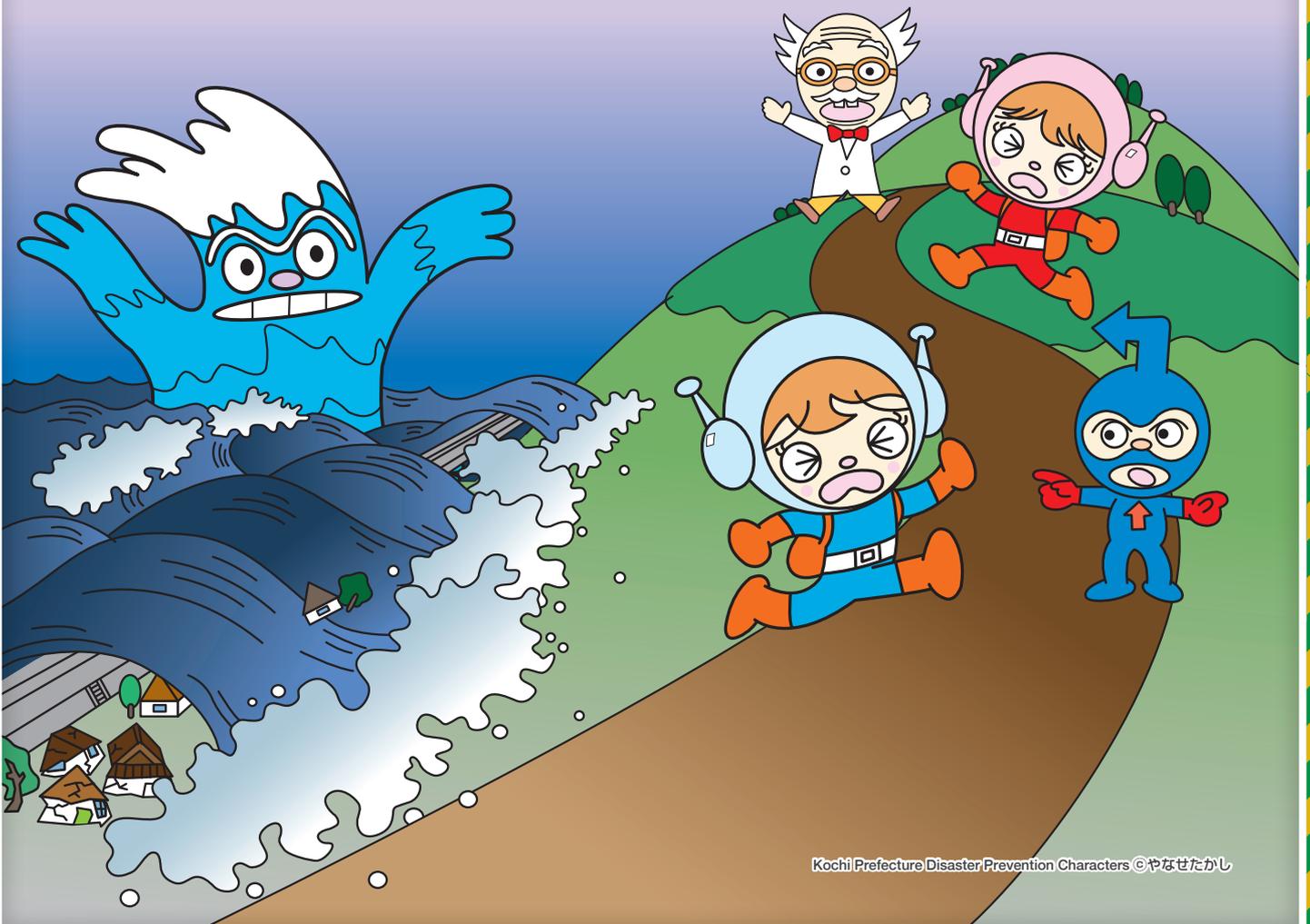


英語



An Information Booklet for the International Residents of Kochi

PREPARING FOR THE NANKAI TROUGH EARTHQUAKE (NANKAI TORAFU JISHIN)!



Regarding this book

To Foreign Residents in Kochi

Japan is a country that experiences many natural disasters, such as earthquakes and typhoons.

In particular, Kochi Prefecture is expected to be severely affected by the Nankai Trough Earthquake, a large earthquake predicted to occur once every 90 to 150 years. It is expected to trigger a large tsunami and cause major damage to Kochi Prefecture.

To minimize the damage that occurs during a natural disaster, it is important to learn about and prepare for natural disasters.

Read through this booklet so that you and your loved ones are prepared to protect yourselves, and make sure you, your family, and those around you can act on the information you learned in the case of an emergency.

Natural Disasters related to the Nankai Trough Earthquake

Earthquake

Earthquakes cause widespread shaking of the ground. Japan is a country that experiences many earthquakes. Earthquakes occur suddenly and often without any warning.



Tsunami

Tsunami are extremely large waves that can be triggered by earthquakes. Tsunami move very quickly. The 2011 Tōhoku earthquake caused a tsunami that brought about great damage.



Long-Term Inundation (Flooding)

Earthquakes in Kochi may cause the elevation to change. Low elevation areas may sink below sea level, causing long-term inundation.



For more information, see page 15

Index

Preparing for Disasters

1. What Happens During an Earthquake.....turn to page 1
2. How to Protect Yourself
 - Protecting Yourself from Tremorsturn to page 3
 - Protecting Yourself from Tsunamiturn to page 6
 - Preventing Fires.....turn to page 8
 - Going to an Evacuation Shelter.....turn to page 9
3. Prior Preparation
 - Securing your Furnitureturn to page 10
 - Preparing Emergency Supplies and Stockpilesturn to page 12
 - Deciding on a Meeting Place for your Family and Friends.....turn to page 13
 - Installing Disaster Management Applicationsturn to page 14

Learning About Disasters

- The Nankai Trough Earthquaketurn to page 15
- Nankai Trough Earthquake Extra Informationturn to page 17
- The Kochi Disaster Multilingual Support Centerturn to page 18
- Useful Vocabulary and Phrasesturn to page 19
- Earthquake Preparation Simulationturn to page 20

Character Introduction



※These characters were developed in 2002 with the extensive support of Mr. Yanase Takashi, to generate interest in disaster prevention amongst children.

Preparing for Disasters

1 What Happens During an Earthquake

(1) Houses collapse and furniture falls over.

Cars, trains, and buses become unusable due to damaged roads and tracks.



Landslide (Minamiaso Village)
(Provided by MLIT)



Destruction to housing (Mashiki Village)
(Provided by Mashiki, Kumamoto)



Fallen furniture (Provided by Tokyo Fire Dept.)



Concrete-block wall collapse
(Provided by the Disaster Prevention System Institute)

What should I do during an earthquake? → turn to page 3
How should I prepare? → turn to page 10

(2) Tsunami are triggered.



A tsunami devastating the coast (From the Kyodo News Service Helicopter
over Natori City, Miyagi Prefecture on March 11, 2011 3:56PM)



Debris scattered from a large tsunami
(April 4, 2011 Kamaishi City, Iwate Prefecture provided by Kochi Newspaper)



A tourist bus left on top of a building by a large tsunami
(July 15, 2011 Ishinomaki City, Miyagi Prefecture)

What should I do during a tsunami? → turn to page 6

(3) Fires break out.

■ Damage from Past Earthquake-caused Fires

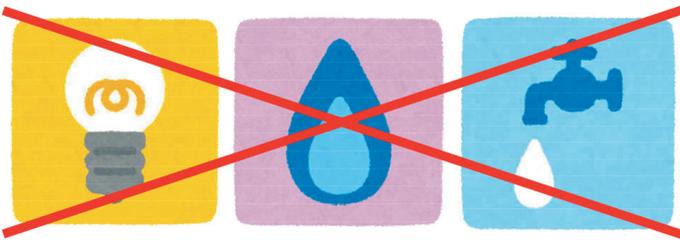
Date	Earthquake Name (Magnitude)	Structures Destroyed
1 Sep 1923	Great Kantō Earthquake (M7.9)	477,128
21 Dec 1946	Showa Nankai Earthquake (M8.0)	2,598
17 Jan 1995	Great Hanshin Earthquake (M7.3)	7,478
11 Mar 2011	Great East Japan Earthquake (M9.0)	330 fires (159 fires due to tsunami)



Fires during the Great Hanshin Earthquake (Provided by Kobe City)

How should I prepare? → turn to page 8

(4) Electricity, gas, and plumbing stop working.
Phone lines and the internet may be unusable.



