# Chapter 10 Emergencies and **Disasters**



# **Emergency call**

# Medical emergencies, injuries, fires, etc. (119)

Dial 119 in the case of a medical emergency, injury, or fire.

# In case of medical emergency or injury

- Dial 119. An operator will ask you "is it a fire or a medical emergency?" so tell them "it's a medical emergency."
- Tell the operator a landmark close-by or the exact location where you want an ambulance to be sent.
- Inform the operator of the symptoms and the age of the person who requires immediate assistance.
- Give the operator your name and telephone number.

#### You can check how to call an ambulance in the following link in various languages:

https://www.fdma.go.jp/html/life/gaikokujin\_kyukyusya\_guide/index.html



### In case of fire

- Dial 119. An operator will ask you "is it a fire or a medical emergency?" so tell them "it's a fire."
- Tell the operator the location of the fire.
- Give the operator your name and telephone number.

# 1-2 Traffic accidents and crimes etc. (110)

- If you get involved in a traffic accident or a criminal damage etc., and need immediate police assistance, call 110 for help.
- When you dial 110, an operator will ask you most likely the following questions, so stay calm and answer with as much detail as possible.
  - i. When, where and what has happened
  - ii. Your name and telephone number etc.
  - iii. Description of the other person in the accident or the criminal(s), such as gender, number of people, age and clothing etc.
  - iv, If there is anyone injured
- If you cannot make a phone call by yourself, ask someone around you to help.







# **Natural Disasters**



# 2-1

# **Tropical cyclones and intense heavy rain**

- When seasons change, warm air meets cold air, forming a boundary (front). A front staying over Japan may often result in heavy rainfall.
- When a tropical cyclone or a low pressure system with fronts passes Japan, it leads to torrential rain over a wide area.
- When convective clouds develop into a towering cumulus (a cumulonimbus) repeatedly in the same area, it causes heavy localized rainfall (intensive heavy rainfall).
- Be careful as these rainfalls may cause sediment disasters and floods which devastate the area.

# (1) Flooding of rivers

- After heavy rain, rivers may be flooded, inundate buildings and wash people away.
- To protect your own life, take the following actions:

# **Prepare for yourself**

It is important to check regularly the areas which are most likely to be flooded, the locations of evacuation shelters, and the safe routes to the evacuation shelters from your house and other facilities, , with a hazard map or by other methods.



### **Hazard Map**

This is a map that shows the areas that are most likely to be affected by natural disasters.



#### For more details, visit the website below:

https://disaportal.gsi.go.jp/



### In case of a heavy rain

- i. If you feel you are in danger, according to disaster prevention information issued by Japan Meteorological Agency (JMA) or other agencies, you should start to evacuate in your own decision.
- ii. If evacuation instructions have been issued by your local government, evacuate from dangerous places and proceed to a safer place.
- iii. See "3 Evacuation" for how to evacuate.

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# (2) Sediment disaster

Sediment disasters occur when mountain slopes or cliffs collapse due to heavy rain or earthquakes, or when soil, stones, and trees are washed away from river areas during flooding. Such disasters can destroy or bury buildings or block roads. Here is how to protect yourself from this disaster:

# **Prepare for yourself**

It is important to check regularly which areas are likely to suffer a Sediment disaster, an evacuation shelter, and a safe route from your house, etc. to the evacuation shelter, with a hazard map or by other methods.

## In case of a heavy rain

- i. If you feel you are in danger according to weather information for disaster prevention issued by the JMA or other agencies, you can start to evacuate by judging for yourself.
  - . If evacuation instructions have been issued by the local government, evacuate from dangerous places and proceed to a safer place.
- iii. See "3 Evacuation" for how to evacuate.

