

What we can do to prepare: protecting ourselves from natural disasters

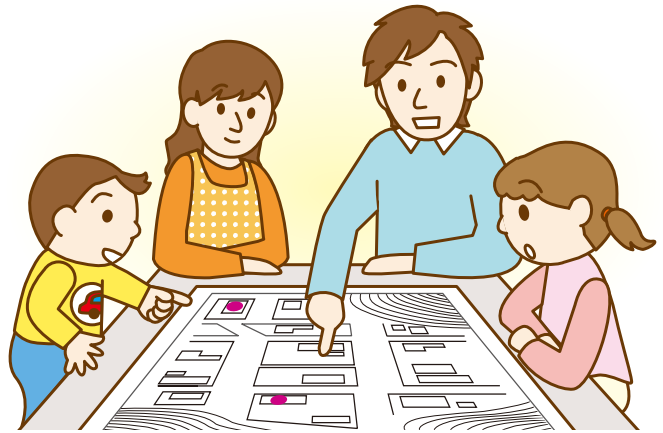
# Nishinomiya City Disaster Reduction Map



**Permanent Edition**  
October, 2014

# Make the time to talk about it with your family and friends

We have no way of knowing when and where a natural disaster will occur. It's possible your family will be in separate places when it happens. Talk with your friends and family in advance to plan a place to take shelter and a place to meet in case of a natural disaster. Take responsibility for protecting yourself, and take action to protect others in your community.



## Our family's emergency shelter (shelter location, relative's house, etc), meeting place, etc.

Meeting place

Phone

Meeting place

Phone

Meeting place

Phone

## Our Family's Disaster Reduction Notes

Family Name	Contact information at work and school	Notes

# Our Family's Disaster Reduction



Check and understand what to do in an emergency,  
And have the right supplies at hand.

- Talk about a meeting place and contact information in case of a disaster with family and friends. — P1
- Make sure we have a clear picture of what to do when taking refuge. — P3
- Prepare items that will be useful in a disaster. — P5
- Make sure furniture is stable, or place it in a location that reduces danger. — P6
- Have our home checked for earthquake readiness, and make necessary renovations. — P6
- Know how we will get information during a disaster. — P7
- Know what to do in an earthquake. — P10
- Know how to get to a safe place in a tsunami. — P13
- Know the warning signs of a landslide. — P15
- Know how to get to a safe place in a flood. — P17
- Know the spots in our neighborhood that are likely to be damaged in a tsunami, flood, or landslide. — MAP
- Plan several routes to access our emergency shelter. — MAP

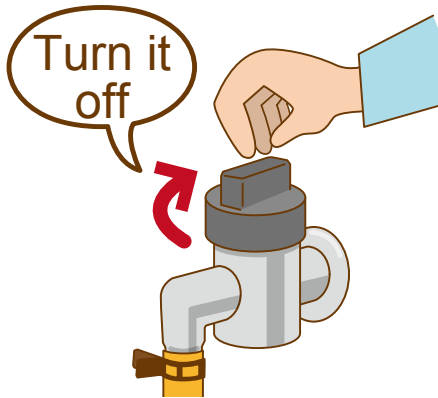
## Table of Contents

	Make a plan with family and friends	P 1
1	Preparedness in everyday life	P 3
2	Checking information during an emergency	P 7
3	What to do in an emergency...Earthquakes	P10
4	What to do in an emergency...Tsunami	P13
5	What to do in an emergency...Landslides	P15
6	What to do in an emergency...Floods	P17
7	What to do in an emergency...Typhoons, tornadoes, lightning strike	P19
8	Using the Disaster Reduction Map	P21