What should I do when this happens? → turn to page 9, page 13

(5) Food, water, medicine, and daily essentials become difficult to get.



How should I prepare? → turn to page 12

(6) You must live at an evacuation shelter for a period of time.



(Provided by Miyagi Prefecture)

Learn more about evacuation shelters → turn to page 9

How should I prepare? → turn to page 13

2 How to Protect Yourself

Protecting Yourself from Tremors

The Earthquake Early Warning

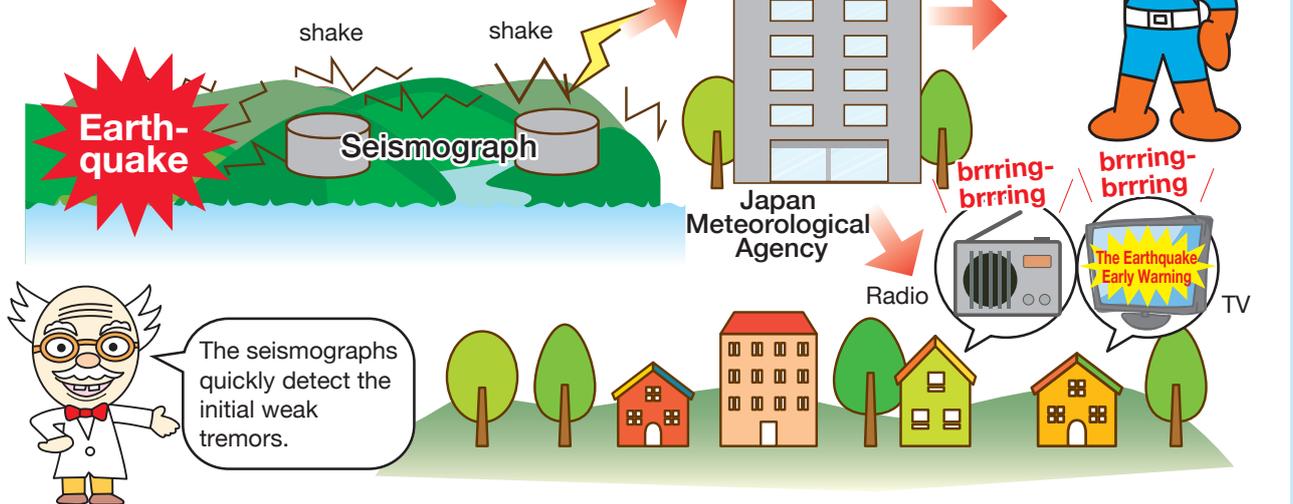
The Earthquake Early Warning System is triggered the instant an earthquake occurs. The system predicts the strength and arrival time of tremors in your area and sends out a warning as fast as possible.

When the Earthquake Early Warning goes off, don't panic! Let those around you know; **pay close attention to your surroundings; and above all, protect yourself.**

The Earthquake Early Warning System

When are warnings issued?

When the seismic intensity (*shindo*) near the epicenter is **Weak 5 and above**, a warning is issued for all areas where the predicted *shindo* is **4 and above**.



What if you hear an Earthquake Early Warning?

You only have **a few seconds** until strong tremors arrive.

Take action immediately to protect yourself! See the next page for details.

Herupa-chan says:



Use the websites or QR codes on the right to hear what the Earthquake Early Warning sounds like on various devices.

TV/Radio NHK

<http://www.nhk.or.jp/sonae/bousai/>



au

<http://www.au.kddi.com/mobile/anti-disaster/kinkyu-sokuho/jishin-sokuho/>



Try listening to the warning alarms!

Cell phones docomo

<https://www.nttdocomo.co.jp/service/aremail/index.html>



SoftBank

http://www.softbank.jp/mobile/service/urgent_news/about/eeew/





What to do When you Notice the Earthquake Early Warning

■ When at Home

When in the bedroom



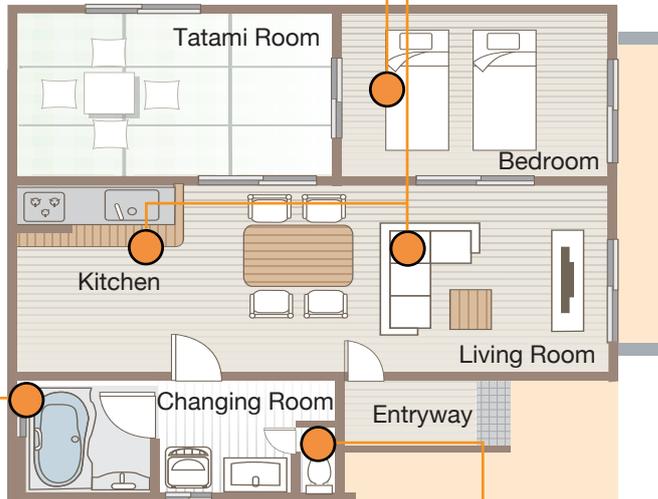
Open the door slightly, wrap yourself in your futon, and protect yourself.

When in the kitchen or living room



Protect your head and get close to the ground.

During the Nankai Trough Earthquake, shaking registering at shindo Weak 6 or above will continue for over a minute, and furniture may fall over. Stay away from them, just in case!



Protect your head somewhere where things won't fall, move or collapse on you. When under a desk, it's important to firmly grip its legs.



When in the bath

Open the door slightly, get into the bathtub, and protect yourself with the bath cover or something similar.



When in the toilet

Open the door slightly and get close to the ground.



■ When Outside

When in a shopping arcade



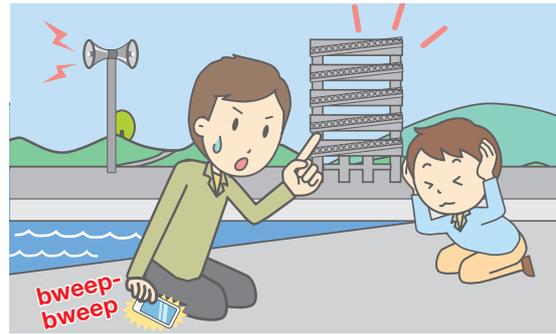
Stay away from dangerous things like signs and vending machines. Quickly move to a safe space and get close to the ground.

When in an elevator



Press all the buttons and exit the elevator immediately when it stops. Use your bag or something similar to protect your head and get close to the floor.

When near the ocean

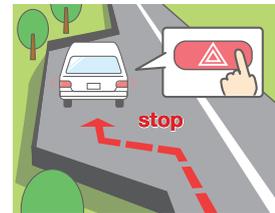


After the shaking has subsided, a tsunami will soon follow, so evacuate to a tsunami tower or other high ground.

When driving in a car



Notify the other passengers. Calmly turn on your hazard lights and stop in a wide area.



Q. Will there be only one major tremor?

- A. During the Kumamoto Earthquake, shindo 7 tremors happened twice. In the case of the Tōhoku earthquake, the aftershocks are still continuing even nine years later, and there are records from the 1854 Ansei Nankai Earthquake stating that aftershocks continued for three years.

Herupa-chan says:



Every year, a shakeout drill is held in Kochi Prefecture during the Kochi Prefecture Nankai Trough Earthquake Preparedness Promotion Week (August 30 to September 5). Participants throughout the prefecture take the following actions: "Stay low, protect your head, and don't move." The drill is open to anyone, anywhere, so hopefully many people will participate!