# 2-2 Earthquakes

- Japan lies along what is called the Ring of Fire, or the Circum-Pacific Belt, and several tectonic plates mash and collide. This feature makes Japan one of the most earthquake-prone regions in the world.
- When an earthquake occurs, it is vital to protect yourself first, and then stay safe by cooperating with your community.
- Here are actions to take regarding earthquakes that you must always keep in mind:

# **Prepare for yourself**

- Create a family plan about where to evacuate when a large earthquake occurs.
- ii. Take part in an emergency drill of your region, check and understand evacuation plans.
- ii. Prepare a first aid kit and enough food and water for at least three days (for seven days if possible).
- iv. Take precautions to prevent furniture, etc. from falling over. Arrange furniture in a room taking such risks into consideration.



### Magnitude and Seismic Intensity

- Magnitude measures the energy released at the source of the earthquake. When the magnitude value increases by 1, the energy increases about 32 times.
- Intensity measures the strength of shaking produced by an earthquake at a certain location. JMA divides the intensity into 10 grades (0, 1, 2, 3, 4, 5lower, 5upper, 6lower, 6upper, and 7).
- You can find this information on TV, radio, and online.

### When an earthquake occurs

When an earthquake occurs, keep calm. What to do depends on where you are. Please keep in mind the following:

### i. Keep Calm

When you are in your house or building

Protect your head from falling or moving objects, get under a sturdy table or other furniture, and stay there until the shaking stops.

When you are outside

Cover your head with a bag, etc. from falling signboards, walls or window glass from buildings nearby and evacuate to a safe place.

While you are driving a car

If you feel shaking, stay calm, pull over to the left and stop the engine. Leave the key, get out of your car and walk to a safe spot nearby for evacuation.

#### ii. Check All Fire Sources

Fires following earthquakes can worsen the damage.

- When the shaking stops, extinguish kitchen gas stoves and gas heaters.
- If there is a fire, try to put it out with an extinguisher.
- After an earthquake, do not light a fire due to a risk of gas leaks.

#### iii. Evacuate to a Safe Place

An earthquake may collapse buildings and cause fires.

- In mountainous areas, there is a risk of Sediment disaster. When the shaking stops, promptly go to the evacuation shelter designated by your local government.
- Turn off the circuit breaker before evacuation, because a fire could occur due to electric appliances after the recovery of power failure caused by an earthquake.

### iv. Cooperate and Mutual Aid with Your Neighbors

When a disaster occurs, it is important to cooperate with your neighbors.

• Help especially the elderly who live alone and people with disabilities.

### v. Acquire Accurate Information

After an earthquake, false or misleading information tends to spread.

• Keep yourself updated with the latest official information via TV, radio, mobile phone networks and/or disaster information wireless broadcast system and stay calm.



### Earthquake Early Warnings

- The Japan Meteorological Agency issues Earthquake Early Warnings when intense shaking is expected.
- The Warning will be broadcasted on TV, radio, mobile phone networks, disaster information wireless broadcast system, etc.

Video about earthquakes and Earthquake Early Warnings (in English, Chinese, Korean and Japanese)



https://www.jma.go.jp/jma/kishou/books/sokuho\_dvd/index.html

# When you see or hear Earthquake Early Warning, don't panic and protect yourself!

# 2-3 Tsunami

- When a large earthquake occurs on the seabed, the ocean floor can rise and fall. These movements displace the water above it and launch the rolling waves in every direction. These waves become destructive tsunami waves.
- It is not always true that "the water level drops before a tsunami hits."



# **Prepare for yourself**

It is important to find where evacuation shelters are on a hazard map and check the safe evacuation routes from your home to the nearest shelter.

# When a Tsunami is likely to occur (occurred)

It is too late if you start to evacuate when you see tsunami waves coming to the shoreline. Keep in mind the following when you evacuate:

- If you feel massive shaking in a coastal area or at a river mouth, or even weak but long shaking, immediately leave the area and go to high ground or a tall building.
- Even though you do not feel any shaking but receive an official tsunami warning from the JMA or an evacuation instruction from the local government, immediately leave the coastal area or the river mouth and go to high ground or a tall building.
- Listen and search for correct information via TV, radio, mobile phone networks, disaster information wireless broadcast system, JMA English webpage, or safety tips.
- Tsunami waves are expected to hit repeatedly. Keep away from at-risk zones and areas until a warning or alert is lifted.