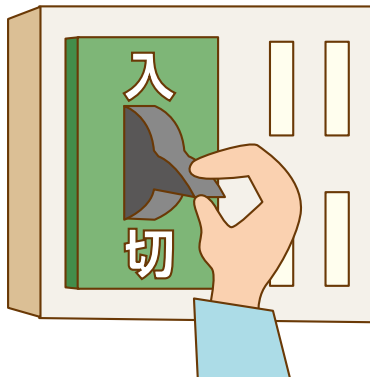
# Preparedness in everyday life

## When you leave to take refuge

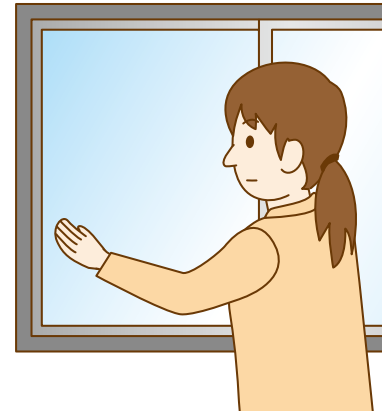
1 Shut off the gas



2 Turn off the breaker



3 Lock up



Emergency bag

4 Carry a backpack filled with emergency items

5 Put on a helmet or a protective hood

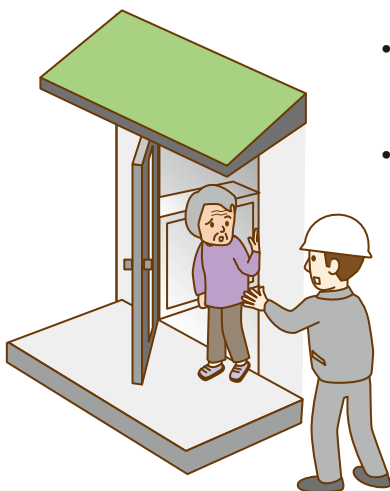
6 Depending on the situation, bring minimum necessary items

7 Bring something that helps to identify you

## There are people waiting for you to help them

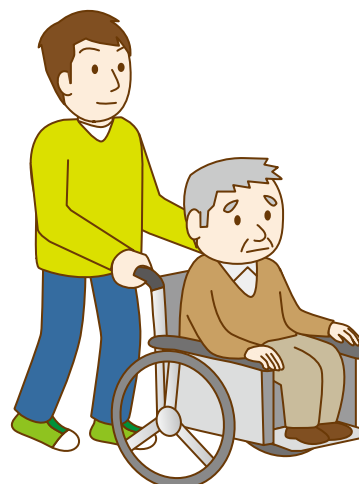
Elderly people and people with disabilities will have difficulties taking emergency shelter, so everyone in the community must work together to help them. It's important to communicate with your neighbors on a day-to-day basis.

### Elderly People



- First, call out to them.
- Use a wheelchair or a stretcher, or carry them on your back to a shelter.

### People who use a wheelchair



- Help to push the wheelchair, and cooperate with other members of the community to get the person to a shelter.



### People with intellectual or mental disabilities



- First, help them to calm down.
- If they don't understand what you are saying, take them by the hand and help them get to a safe place.

### People who are deaf



- Stand where they can see you, speak with clear mouth movements. Use sign language, write messages, or use body language to communicate accurate information.

### People who are blind



- First, call out to them.
- When guiding them to a shelter, have them hold your arm at the elbow with their non-cane hand, and walk slowly.

### People who are pregnant or who have a baby



- Help to carry the baby or the bag of emergency supplies.

### People who don't speak Japanese



- Use body language to communicate necessary information.

## Please help deaf people who use the following signs

#### Help me



One hand is in a "thumbs-up" position.  
The other hand is open, and taps the closed hand towards the body twice.

#### Please



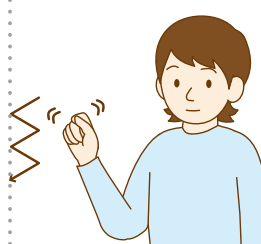
One hand is held up (like praying) and then moved downward.

#### It hurts



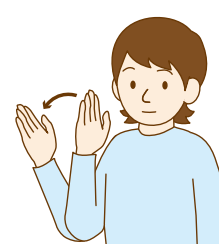
The five fingers of the hand are curved, and the hand is moved back and forth.  
Near the head = headache  
Near the stomach = stomachache

#### Write it



Thumb and forefinger are pinched and moved like when writing.

#### Please



One hand is held up (like praying) and then moved downward.

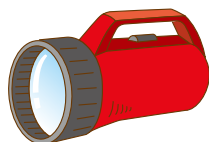
If you don't understand, have them write it down.

## Prepare the following items for an emergency kit

The following items are considered useful when a low-6 level earthquake happens.