■ Kochi Prefecture's Shakeout Drill Website

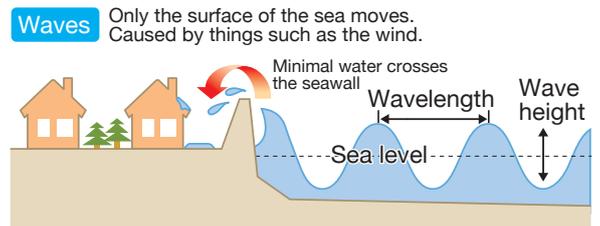
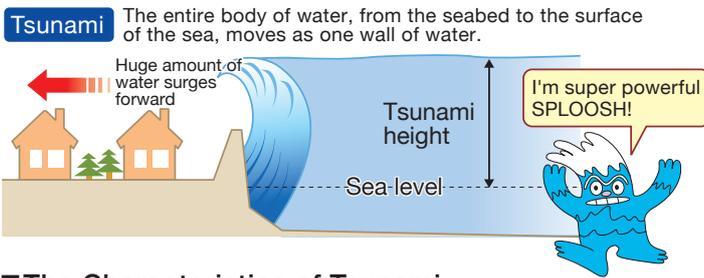
<https://www.pref.kochi.lg.jp/soshiki/010201/shake-out.html>



Protecting Yourself from Tsunami

Properly understanding tsunami

■ The biggest difference between tsunami and waves

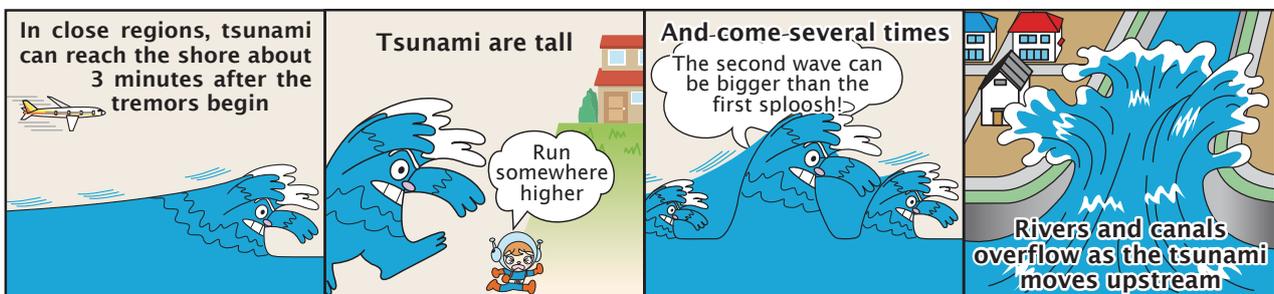


■ The Characteristics of Tsunami

- The wavelength (the length of a wave from crest to crest) of a tsunami is extremely long (approx. 50km in the case of the Nankai Trough Earthquake). Tsunami move faster the deeper the ocean is. As the water gets shallower, the speed of the tsunami slows, but the height of the wave grows taller.
- The height and time the tsunami arrives will depend on where the earthquake occurred (epicenter) and how big it is (magnitude).
- The seawater may or may not recede before the tsunami arrives.
- People **cannot remain standing** in a tsunami that is **higher than their knees**.
- Tsunami will hit several times. **The first wave is not always the biggest.**

■ The Threat of Tsunami

- Tsunami may surge into rivers and make them overflow.
- Even people living in plains far from the ocean need to be cautious. In the Great Eastern Japan Earthquake, tsunami reached plains as far as 5km from the coast.
- In areas where the bay is V-shaped, the waves may grow taller as they move further into the bay.
- The pulling strength of the waves is enormous. Broken houses and boats are washed into the seas.
- Tsunami triggered on the other side of the Pacific ocean can still cross the sea and affect Japan. (Example: 1960 Chilean Earthquake and Tsunami)



How to Escape from a Tsunami

Tremors	When tremors begin, protect yourself. After large or long tremors, assume that a tsunami will come.
Get Ready	When the tremors stop, collect only what you need and run. (Glasses, medicine, portable radio, flashlight, etc. should be kept ready so that you can evacuate at any time. → See page 13) Do not wait for a Tsunami Warning (tsunami keihō) or Tsunami Advisory (tsunami chūihō), just take yourself and run.
Quickly	Evacuate quickly to a designated Evacuation Site (hinan basho). When you are in an unknown place and are unaware of the location of the <i>hinanbasho</i> go to elevated ground (<i>takada</i>) or up a building. Depending on the waves, you may want to move even higher. Generally, move quickly and do not use a car. (You may be caught in traffic or unable to find your car keys and unable to escape in time.)
Until the tsunami keihou is lifted	Tsunami come several times. Please confirm on a radio etc. that the tsunami has finished before you return home. Never return home before the tsunami keihō has been lifted.



Q. What should I do in the case of a tsunami?



A. As soon as you feel strong tremors, or even weak tremors that persist for a long period of time, immediately make your way to a designated evacuation site.

When at the beach or rivers, always take note of high-ground or tall buildings in the area, so that you can escape quickly if a sudden earthquake triggers a tsunami.



Important!

Evacuation Sites and Evacuation Shelters are not the same thing.

Evacuation Site (*Hinan Basho*)

A **place to take temporary refuge** from tsunami and other disasters.



Tsunami Evacuation Site



Tsunami Evacuation Building

Evacuation Shelter (*Hinanjo*)

A **place to live temporarily**, when your home is partially or completely destroyed, or if utilities such as electricity, water and gas are not in operation.



Evacuation Shelter (building)

※Check the location of your local evacuation sites and shelters on your municipality's website.



Q. What should I do if the tsunami is predicted to stop just before my area?



A. In the 2011 Tōhoku Earthquake, many people in areas that were predicted to not be affected by the tsunami ended up suffering damage. Even in areas predicted to be safe from the tsunami, you can never be too careful!



Q. Until when should I take shelter?



A. In the past, there have been people who lost their lives after deciding to leave the Evacuation Site to go home and gather belongings, despite the tsunami warning still being in effect. Tsunami ebb, flow, and strike again and again over a long period of time. Sometimes the second wave is even larger than the first. There are also times where a tsunami advisory will suddenly switch to a tsunami warning, so it's important to always be looking at the latest information. **Until the tsunami warning is lifted, DO NOT leave the Evacuation Site!**

※During the 2011 Tōhoku Earthquake, it took over 29 hours for the tsunami warning (*tsunami keihō*) to switch to a tsunami advisory (*tsunami chūihō*) in Iwate, Miyagi, and Fukushima (prefectures that suffered great amounts of damage).

Preventing Fires

When earthquakes and tsumai occur, fire fighting services may not be able to arrive quickly to extinguish fires. As such, it is important to prevent fires from starting. If a fire starts, try to use a fire extinguisher to extinguish it immediately while the flames are still small. If you feel any danger to your life, evacuate (*hinan*) swiftly to a safe place.

Preventing electrical fires

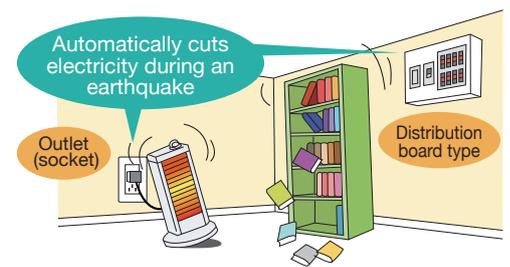
When there are tremors during an earthquake, electrical appliances that produce heat may topple over and flammable items can fall on them starting fires. Consider purchasing appliances that turn off automatically when they fall over, and never leave flammable items near objects that produce heat.

When the electricity comes back on, damage to electrical wiring and appliances may start fires. Make sure to flip your breaker after the tremors have stopped and before you evacuate.

■ Earthquake Sensitive Circuit Breaker

An earthquake sensitive circuit breaker automatically cuts the electricity when a large tremor is felt.

You can purchase and install both outlet (socket) types and distribution board types.



Q What should I do if I am using fire in a kitchen and an earthquake occurs?

A As there is the possibility of being burnt, step away from the stove and move under a table to protect yourself. Extinguish the fire when the tremors stop.

Currently, most homes are equipped with a microcomputer meter which detects earthquakes at a seismic intensity of 5 or so and automatically stops the flow of gas. Please check its characteristics and use.

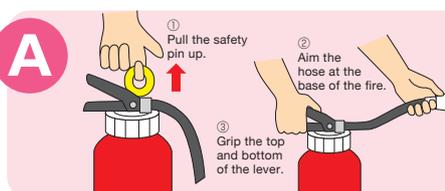


Q What should I do if a fire breaks out?