### Tsunami Flags

• Starting from June 2020, red-and-white checkered flags called "Tsunami Flags" are used on the beach, etc. to alert people visually to the fact that major tsunami warning, tsunami warning, or tsunami advisory has been issued.



The use of "Tsunami Flags" enables us to inform people with hearing difficulties, people who are swimming and hard to hear due to the sound of waves or wind, and foreign nationals of issuance of tsunami warning, etc.

Please visit the following website for information on "Tsunami Flags" (English):

https://www.data.jma.go.jp/eqev/data/en/tsunami\_flag.html



# 2-4 Volcanic Eruption

- There are 111 active volcanos in Japan.
- When a volcano erupts, it may cause life-threatening damage and destruction.
- To stay safe and protect yourself from a volcanic eruption, you need to take the following actions:

# Prepare for yourself

- Find which areas are dangerous regularly on a hazard map.
- When you go on a hike, prepare the following:
  - i. Check a volcanic warning or volcanic alert level and a hazard map, etc.
  - ii. Submit a Mountain Climbing Notification; and
  - iii. Prepare communication equipment and a helmet.



### Volcanic Alert Level

- It is the information provided to make "areas that require warning" and "actions that should be taken" are instantly found out according to the situation of a volcanic activity.
- This is operated for 49 volcanos among active volcanos existing in Japan.
- There are five volcanic alert levels as follows:

Level 5 Evacuation (evacuation from residential areas at risk is necessary))
Level 4 Evacuation of the elderly, etc. (evacuation of the elderly and other
persons requiring special care, and preparation for evacuation of residents in residential areas at risk is necessary)
Level 3Restriction on proximity to the volcano (preparation for the evacuation of the elderly and other persons requiring special care, depending on the situation. Restrictions on entry to areas at risk, such as prohibition of climbing and restrictions on mountain entry)
Level 2Restriction on proximity to the crater (restrictions on entry to areas near and around the crater)
Level 1 Potential for increased activity (no restrictions)

Information on volcanic warnings and volcanic alert levels (English):

https://www.data.jma.go.jp/vois/data/tokyo/STOCK/kaisetsu/English/level.html



### When a volcano is likely to erupt or has erupted

- Evacuate on your own (if necessary) based on the eruption notice, volcanic warning and volcanic alert level the JMA has issued.
- If the local government issues an evacuation instruction, evacuate and proceed to a safe place.
- When you receive the above-mentioned information or an eruption occurs while you are climbing a mountain, you should take the following actions;
  - Leave the crater and its vicinity immediately.
  - ii. Evacuate and proceed to a mountain hut or a shelter.
  - iii. Wear a helmet to cover your head.

# 3 Evacuation

# Evacuation shelters

An evacuation shelter is a temporary evacuation area or facility that can save your life during disasters.

### When a disaster is likely to occur or has occurred

- Evacuate from the dangerous place based on the evacuation advisory, etc. and proceed to a safe place as soon as possible.
- Check in advance where the evacuation shelters in your area are.
- Shelters can be found on the hazard map or website of municipalities.
- If it seems to be more dangerous to go to a shelter due to occurrence of a flood or other reasons, evacuate to another safe place (to a large substantial (sturdy) building nearby. In the case where it is also difficult to do so, you should evacuate to the very safest place of the second floor or higher floor of a house). At the very least, take actions to protect your life

# **Evacuation information provided**

Evacuation information is a guidance issued by your local government when a disaster is likely to occur or has occurred. Here are some examples:

## Alert level 3 Evacuation of the elderly

What kind of advisory?

This is an advisory for people who will take time to prepare for evacuation and evacuate, such as the elderly and small children, due to a risk of a disaster that causes damages.