# BEST 10

### 1 Flashlight



### 2 Water



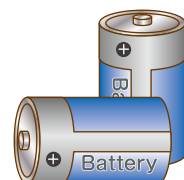
### 3 Portable radio



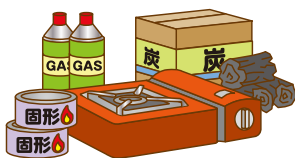
### 4 Food



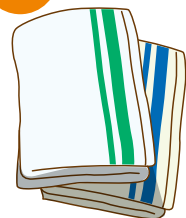
### 5 Batteries



### 6 Portable cooking stove



### 7 Towels



### 8 Cash



### 9 Plastic tank



### 10 First aid set



Source: Institute for Fire Safety and Disaster Preparedness (August, 2007)

#### Other useful items

Work gloves, helmets, plastic bags, lighters, bank account information, copies of insurance and drivers licenses, candles, pen and paper, copies of medical prescriptions, cart or dolly for carrying things, toothbrush set, clothing, protection against cold, first aid blanket, etc.

\* Set aside enough food and water for about a week. (Each person needs about three litres of water per day)

\* There are limits to how much you can carry in an emergency bag. Choose what you need most from the above list. Estimate 15kg for an adult man, and 10kg for an adult woman.

## Disaster readiness for pets (animals)

### Humans are not the only ones who are affected by disasters

- Make sure your cat or dog has a license, tag, or microchip so they can find their way back to you in a disaster.
- Emergency shelters will have separate spaces for humans and pets, and each owner will be responsible for their own pets' care. Prepare some emergency supplies for your pet.
- Some people may dislike animals, or have an allergy. Show good manners in order to ensure your pet doesn't cause discomfort or harm to others.

#### Prepare the following items in advance

- Food and water
- Toilet items (pet sheets or kitty litter)
- A pet cage, lead, and harness to use at the emergency shelter (cats will also require this)
- Pet license, identification tag, photograph (you will need this when searching for your pet)

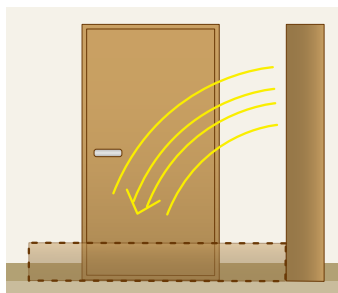


## When furniture collapses, it blocks your escape route

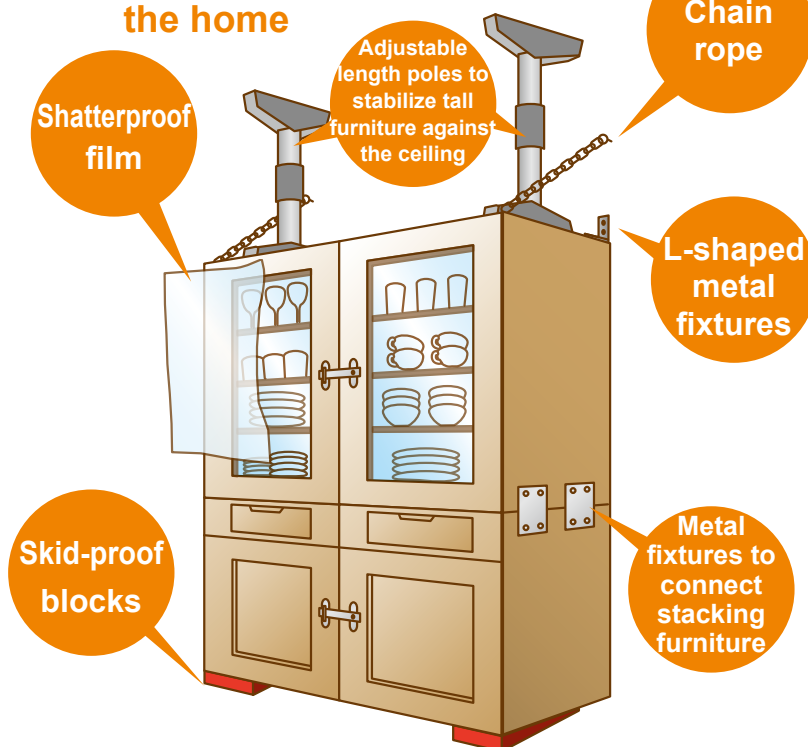
Expect that your furniture will fall down in the event of an earthquake, and stabilize your furniture (chest of drawers, television, piano, etc) or adjust its placement. Make sure your home is easy to evacuate in an earthquake, and that your furniture won't topple and cause injuries. Keep cushions or slippers close at hand to help avoid stepping on broken glass..

### Ways to ensure a smooth evacuation

- Don't leave anything in hallways or near the entrance.
- Don't leave anything that could fall over easily outside the bathroom door or other doors that open outwards.