A

- Announce it quickly...let your neighbors know in a loud voice: "*Kajida* (fire)!"
- Extinguish it quickly...before the flames reach the roof.
- Escape quickly...if the flames hit the roof, escape immediately.

Q How do you use a fire extinguisher?



A Prepare an extinguisher in every household. (Old fire extinguishers pose the risk of exploding and are extremely dangerous. Take care of them in a suitable manner by having them exchanged when they pass their use-by date.)

Q What should I do if a fire breaks out nearby?

A As fires will break out in many places, there is a high chance that firefighters will not arrive straight away. Contact 119. Confirm that you are in a safe place and there is no danger of tsunami, then attempt to extinguish any fires with help from your neighbors or local disaster prevention organizations.

Going to an Evacuation Shelter

Don't Go In or Near Buildings that are Unsafe!

After a large scale earthquake damaged buildings and houses will be inspected to determine if they will collapse from aftershocks (*yoshin*). Do not enter buildings or houses that are deemed unsafe.

An inspection sticker will be placed on the building.
(Do not enter buildings with a red sticker)



[Red] Entry to this building is unsafe.

[Yellow] Be cautious when entering this building.

[Green] Use of this building is permitted.

Contact your Office / School / Consulate / Embassy

When things have calmed down, contact your office or school and embassy or consulate.

Office or School's Phone Number : _____

Embassy or Consulate's Phone Number : _____

Life at the Shelter (*Hinanjo*)

Many people live together at *hinanjo*. As it is not your house, there will be many inconveniences and everyone must work together.

What is a *hinanjo*?

A place where people who have lost their homes can live after an earthquake (often schools, office buildings, parks, etc.). *Hinanjo* gather and post useful information and distribute food, water, etc.

Q When should I go to a *hinanjo*?

- When your house is damaged and you have nowhere to live.
- When aftershocks could damage your house, and it is dangerous to live there.
- When there is the possibility of landslides around your house.
- When your furniture is strewn about your house and you cannot live there for the time being.
- When there is nobody else living nearby, or when water surrounding your home doesn't retreat etc.



Q What should I be aware of when living in a *hinanjo*?

- Please make the most of the daily interactions with your neighbors.
- Please obey the rules of the *hinanjo*.
- Do not be a guest; help where you can and work with other people in the *hinanjo*.
- Help the sick, disabled, elderly, pregnant, and children.

Q What other types of people come to the *hinanjo*?

- Even people who can sleep at home will come when they have no electricity, water, or gas. These people often come to receive food and water at the *hinanjo* before returning home.



Q What should I be aware of when living somewhere other than the *hinanjo*?

- Those who are living in their cars or in tents should take care of their health. If you spend a long time in a cramped place it can lead to poor blood flow and result in sickness. Wear loose-fitting clothes, drink lots of water, and keep active.

3 Prior Preparation

Securing your Furniture

Furniture in a house will fall over during large tremors. You can also be injured by broken glass and fallen dishes etc.

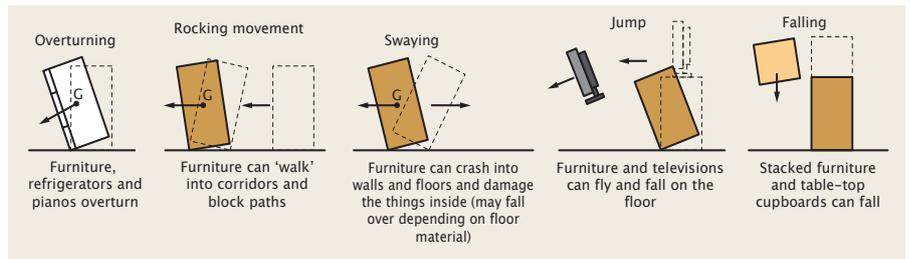
Please secure your furniture. Also, be careful not to place furniture where it could block exits if it falls over.

Glass windows and dishes may shatter. Take precautions so that glass and other objects don't fly around.

Securing Furniture

● What will my furniture do in an earthquake?

During an earthquake, furniture can overturn, rock, sway, jump, fall, or slide around the floor (pictured right).



● What happens when furniture isn't secured?

(Inside buildings during the Great Hanshin Earthquake)



Left) A home (Provided by Kobe City Media Department)

Right) An office (Provided by Hyogo Prefecture Media Department)

● Avoid injury from furniture and electrical appliances

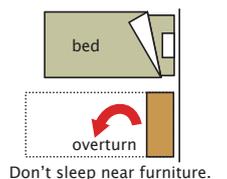
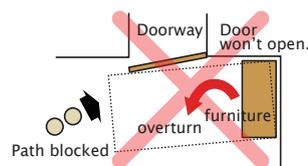
(1) Don't place tall furniture in rooms you use often

Try and place tall furniture in other rooms.



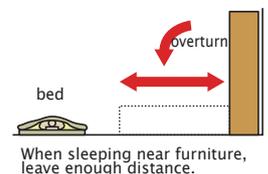
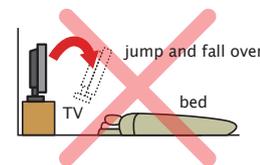
(3) Furniture Placement

Don't place furniture in bedrooms or hallways.



(2) Store heavy things lower, and lighter things higher

Don't place dangerous items such as glass or irons on top of furniture.



(4) How to stop glass and other objects from flying across the room



Stick shatterproof film to glass. This is especially important for cupboards with dishes in them as well as glass in your bedroom, living room, and other places where people spend a lot of time. ⇒ Left Photo

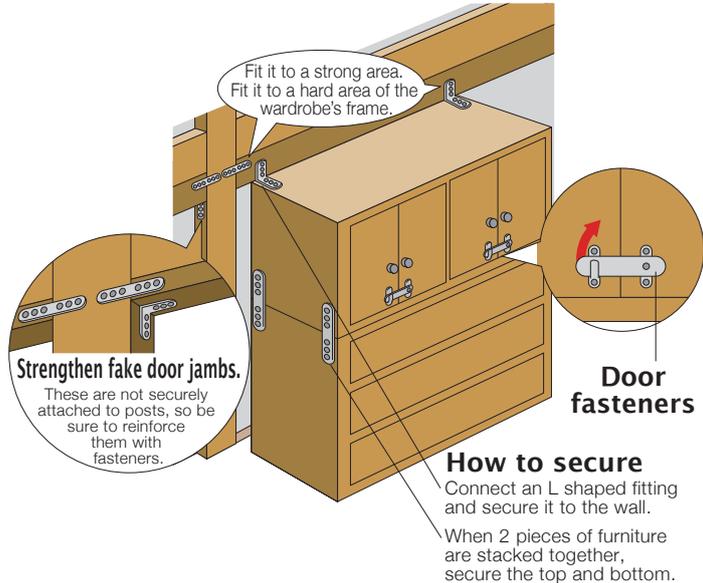
On expensive items such as vases, use special putty. ⇒ Right Photo

(5) Securing Furniture and Appliances, with Estimated Costs

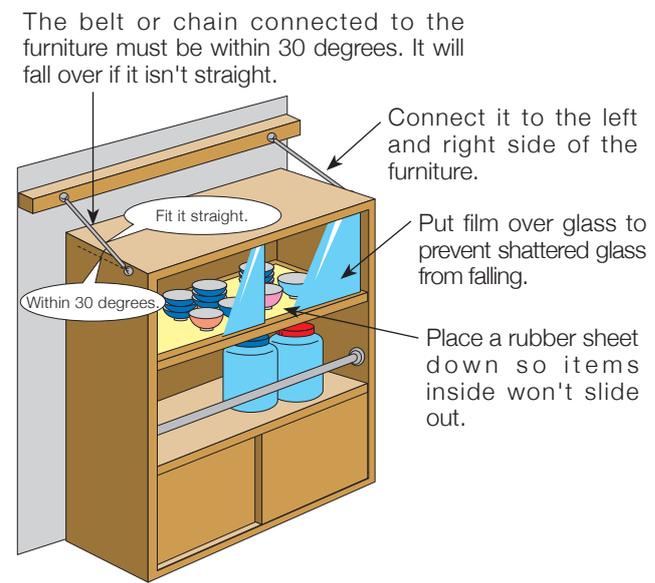
The costs are an estimate based solely on the item required. Other costs such as labor fees are not included. (If you are renting your place, remember to ask the landlord for permission.)