When the information is announced

The people listed below should start evacuating from a place in danger:

- i. The elderly;
- People with disabilities; ii.
- Children; iii.
- Others who are difficult to evacuate by themselves and who take time to evacuate (including pregnant mothers);
- Assistants to those corresponding to i-iv mentioned above; and
- vi. Person who feel in danger.

This is also the right time for other people to postpone their regular activities and prepare for evacuation, as necessary.

### **Alert Level 4 Evacuation instruction**

What kind of instruction?

This advisory will be issued when the risk of damage caused by a disaster has elevated.

When an advisory is issued

All people should evacuate from a place of danger safely and proceed to either of the following:

- An evacuation shelter
- ii. Safe houses of relatives or friends, inns, etc.

Further, when you check a hazard map, etc. and can determine by yourself that the following three conditions are met, it may be possible to stay indoors and ensure safety:

- Not in the zone where there is a risk of house collapse or destruction due to a flood (possible flood area causing house collapse, etc.)
- Living in a high building without danger of flooding ii.
- Endurable until the flood subsides with a stock of enough water and food

### Alert level 5 Emergency safety measures

What kind of measures?

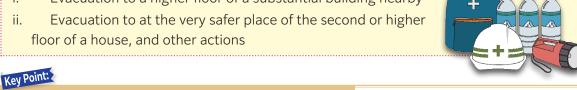
These measures are given when the situation gets worse and a disaster has already occurred or is imminent.

When the measures are issued

If you have not evacuated, ensure your safety immediately because your life is in danger. If it seems to be more dangerous to go to an evacuation shelter, at the very least, please take the following actions immediately in order to protect your life:

- Evacuation to a higher floor of a substantial building nearby i.
- floor of a house, and other actions

imminent. Protect your own life!)



# Evacuation instructions categorized by Alert Level

#### —What is an Alert Level?—

- This information provides guidance on the appropriate response when a floods or Sediment disasters are likely to occur.
- From 2019 on, alert levels are released together with evacuation instructions and weather information for disaster prevention.
- There are five scales:
  - Level 1 ......... Enhance readiness for the disaster. (Gather information on rainfall and river status on TV or online.) Level 2......Verify evacuation routes. (Search on whether or not the place where you are is in danger and how and where you should evacuate if it is in danger.) Level 3.........The elderly and other persons requiring assistance should start evacuating from a place of danger. (People who would take time including the elderly and children etc. to reach shelter should evacuate.) Level 4.....Full evacuation from a place of danger. (Everyone evacuates from a place of danger and take shelter at a safe place.) Level 5..........Take best possible measures to save lives. (Disaster has already occurred or is

# 3-3

# How to evacuate

When you actually do evacuate, keep in mind the following:

- Extinguish all fire before evacuation; and
- Take the minimum of personal items and carry them in a backpack, so that you can use both hands freely.



# Key Point:

## Disaster Emergency Message Service

- In times of disaster, such as when a big earthquake occurs, telephone lines will get busy.
- In such case, the Disaster Emergency Message Service will be provided.

The outline is also posted on the website of the Ministry of Internal Affairs and Communications:

https://www.soumu.go.jp/menu\_seisaku/ictseisaku/net\_anzen/hijyo/dengon.html



### **Disaster Emergency Message Dial (171)**

By dialing 171 from a land line or mobile phone, you can easily record and play back messages by following the operation instructions.  $\begin{array}{ccc} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ &$ 

#### For more details, please see the following websites:

NTT EAST : https://www.ntt-east.co.jp/saigai/

voice171/

NTT WEST : https://www.ntt-west.co.jp/dengon/





# Disaster Message Board (web 171) (in English, Chinese, Korean, Japanese)

You can register and check the safety information by inputting a number of your land line or mobile phone with your PC or smartphone.

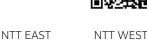
#### Visit the following site to use the service:

https://www.web171.jp/web171app/topRedirect/



#### For more details, please see the following websites:

NTT EAST : http://www.ntt-east.co.jp/saigai/web171/
NTT WEST : https://www.ntt-west.co.jp/dengon/web171/





#### **Disaster Message Board (on mobile phone networks)**

Mobile phone operators also provide message board services.

