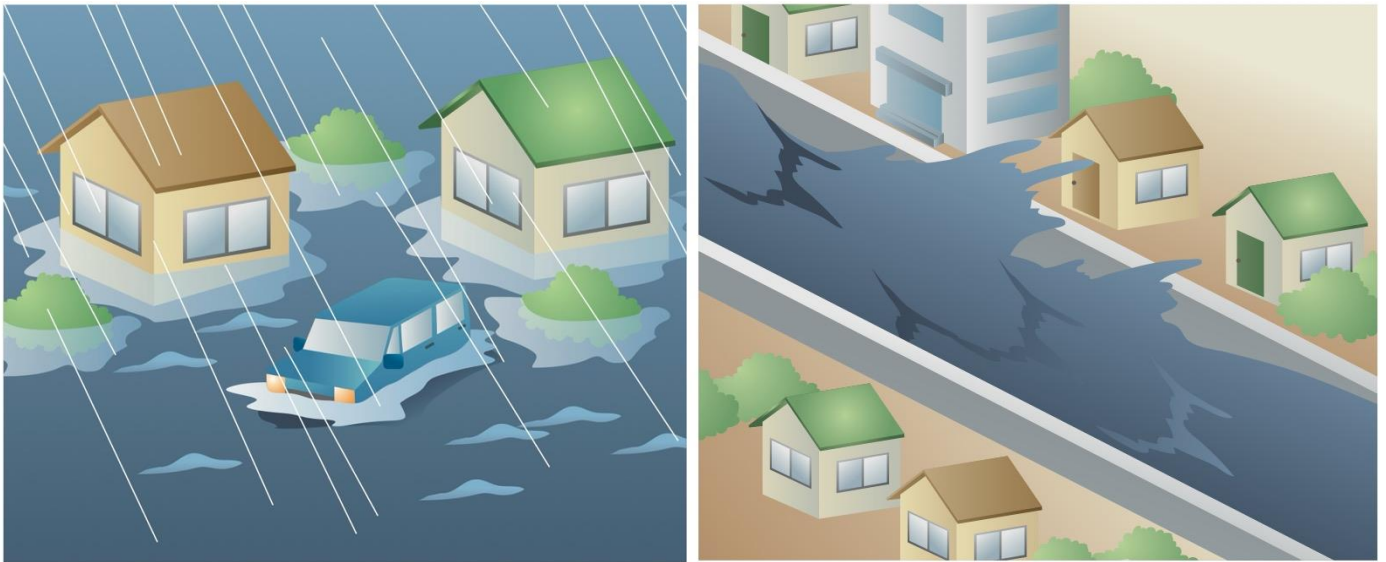


Fig.2 Rainstorm and Flash Flood



Fig.3 The disaster warning information received by the mobile phone.

Thunderstorm and Thunderbolt

A thunderstorm is a common weather phenomenon characterized by lightning and thunder. A thunderbolt is an electric discharge phenomenon that occurs in thunderclouds characterized by thunder, flash and lightning.

Precautions

✔ On thunder stormy days, stay indoors. Keep away from doors and windows. Avoid as much as possible using telephone, mobile telephone or plugged electric appliances.

✔ Stop swimming and any other aquatic activities.

✔ To avoid being struck by a thunderbolt, do not use an umbrella, raise a rod or use a mobile telephone in an outdoor open space.

✘ Stay away from antennae, metal faucets, metal pipes, wire meshes or any other electrical charge conductors.

✘ Do not stay in an outdoor open space. Do not seek shelter from the rain under an isolated tree. Do not stay near a river, a brook or a low-lying area.

Typhoon or Hurricane

A typhoon or hurricane usually affects coastal areas and can be very destructive as it may generate a heavy rainstorm and strong winds, causing huge waves and a flood.



Fig.4 Typhoon or Hurricane

Precautions

- ✔ Listen to the radio and follow TV reports on typhoons or hurricanes.
- ✔ Keep away from coasts, beaches, low-lying areas and brook channels. Stop all aquatic activities.
- ✔ Stay indoors and keep away from glass doors and windows.
- ✔ Quickly evacuate to a safe area from any building that is not sturdy, such as a wooden hut or a mobile house.
- ✔ If you are outdoors, quickly seek shelter in the lower level of a sturdy building.
- ✔ If you are in a car, leave the car immediately. Keep away from trees, electric receptacles and brook channels. Seek for a safe shelter.