Items That Must Be Secured
 Wardrobes, bookshelves, cupboards, shoe racks, refrigerators, microwaves, televisions, computers, pianos etc.

How to secure a wardrobe with metal fittings (cost: approx. ¥2,500~)

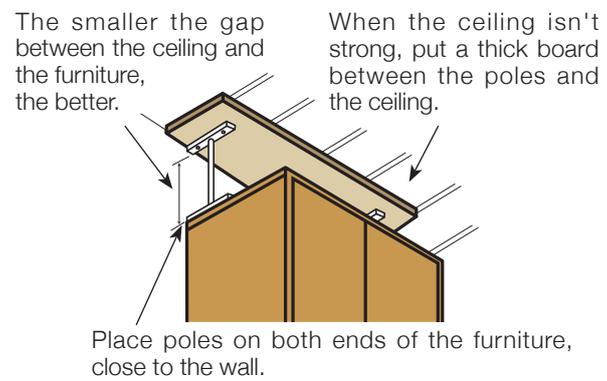
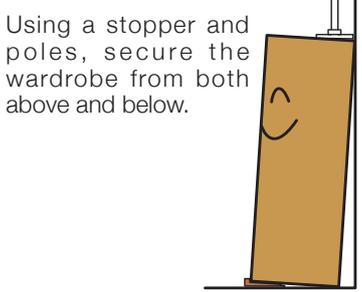


How to strengthen a cupboard using belts, rubber sheet, and shatterproof film (cost: approx. ¥2,500~)



How to secure a wardrobe using a pole or stopper (cost: approx. ¥2,500~)

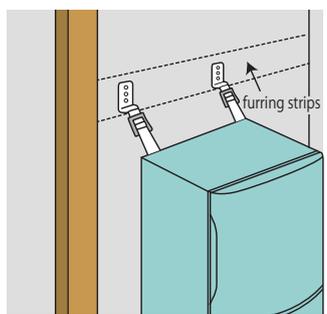
●Pole Method



●Stopper Method

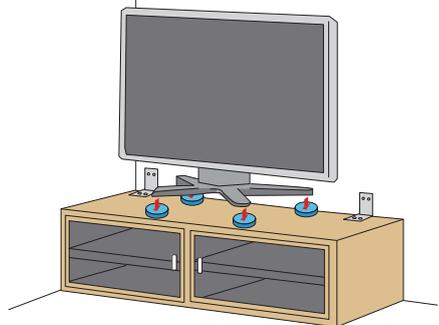


Securing a refrigerator with belts (cost: approx. ¥2,000~)



Secure to the furring strips (the large, wide planks of wood inside the walls).

Securing a television using L-shaped fittings and sticky, gel sheets (cost: approx. ¥1,500~)



Where can these items be bought?
 They can be bought at home centers (Brico, Maruni, Hamart etc). Many municipalities offer financial assistance to elderly or disabled people who cannot secure furniture themselves.

Preparing Emergency Supplies and Stockpiles

Emergency Supplies for when earthquakes occur and Emergency Stockpiles for life as an evacuee are different!

Emergency Supplies (What to Carry When Evacuating)

When evacuating during an earthquake, avoid carrying lots of items. Take only what is necessary and valuables. Place emergency supplies in a bag and leave it somewhere easily accessible, such as near your pillow, so that you can grab it and evacuate immediately.

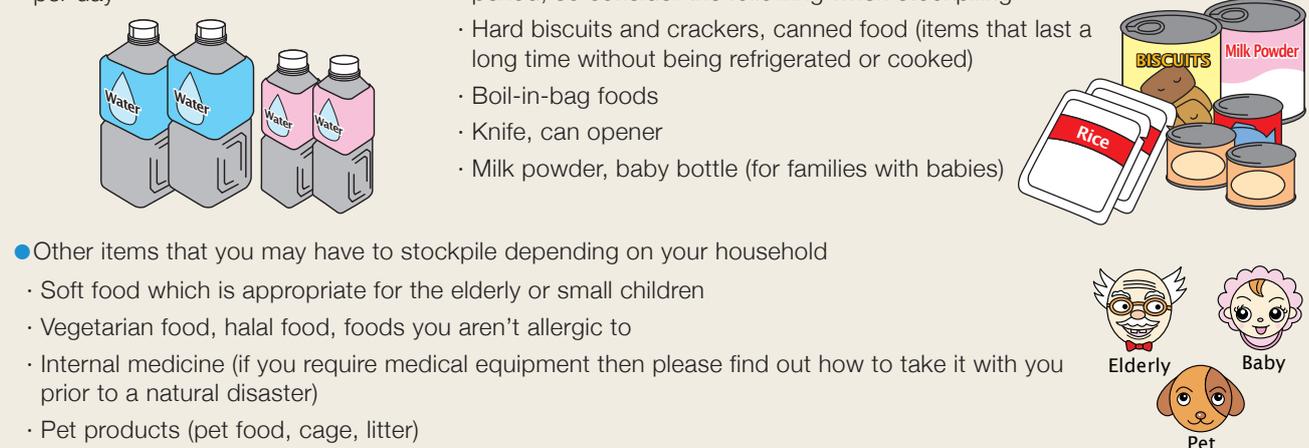
- Glasses, hearing aid, false teeth, daily medicine
- Helmet, disaster hood, sneakers, whistle
- Flashlight (torch), portable radio and spare batteries
- Cash (include coins), valuables, passport, residence card, insurance cards



Emergency Stockpiles (Things to Stockpile for Life in a Shelter)

In the aftermath of an earthquake, water, food and daily necessities cannot be bought straight away. Please store enough food and water in your house to last until help arrives. In areas where a tsunami might occur you will be unable to return home. Please store food at a separate place without danger of tsunamis. **Store enough to last for more than 3 days!**

- Drinking Water : 3L per person per day
- Food : Water, electricity, and gas will not be available for an extended period, so consider the following when stockpiling
 - Hard biscuits and crackers, canned food (items that last a long time without being refrigerated or cooked)
 - Boil-in-bag foods
 - Knife, can opener
 - Milk powder, baby bottle (for families with babies)
- Other items that you may have to stockpile depending on your household
 - Soft food which is appropriate for the elderly or small children
 - Vegetarian food, halal food, foods you aren't allergic to
 - Internal medicine (if you require medical equipment then please find out how to take it with you prior to a natural disaster)
 - Pet products (pet food, cage, litter)



Items Useful for After an Earthquake

- Daily Necessities

Cling wrap, disposable heat packs, writing implements (such as an ink marker), plastic bags (rubbish bags), packing tape, required medicine, medicine handbook (medicine information), glasses, false teeth, sleeping bags and blankets, wet weather gear, valuables, cash (include coins), some form of identification etc.


- Sanitary Items

Towels, toilet paper, tissues, wet wipes (a larger size is useful for wiping the hands and body), a change of clothes (underwear, clothes), sanitary products, mask, mouthwash, shampoo that doesn't require water etc.


- Toilet Supplies

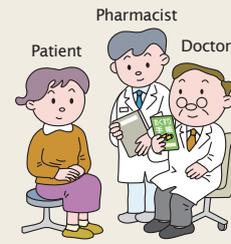
Toilet paper, portable toilet, plastic bags, diapers, deodorant etc.



- Your Medicine Handbook (*Okusuri Techo*) is handy in emergencies!

Medicine Handbook Records

- Name of your prescribed medicine
- The frequency and amount needed
- Your Allergy History
- Side Effect History



At the shelter

If confirmation can be made on the medicine you require it can be prescribed.

During the Great East Japan Earthquake, there were many cases where care could continue as people had their Medicine Handbook or Medicinal Information Documents with them. In preparation for an emergency please carry your Medicine Handbook with you.



Prepare Emergency Supplies and Emergency Stockpiles

- In preparation for an earthquake occurring during the night, place emergency supplies such as a torch, radio, and shoes near your bed.
- Keep emergency supplies of water and groceries. Keep a rolling stockpile, using the older items and replacing them with newer items.