### Ways to minimize injuries in the home



## Have your home checked for earthquake readiness, and make necessary renovations.

Approximately 90% of the deaths in the Hanshin-Awaji Earthquake of 1995 were caused by the collapse of buildings and furniture. Over 200,000 homes were either completely or partially destroyed. Many of the buildings that collapsed were built before the new quake-resistance standards were implemented in 1981.

If your building was built before 1981, it's likely that it was built according to old quake-resistance standards and may not be sufficiently quake-resistant. It's important to get your home checked and do seismic retrofitting as soon as possible.



**Note**

### Homes built before 1981

Hyogo prefecture and Nishinomiya City offer partial subsidies for seismic retrofitting.

For details, contact the Nishinomiya City Building Guidance Division (0798-35-3705) about the "Wagaya no Taishin Kaishu Sokushin Jigyo" (Program for promoting seismic retrofitting for homes).

### Join the Phoenix Mutual Aid System (Hyogo Mutual Aid System for Housing Reconstruction)!!

This highly reliable system is run by the Hyogo Prefecture Government in accordance with the prefecture's ordinances. Pay 5000 yen per year to be insured for a maximum of 6 million yen. A new system was introduced in August 2014 where one can be eligible for an extra payment of up to 250,000 yen by paying an extra 500 yen. For details, see the advertisement page, or contact the Hyogo Prefecture Mutual Aid Fund for Housing Reconstruction (078-362-9400).



# 2 Checking information during an emergency

Nishinomiya City has several systems in place for transmitting information before and after natural disasters. Some systems may require advance registration to receive the information, so check if you are registered. By sharing the information with others in your neighborhood, you can help confirm people's safety and support their evacuation. Check up on information to first protect yourself, and then to help others in your community.

**During a natural disaster, a lot of information is transmitted, so actively keep informed**





# Accessing Information

## Nishinomiya Bosai Net

### Emergency Mail is delivered during a natural disaster

Register your e-mail address with the Nishinomiya Bosai Net, you will receive messages (regarding evacuation, etc.) to your mobile phone or smartphone in the event of an emergency or natural disaster. Emergency weather information (heavy rain alerts, etc) is also sent out on this system.

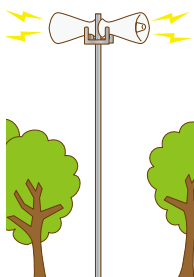
#### How to register

Scan the here to register by mobile etc.



### The emergency speaker system makes a regular test broadcast (17th of each month at 5pm)

The emergency speakers installed around the city in parks, schools, and so on are used for a test broadcast on the 17th of each month at 5pm. The goal of this is to make people aware of the locations and volume of the speakers, so that people can be aware that they may need other ways of getting emergency information.



## Disaster Emergency Message Dial (171)

During an earthquake or other large-scale natural disaster, telecommunication lines can get jammed with calls, and it can be hard to reach people by phone. By dialing 171, people can check for information about the safety of others, and leave messages of their own. Learn how to use it before you need it.

#### How to use the Disaster Emergency Message Dial 171

**1 7 1** Dial 171.

Follow the voice prompts.

To record a message. To play (listen to) a message.

**1**

**2**

Voice prompts will guide you.

The phone number of the person in the affected area. (ooo)△△△-xxx

Only phone numbers from within the affected area can register to receive messages.

Record a message  
(30 sec or less)

Listen to a message

Even when there is no disaster, on the 1st and 15th of each month and during Disaster Preparedness Week (August 30 to September 5), people are invited to try using the Disaster Emergency Message Dial service, so use this time to practice with your family.

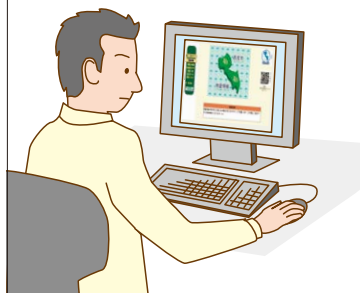


## Nishinomiya Rain Volume Information

Information about rain volume is available in real time from 19 locations around Nishinomiya.

#### How to view

Scan the here by mobile etc.



## River Information

Information about Nishinomiya's rivers is available in real time. Find out information about the rivers, rain volume in various locations, and the water level of the rivers.

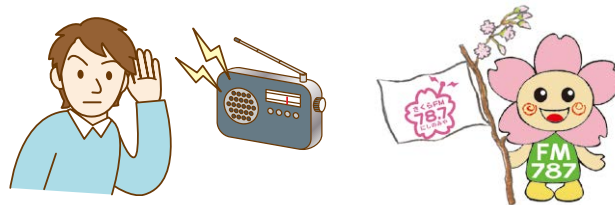
#### How to view

Scan the here by mobile etc.