✘ Do not seek shelter in a basement. You can be trapped by flood.



Fig.5 Evacuation area sign

Earthquake

An earthquake can hardly be predicted accurately. A strong earthquake is frequently accompanied by number of aftershocks. In addition to casualties and collapsed houses, an earthquake can also trigger a fire, gas explosion, landslide, tsunami, ground crack, epidemic or other disasters causing greater damages.



Fig.6 Earthquake

Precautions

There are usually only a few seconds for escape after an earthquake.

✔ If you encounter an earthquake, select a protection method quickly depending on your situation:

✔ If you are indoors and far from an exit, you should hide in a kitchen, bathroom or any place with a small space and a firm structure. You can also hide beside a piece of large and firm furniture. Protect your head with a quilt or thick clothes, etc. **Never jump from the building, which is a main cause of casualties from an earthquake.**

✔ If you are outdoors, you should try to escape to an open space, and keep away from tall buildings, big trees, flyovers, elevated highways, electric poles, etc. to avoid injury. You should not cross a bridge; otherwise, you might be injured if the bridge collapses.

✔ When you are buried under the rubbles and cannot get out, never shout loudly; instead, you should seek help by knocking or whistling in order to preserve your physical strength while waiting for rescue. After an earthquake, beware of any electrical current from broken lines or gas leaks to avoid an electric shock or fire.

✔ When you are assisting in a rescue, you are advised to rescue the lightly injured near to the surface of debris first in order to expand the rescue team. However, sharp tools should not be used for excavation in order not to injure those being trapped.

✘ Do not re-enter the building immediately because an aftershock may occur and the building may collapse.

Tsunami

A tsunami is usually caused by an underwater earthquake or volcanic eruption. An intense underwater earthquake may affect coastal areas that are tens to thousands of kilometers away, and can result in vast casualties and property losses. Therefore, if people living along coastal areas feel an earthquake, they should prepare for a tsunami to follow.



Fig.7 Tsunami

Precautions

- ✔ Listen to radio and follow TV reports on tsunami.
- ✔ Pay attention to tsunami alerts.
- ✔ After an earthquake, keep away from coasts, beaches and coastal low-lying areas. Stop all aquatic activities. Stay on high ground or an upper floor of a firm building for temporary shelter.



Fig.8 Tsunami Evacuation Area Sign

Volcanic Eruption

Volcanic eruptions happen when lava and gas are discharged from a volcanic vent on the earth's surface. Volcanic eruptions can hurl hot lava and rocks. Lava flood, airborne ash and noxious fumes can travel 160 kilometers or more.

Precautions

✔ Pay attention to volcanic eruption alert / warning (if any), and evacuate in advance. ✔ Prepare a pair of goggles and a disposable breathing mask.

During volcanic eruptions

✔ Stay inside and close all windows, doors or chimneys, turn off the stove and furnace. ✘ Avoid areas downwind of the volcano and get to high grounds.

✘ Avoid driving when ash is falling heavily as driving will stir up more ash that may congest traffic.

✘ Stay away from falling volcanic ash and cover your mouth and nose.

After volcanic eruptions

- ✔ Clear the roof with fallen ash as it is very heavy and can cause buildings to collapse.

Snowstorm

In a snowing area, a snowstorm may cause frostbite or death to humans and animals, house collapse and other serious damages. A person suffering from frostbite will probably need amputation to survive.

Precautions

- ✔ When going to a snow-covered site, be sure to know the geographic location of outdoor activity in advance (e.g., roads, rivers).

- ✔ Wear clothes that are sufficient to keep you warm, and avoid walking alone.

- ✔ Wear snow goggles to protect your eyes from ultraviolet radiation. If you don't have dark sunglasses, you may use a strip of cloth for protection. Put a slit or a cross on the eye position on the cloth. Bind the cloth on your head to protect your eye.