Keep household medicines in a nearby place.

Deciding on a Meeting Place for your Family and Friends

An earthquake may occur at a time when you are not with your family (friends). As such, it is important to decide on where (shelter, friend's house) to meet up with your family (friends) when you cannot return home.

Also, please talk to family members (friends) to make sure that everyone knows what to do in a disaster.

- Fundamental Knowledge of Earthquakes
- How to contact others (confirm their safety) during a natural disaster
- Confirming Evacuation Point and Evacuation Method
- Confirm you have multiple Evacuation Routes
- Emergency Stockpiles (Food, Drinking Water etc)
- Emergency Supplies (Portable Radio, Batteries, Medicine)
- Create a Disaster Prevention Map for around where you live
- Prevent furniture and so on from falling over
- How to evacuate the elderly, infants and pets

Are My Family and Friends Safe?

It will be difficult to make phone calls in regions which have suffered a large earthquake. Therefore, after a disaster it is difficult to contact family and friends over the phone to confirm their safety. In preparation of this, you can use the NTT disaster messaging service (explained below) and other mobile phone service provider's disaster messaging services to contact your family and friends.

Also, check the phone numbers of your family and friends' offices, and the places their children go to school. When you have to evacuate your home, you can stick a sign on your door that lets your family and friends know where you have evacuated to.

How to use the Emergency Messaging Service (171)

This service can be used when a large earthquake (over a Weak 6) occurs. From your home phone or mobile you can use this to check on the safety of your family and friends, as well as let others know that you are safe.

TV and radio programs will announce when this service can be used. You can practice using this service on the 1st and 15th of every month, as well as January 1st to 3rd, August 30th to September 5th, and the 15th to 21st of January. Please try it out.

Each mobile phone provider's emergency messaging service as well as the disaster broadband message board have days when you can practice using them.

When you want to let your family and friends know you are safe

Dial **1 7 1**
 ↓ Japanese audio will play

Press **1**
 ↓ Japanese audio will play

Dial a landline number
 (x x x) x x x - x x x x

↓ Japanese audio will play

Leave a message (30 seconds)

When you want to check on the safety of family and friends

Dial **1 7 1**
 ↓ Japanese audio will play

Press **2**
 ↓ Japanese audio will play

Dial a landline number
 (x x x) x x x - x x x x

↓ Japanese audio will play

Listen to the message

Installing Disaster Management Applications

1. Kochi Disaster Mitigation App (Kochi ken Bousai Apuri)

高知県防災アプリ

Kochi Disaster Mitigation App is designed to provide notifications when a natural disaster is going to occur, in order to help with evacuation. (Planned to be available in 8 different languages in 2022.)



This app provides you with information regarding weather, evacuation notices, river water levels, landslides, and other dangers in your municipality, allowing you to decide when you need to evacuate.

It also provides evacuation route information and information on what evacuation shelters are open.

It includes a group function where you can send an SOS distress signal to pre-registered family members and neighbors, as well as disaster related quizzes and information.

For ease of use, the app has 3 modes: Standard Mode, Children's Mode, and Senior Mode.

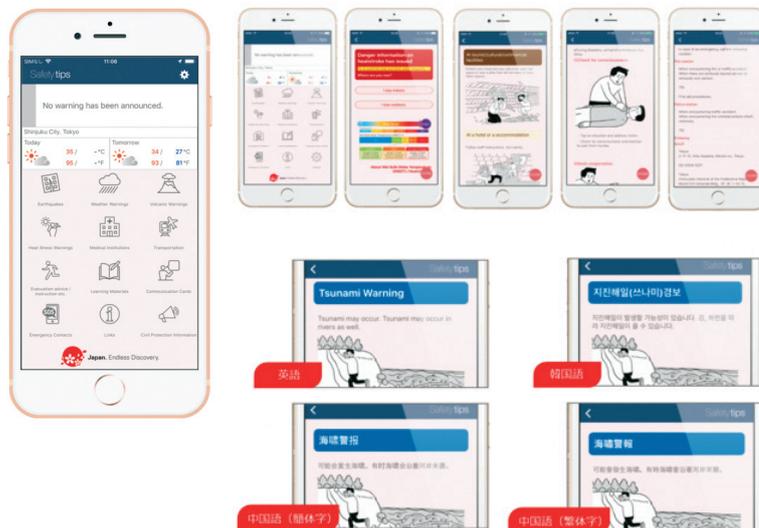
Please install it to help protect both your life and the lives around you.



2. Safety Tips

An app designed for foreigners that sends early earthquake warnings, emergency weather warnings, and general safety information to your phone as push notifications. (Available in 14 languages)

Includes features such as: a flowchart showing evacuation actions based on the surrounding situation, helpful phrases to help you get information from people around you, and links to other useful sources of information.



Learning About Disasters

The Nankai Trough Earthquake

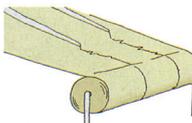
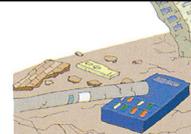
The Nankai Trough Earthquake is a large-scale earthquake with an epicenter within the Nankai Trough or along the boundary between the tectonic plates that form the trough.

Strong, Long Shaking Will Occur

In the event of a large earthquake, 26 municipalities will experience severe shaking at an intensity of 7, and the remaining 8 municipalities will experience a Strong 6.

Shindo and Damage

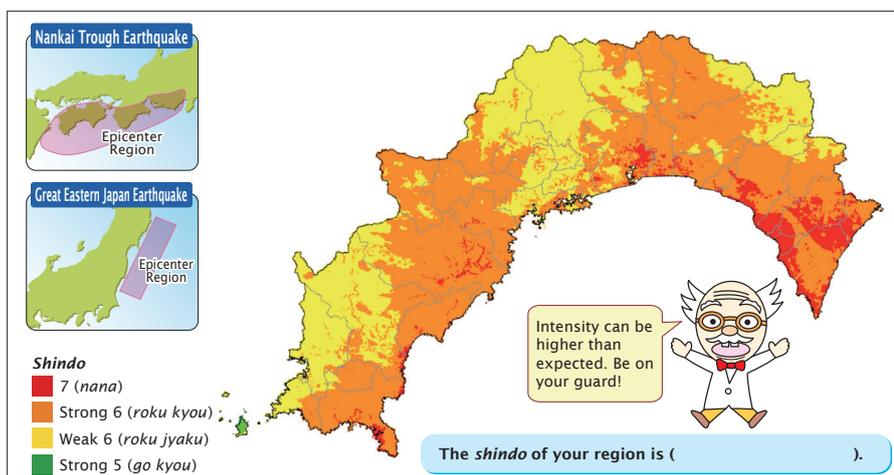
In Japan, *shindo* is separated into 10 categories, the larger the number the bigger the damage.

Shindo	Damage	Shindo	Damage
0 (zero)	Not felt by humans but will be recorded by seismographs. 	Weak 5 (go jyaku)	Many people will feel scared and try to take cover. Unstable items may fall over. Some glass windows may crack or break. 
1 (ichi)	Felt by some people who are indoors. 	Strong 5 (go kyou)	Many people will find it difficult to move normally. Televisions will fall. Weak concrete walls may fall over. 
2 (ni)	Felt by many people who are indoors. Some sleeping people will wake up. Hanging lights sway a little. 	Weak 6 (roku jyaku)	It is difficult to stand. Walls, tiles and glass windows will break and drop from some buildings. Weak wooden houses might collapse. 
3 (san)	Felt by many people indoors. Some people walking will feel it. Many sleeping people will wake up. Plates in cupboards will rattle. 	Strong 6 (roku kyou)	You will be unable to stand. Many walls, tiles, and glass will break and fall. Concrete-block walls collapse. The ground cracks open and landslides occur. 
4 (yon)	Most people will notice. Most people walking will feel it. Most people sleeping will wake up. Hanging lights will sway more. Plates in cupboards will rattle. Unstable items may fall over. 	7 (nana)	You will be unable to stand. Even buildings with high earthquake resistance will sway and break. Large ground cracks and landslides will occur, changing the terrain. 

Estimated *shindo* of the Nankai Trough Earthquake

Seismic Intensity Distribution Map (Strongest shindo superimposed) (Published by Kochi Prefecture, December 2012)

This shows the strength of the shaking.