### Visit the following websites to use the services.

NTT DOCOMO: http://dengon.docomo.ne.jp/

top.cgi

KDDI (au) : http://dengon.ezweb.ne.jp/

SoftBank/

Y!mobile : http://dengon.softbank.ne.jp/

Rakuten

Mobile :https://public-safety.mobile.rakuten.co.jp/?lang=ja

NTT DOCOMO



KDDI (au)

SoftBank/ Y!mobile



Rakuten Mobile



### See the following URL for details:

NTT DOCOMO: https://www.nttdocomo.co.jp/info/disaster/disaster\_board/index.html

KDDI (au) : https://www.au.com/mobile/anti-disaster/saigai-dengon/

SoftBank: https://www.softbank.jp/mobile/service/dengon/

Y!mobile : https://www.ymobile.jp/service/dengon/

Rakuten

Mobile :https://public-safety.mobile.rakuten.co.jp/?lang=ja

NTT DOCOMO KDDI (au) SoftBank











Rakuten

### 3-4

# **Useful Disaster Weather information**

The JMA publishes useful weather forecasts in times of disaster. Such information is available via TV and radio, or on the internet.

Heavy rain and earthquake information (Multilingual)

https://www.jma.go.jp/jma/kokusai/multi.html



# **Disaster management information**

Find the latest disaster information at the following link:

https://www.jma.go.jp/jma/en/menu.html



# **Real-time Risk Map**

Find zones and areas with the risk of any of the following disasters:

### Inundation (low-land flooding)

https://www.jma.go.jp/bosai/en\_risk/

#elements:inund





### Flood (river flooding)

https://www.jma.go.jp/bosai/en\_risk/ #elements:flood

https://www.jma.go.jp/jma/kokusai/multi.html

https://www.jma.go.jp/jma/kokusai/multi.html



# Sediment disaster (collapse of a mass of earth from a mountain or cliff)

https://www.jma.go.jp/bosai/en\_risk/ #elements:land







# **Volcanic alerts**

### Volcanic information

https://www.jma.go.jp/bosai/map.html#5/34.5/137/&contents=volcano&lang=en

https://www.jma.go.jp/jma/kokusai/multi.html





# Key Point:

### Emergency Warning for Heavy Rain Emergency Warning

- The JMA may issue an Emergency Warning for Heavy Rain Emergency Warning.
- This Emergency Warning will be issued when intense rainfall of the sort that happens only once in decades is predicted, and fatal damage may have been caused.

# Key Point:

### Real-time Risk Map

- The JMA marks areas with imminent risk of inundation, flood and Sediment disaster in the Kikikuru (Real-time Risk Map), based on the prediction of rain, etc.
- Real-time Risk Map is updated on the JMA website every ten minutes.
- Get the latest information on your area via mobile phone networks and move to a shelter early.

# Key Point:

### "Safety Tips," an application for up-to-date disaster information

- There is an application for foreign tourists in Japan that provides up-to-date disaster information.
- By downloading this application on the phone, you are notified in advance with the following alerts of disasters near you.
  - i. Earthquake Early Warning (prediction of strong shaking)
  - ii. Tsunami Warning (advisory to shelter at higher ground as a tsunami is coming)
  - iii Emergency Warning of Weather, etc. (the largest degree of advisory that intense rainfall or storm in decades is likely to occur)
  - iv. Eruption Notice (advisory to take protective action due to an eruption)
  - v. Tropical Cyclone Information (advisory to take protective action due to an approaching tropical cyclone)
- You can also find the following useful information:
  - i. Flowchart showing what to do when there is a disaster
  - ii. Communication cards to talk with Japanese people near you.
  - iii. Links where useful information is found:

Android : https://play.google.com/store/apps/details?id=jp.co.rcsc.safetyTips.android

iPhone : https://itunes.apple.com/jp/app/safety-tips/id858357174?mt=8

Android



iPhone