- ✔ Once you encounter a snowstorm in an open space, be sure to hide in a lee. You can use colorful clothes or a reflecting object to give an SOS signal in the daytime. At night, you should reduce activity to avoid exhaustion and physical strength; but do not fall asleep.

- ✔ In case of frostbite, change into dry clothes immediately. Never rub the affected part. Keep it warm with down clothing or a thick coat and seek medical attention as soon as possible.

NOTE: Illustrations 5, 7, and 8 in this article are from the Japan Sign Industry Association at

<http://www.signs-nsa.jp>.

防灾小锦囊

日本是个自然灾害频发的国家，地震、台风、暴雪、海啸经常袭击这个北太平洋上的岛国。因此了解在灾害中的防护方式是极为必要的。以下我们将介绍一些在灾害中保护您自身安全的实用小贴士。

保持警惕

您应该时刻做好应对自然灾害的准备。提前学习自然灾害的预防建议，并制定应对自然灾害或紧急情况的应急措施。

注意天气变化

大自然变化莫测，全球气候变暖也增加了极端天气事件发生的概率。由于许多自然灾害都是由极端天气引起的，因此应经常关注天气预报，了解最新的天气信息，尤其是在户外时，这样才能及时应对多变的天气。

保持冷静，寻求帮助

当自然灾害或紧急情况发生时，保持冷静。选择最合适的逃生方式。如有必要，应尽快向警方或相关部门寻求帮助。如果您在国外旅游或出差，应提前获取当地的紧急电话号码，以应对任何紧急需要。

准备应急生存包

无论您是待在家里、外出游玩还是出差，您都应该准备一个应急生存包，其中包括移动电话（或卫星电话）及其充电器、便携式收音机、手电筒及其电池、哨子或发声装置、急救用品、常规药品、即食食品和足够三天使用的饮用水，以帮助您在疏散期间生存。



图 1 应急包

暴雨和山洪

暴雨来临时，溪流、人工或天然渠道、雨水渠或排水道的水位可能在极短的时间内迅速上涨，导致河水泛滥，并可能加剧山洪，造成人员伤亡和损失。



图 2 暴雨和山洪

注意事项

- ✅ 暴雨时，应留在家中或转移到安全的地方，在户外者应尽快进入室内。
- ✅ 远离水道，迅速转移到高处。不要在桥下避雨或试图穿过已被水淹没的桥梁。
- ✅ 远离雨水排水设施。浑浊的泥沙湍急的水流是山洪暴发的征兆。应立即远离水道。
- ✅ 如果不幸落入湍急的河流，应紧紧抓住或抱住河岸的巨石、树干或藤蔓等，并尝试爬回陆地等待救援。
- ❌ 不要沿着小溪或水道行走，尤其是在雨季或暴雨后。
- ❌ 切勿走进雨水涵洞。



图 3 手机接收到的灾害预警信息

雷暴和雷电

雷暴是一种常见的天气现象，其特点是闪电和雷声。雷电是雷雨云中发生的放电现象，其特点是雷声、闪光和闪电。

注意事项

- ✅ 雷雨天，请待在室内。远离门窗。尽量避免使用电话、移动电话或带电电器。
- ✅ 停止游泳和任何其他水上活动。
- ✅ 为避免被雷击中，请勿在室外空旷的地方使用雨伞、举起杆子或使用移动电话。
- ❌ 远离天线、金属水龙头、金属管、金属网或任何其他带电导体。
- ❌ 不要待在室外空旷的地方。不要在孤立的树下避雨。不要待在河流、小溪或低洼地区附近。

台风或飓风

台风或飓风通常会影响沿海地区，其破坏力极强，可能引发暴雨和强风，造成巨浪和洪水。



图 4 台风或飓风

注意事项

- ✔ 收听广播并关注电视上有关台风或飓风的报道。
- ✔ 远离海岸、海滩、低洼地区和溪流水道。停止一切水上活动。
- ✔ 待在室内，远离玻璃门窗。
- ✔ 迅速从任何不坚固的建筑物（如木屋或移动房屋）撤离到安全区域。
- ✔ 如果您在户外，请迅速在坚固建筑物的较低楼层寻求庇护。
- ✔ 如果您在车内，请立即离开车。远离树木、电源插座和溪流水道。寻找安全的庇护所。
- ✘ 不要在地下室寻求庇护。您可能会被洪水困住。