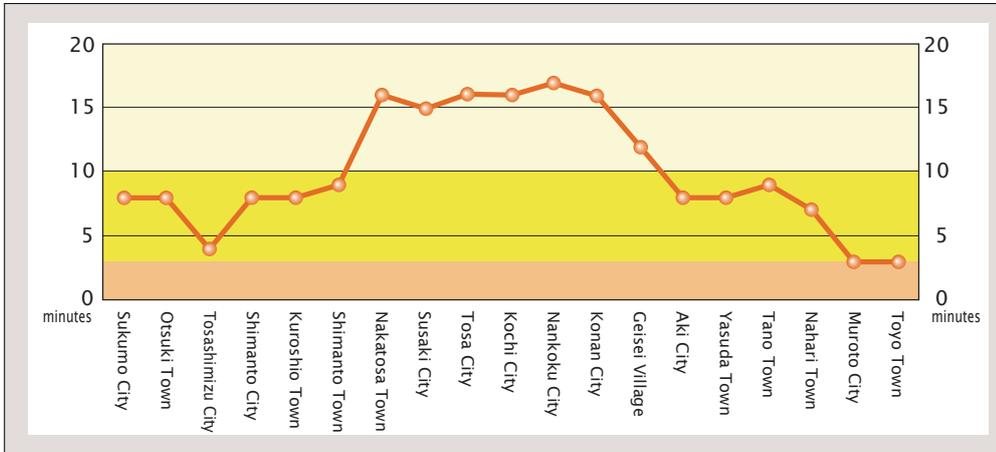


High Tsunami Will Arrive Quickly

In Kochi, a 1 meter tsunami will arrive at the coast within 3 minutes of the earthquake. Most areas along the coast, except for the Uranouchi Bay and Urado Bay, are expected to receive a tsunami of over 10 meters.

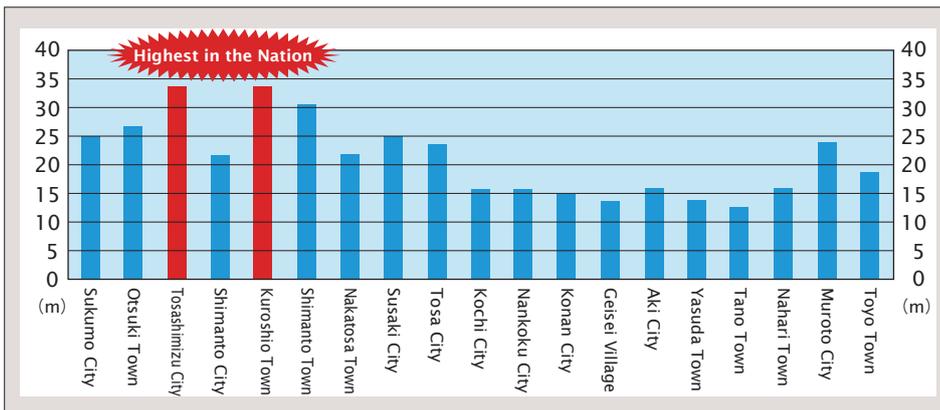
■ The arrival time of a 1 meter tsunami along the coast (published by the Cabinet Office, August 2012)

You can see when a 1 meter tsunami will arrive at the municipalities along the coast.



■ The height of the tsunami along the coast (published by the Cabinet Office, August 2012)

You can see the height of tsunami that will arrive at the municipalities along the coast.



Long Term Inundation (Flooding)

When an earthquake occurs, 13 municipalities within the prefecture are expected to drop in elevation and be inundated for long periods of time.

Because the ground level in Kochi City will sink by about 1.5 meters when the earthquake occurs, about 2800 hectares of the city center will be flooded for long periods of time, possibly making various municipal services unavailable. In the same way, Sukumo City is expected to sink about 2.4 meters, which would cause long term flooding over about 559 hectares of the city center.



After the Nankai Earthquake in 1946
(Land Subsidence at 1.15m)



Current (as of September 2011)

The city center 3 days after the Nankai Earthquake in 1946, taken from Mt. Godai in Kochi City. You can see that a large area of the city is flooded from the land sinking.
(Provided by Kochi City)

About the Nankai Trough Earthquake Extra Information (*rinji jōhō*)

■ What is the Nankai Trough Earthquake Extra Information?

When a large earthquake occurs in the Nankai Trough, there is an increased risk of another large-scale earthquake occurring somewhere else in the trough. In this event, the Japan Meteorological Agency will broadcast an alert, called the Nankai Trough Earthquake Extra Information (*rinji jōhō*).

There are two types of extra information.

1. *Rinji Jōhō (Kyodai Jishin Keikai)* → Major earthquake warning ***Extremely dangerous***
2. *Rinji Jōhō (Kyodai Jishin Chūi)* → Major earthquake advisory

■ What should I do if a *rinji jōhō* alert is issued?

Your course of action in case of a *rinji jōhō* alert depends on several factors, including your current location, the amount of elapsed time since the alert was broadcasted, and the type of alert announced (warning vs advisory).

Possible Scenario: *Rinji Jōhō (Major Earthquake Alert)* was broadcasted

- In areas where there is not enough time to evacuate from a tsunami after an earthquake occurs.

First week after alert:	Evacuate in advance to the closest tsunami evacuation shelter.
Week two:	You can return home but double-check your earthquake preparations and stay on alert.
After two weeks:	You can slowly return to your everyday routine while continuing to take earthquake precautions.

- In all other areas

First two weeks after alert:	Double-check your earthquake preparations and stay on alert while continuing your daily routine.
After two weeks:	You can slowly return to your everyday routine while continuing to take earthquake precautions.

About the Kochi Disaster Multilingual Support Center

■ What is the Kochi Disaster Multilingual Support Center?

In the event that a large-scale earthquake occurs within the prefecture, the Kochi Disaster Multilingual Support Center will be established as a base to share information in multiple languages to foreign residents.

■ Kochi Disaster Multilingual Support Center Responsibilities

The center provides support for foreign residents affected by disasters through the actions listed below.

1. Providing information on disasters in multiple languages

Send out disaster-related information from Kochi Prefecture and other government agencies, as well as information on essential services like water, gas, and electricity, in multiple languages and simple Japanese.

Information from the center will be published on the sites listed below.

Organization	Platform	Details
Kochi Prefectural Government International Affairs Division (From April 1st, 2022: Culture and International Affairs Division)	Website	https://www.pref.kochi.lg.jp/soshiki/141901/ (From April 1st, 2022: Culture and International Affairs Division)
	Twitter	@Kochi_Kokusai
Kochi International Association (KIA)	Website	https://kochi-kia.or.jp/
	Facebook	https://www.facebook.com/KIA.Kochi.International.Association/
Kochi Consultation Center for Foreign Residents	Website	https://kccfr.jp/
	Instagram	kccfr_
Kochi Disaster Mitigation App (Kochi ken Bousai App)	Mobile App	A push notification alert will appear on the top right corner of the Kochi Disaster Mitigation App's homescreen whenever the International Affairs Division (From April 1st, 2022: Culture and International Affairs Division)'s website publishes updates regarding disasters. Tap on it to access the "Information from Kochi Prefecture" menu

2. Handling inquiries and consultations from foreign residents affected by disasters

Receive inquiries and provide consultation by telephone, email, and website, for both foreign residents affected by disasters and for Japanese people providing assistance to foreigners.

Contact Information

(Telephone Number 1) 088-821-6440

Multilingual support offered through services like three-way telephone interpretations (19 languages available)

(Telephone Number 2) 088-875-0022

(Form) <https://kccfr.jp/consultation>

(Email) consultation@kccfr.jp

Useful Vocabulary and Phrases

Vocabulary

1. 地震 (jishin) : Earthquake	13. 高台 (takadai) : Elevation / High Ground
2. 震源 (shingen) : Epicenter	14. 揺れ (yure) : Sway / Shake
3. 津波 (tsunami) : Tsunami	15. 安否 (anpi) : One's Safety
4. 避難 (hinan) : Evacuate / Escape / Take Shelter	16. 救助 (kyūjo) : Relief / Aid
5. 緊急安全確保 (kinkyū anzen kakuho) : Emergency Safety Measures	17. 救援物資 (kyūen busshi) : Emergency Provisions
6. 避難指示 (hinan shiji) : Evacuation Order	18. 消火 (shōka) : Extinguish a Fire
7. 避難所 (hinanjo) : Evacuation Shelter	19. 断水 (dansui) : Water Supply Disruption
8. 震度 (shindo) : Seismic Intensity	20. 停電 (teiden) : Power Outage
9. 余震 (yoshin) : Aftershocks	21. 警報 (keihō) : Warning
10. 危険 (kiken) : Danger / Dangerous	22. 注意報 (chūihō) : Advisory
11. 火事 (kaji) ・ 火災 (kasai) : Fire	23. 行方不明 (yukue fumei) : Missing
12. 逃げる (nigeru) : Escape / Run Away	24. 死者 (shisha) : Deceased

Phrases

① ○○に連れて行ってください。(○○ *ni tsurete itte kudasai.*)

Please take me to ○○.

② ○○が欲しいです。(○○ *ga hoshī desu.*)

I want ○○.

③ ○○が痛いです。(○○ *ga itai desu.*)

My ○○ hurts.

④ 家族が家の中にいます。(Kazoku *ga ie no naka ni imasu.*)

My family is in the house.

⑤ ○○語を話すことができる人を見つけてください。

(○○ *go o hanasu koto ga dekiru hito o mitsukete kudasai.*)

Can you please find me a person who speaks ○○?

⑥ ○○に電話をしてください。(○○ *ni denwa o shite kudasai.*)

Please call ○○.

Earthquake Preparation Simulation

1) How much will an earthquake affect your office or school?

- Please find out the Seismic Intensity (*shindo*) and write it here. *Shindo* → page 15
Your house or office or school's *shindo* : _____

2) Will a tsunami come to your house or office (school)?

Tsunami → page 16

- Please find out the height of the tsunami and when it will arrive and write it here.
Tsunami height : _____m Tsunami estimated arrival time : _____minutes

3) Is there an Evacuation Site (*hinan basho*) near your house and office or school?

- Please find out the closest *hinan basho* and write it here.
The closest *hinan basho* is : _____
A *hinan basho* is a safe place where tsunami will not reach (a tall hill or building).

4) How will you get to the *hinan basho*?

- Please walk to the nearest *hinan basho*.
→ Please check how long it took to get to the *hinan basho* and compare it with the estimated arrival time of the tsunami.

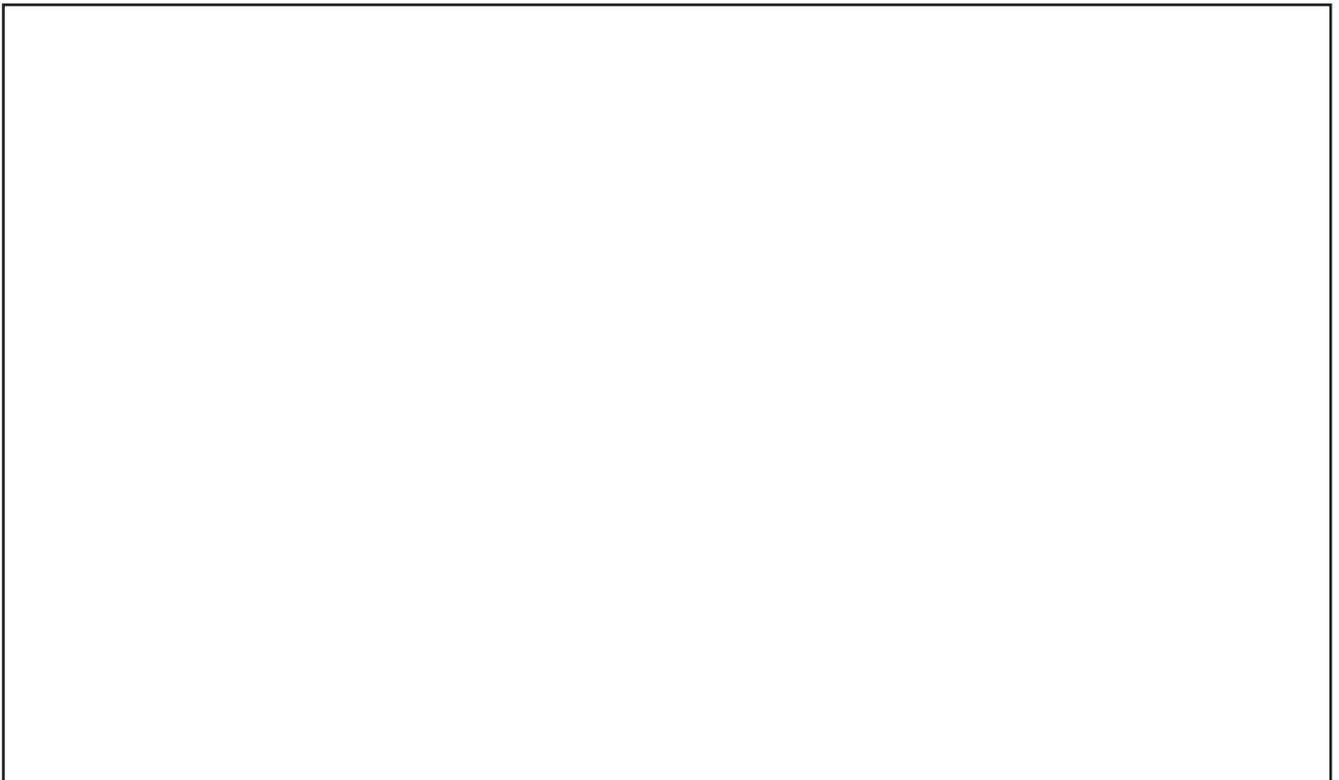
How do you find out?

You can find out by going to the division in charge of disaster prevention in your municipality. You can also find out on the prefectural website 「[南海地震に備えてGOOD!!](#)」.

Homepage <https://www.pref.kochi.lg.jp/sonaetegood/> (Japanese)

To find out where the *hinan basho* is, please ask your neighbors or people from your office or school.

- Please draw a map from your house (office) to the *hinan basho*.



Residence Procedures
ざいりゅうてつづき
在留手続

Employment and Labor
こよう ろうどう
雇用・労働

Health Care
いりょう
医療

Caring for Children
しゅっさん こそだ
出産、子育て、
こま 子どもの教育

こうち せいかつ そうだん
高知での生活についての **ご相談**は… など etc...

こうちけん がいこくじん
高知県外国人

せいかつ そうだん
生活相談センター

Kochi Consultation Center for Foreign Residents
高知県外籍人士生活咨询中心
Kochi Trung tâm tư vấn cho người nước ngoài
Pusat Pelayanan Konsultasi Masyarakat Asing di Kochi
고치현 외국인 생활상담센터

がいこくじん みな こま
外国人の皆さん、困っていることがあったら
なん そうだん
何でも相談してください。

くわしいことはホームページを
見てください。
▶ <https://kccfr.jp>

Instagram
kccfr_

対応言語

にほんご えいご ちゅうごくご かんこくご
日本語、英語、中国語、韓国語、ポルトガル語、スペイン語、
ベトナム語、インドネシア語、タイ語、タガログ語、
ネパール語、フランス語、イタリア語、ドイツ語、ロシア語、
マレー語、クメール語、ミャンマー語、モンゴル語

場所

こうちし ほんまち まるのうち いっかい
高知市本町4-1-37 丸の内ビル 1F

受付時間

げつようび どのうび にちようび しゅくじつ ねんまつねんし のぞ
月曜日～土曜日 (日曜日・祝日・年末年始を除く) 9:00～17:00

TEL: 088-821-6440 E-mail: consultation@kccfr.jp

Published: March 2022 (Third Edition)

Characters Created and Provided by: (有)やなせスタジオ

Published by: Kochi Prefecture International Affairs Division

Address: 1-2-20, Marunouchi, Kochi City 780-8570

TEL: 088-823-9605 FAX: 088-823-9296

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(From April 1st, 2022: 140201@ken.pref.kochi.lg.jp)

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