图 5 洪水避难标识

地震

地震很难准确预测，强烈的地震往往伴随多次余震，地震除了造成人员伤亡、房屋倒塌外，还可能引发火灾、瓦斯爆炸、山体滑坡、海啸、地壳破裂、流行病等灾害，造成更大的损失。



图 6 地震

注意事项

地震发生后，通常只有几秒钟的逃生时间。

✔遇到地震，应根据情况迅速选择保护方法：

✔在室内，远离出口，应躲在厨房、卫生间等空间小、结构牢固的地方，也可躲在大型坚固的家具旁，用被子、厚衣服等保护头部。切勿跳楼，这是地震造成人员伤亡的主要原因。

✔在室外，应尽量逃到空旷的地方，远离高楼、大树、立交桥、高架路、电线杆等，以免受伤。不要过桥，否则一旦桥梁倒塌，可能会受伤。

✔被埋在废墟下无法脱身时，切勿大声呼喊，而应通过敲门、吹口哨等方式寻求帮助，以保存体力等待救援。地震发生后，请注意断线或煤气泄漏产生的电流，以免触电或火灾。

✔协助救援时，建议先救出靠近废墟表面的轻伤者，以扩大救援队伍。但挖掘时不要使用尖锐工具，以免伤害被困人员。

✘不要立即重新进入建筑物，因为可能会发生余震，建筑物可能会倒塌。

海啸

海啸通常是由海底地震或火山爆发引起的。强烈的海底地震可能影响数十至数千公里外的沿海地区，造成巨大的人员伤亡和财产损失。因此，如果沿海地区的人们感觉到地震，就应该做好应对海啸的准备。



图 7 海啸

注意事项

- ✔ 收听广播和电视上有关海啸的报道。
- ✔ 注意海啸警报。
- ✔ 地震发生后，远离海岸、海滩和沿海低洼地区。停止一切水上活动。留在高地或坚固建筑物的上层作为临时避难所。



图 8 海啸避难场所标识

火山爆发

当熔岩和气体从地表火山口喷出时，就会发生火山爆发。火山爆发会喷出炽热的熔岩和岩石。熔岩洪流、空气中的火山灰和有毒烟雾可以传播 160 公里或更远。

注意事项

✅ 注意火山爆发警报/警告（如果有），并提前撤离。✅ 准备一副护目镜和一次性呼吸面罩。

火山爆发期间

✅ 留在室内并关闭所有窗户、门或烟囱，关掉炉子和火炉。❌ 避开火山下风处并前往高地。

❌ 避免在火山灰大量落下时开车，因为开车会激起更多火山灰，可能导致交通拥堵。

❌ 远离落下的火山灰并捂住嘴和鼻子。

火山爆发后

✅ 清除屋顶上的落灰，因为灰烬很重，可能会导致建筑物倒塌。

暴风雪

在下雪地区，暴风雪可能导致人畜冻伤或死亡、房屋倒塌等严重灾害。冻伤者可能需要截肢才能存活。

注意事项

✅ 前往积雪覆盖的场所时，务必提前了解户外活动的地理位置（例如道路、河流）。

✅ 穿着足够保暖的衣服，避免独自行走。

✅ 戴上雪镜，保护眼睛免受紫外线照射。如果您没有墨镜，可以使用布条进行保护。在布条上的眼睛位置缝上一条缝或十字。将布条绑在头上，保护眼睛。

✅ 一旦在空旷的地方遇到暴风雪，一定要躲在背风处。白天，您可以使用色彩鲜艳的衣服

或反光物体发出 SOS 信号。晚上，您应该减少活动，避免疲劳和体力下降；但不要睡着。

一旦冻伤，立即换上干衣服。切勿揉搓患处。用羽绒服或厚外套保暖，并尽快就医。

¹ 文中所载插图 5、7、8 图片来源为 www.signs-nsa.jp 日本標識工業会