## Sakura FM Emergency Announcement Radio

When necessary, Sakura FM (78.7MHz) provides information about natural disasters instead of normal broadcasting. Further, Sakura FM sells emergency announcement radios that will automatically turn on and broadcast the same information as the emergency speaker system in an emergency, even if the power is turned off. The city offers a subsidy program in order for people to purchase a radio.



## J-anpi (All-Japan Safety Confirmation Portal for Disaster)

J-anpi collects the safety status information from telecommunications carriers and other information services and stores them in one place so they can be searched and checked on one website.

#### How to search

Scan the here by mobile etc.



# Evacuation Information

When a typhoon or other natural disaster is predicted, the Japan Meteorological Agency will issue advisories and warnings. When heavy damage is predicted to occur, the city will issue Evacuation Preparation Information, an Evacuation Advisory, or an Evacuation Order.

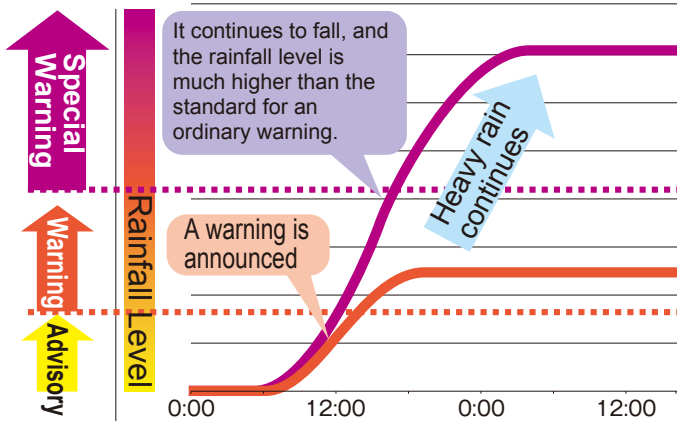
Understanding this evacuation information is an important part of protecting yourself against natural disasters.

Type		What to do
Weather Information	Advisory	Keep informed about weather information and be aware of local weather conditions.
	Warning	Be at alert and prepared to evacuate.
	Special Warning	Take measures to protect yourself immediately.
Evacuation Information	Evacuation Preparation Information	Elderly people, children, people with disabilities, and other people who require assistance should evacuate now.
	Evacuation Advisory	Help each other to get to the emergency shelter quickly. Avoid using a car as much as possible, and walk or use a bicycle to evacuate.
	Evacuation Order	Go to the emergency shelter immediately. If you can't evacuate, then take action to protect yourself.

## About the Special Warning

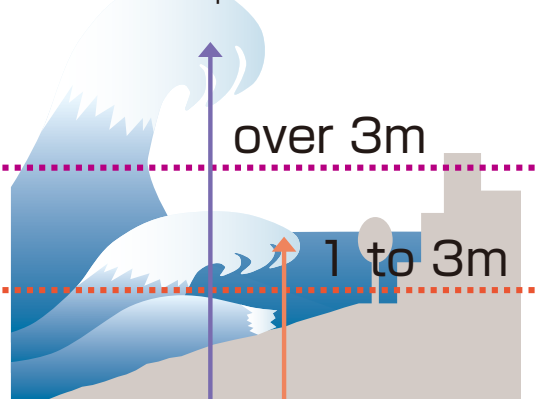
### Heavy Rain

This is issued when there is a likelihood that a once-in-ten-years level of heavy rain will fall. (\*Special Warning Example)



### Tsunami

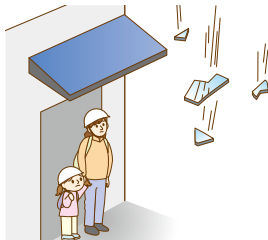
This is announced when there is a high likelihood that a large tsunami is coming that will have an impact inland.



When a large-scale natural disaster become considerably more dangerous, a new "Special Warning" will be issued by the Japan Meteorological Agency, urging maximum vigilance. If a Special Warning is issued, take steps to protect yourself immediately.



## Take steps to protect yourself



When danger is imminent, do not only go to the designated emergency shelter, but also think about how to secure your own safety first, and take steps to protect yourself.



# 3 What to do in an emergency...Earthquakes

The Hanshin-Awaji Earthquake that happened on January 17, 1995 resulted in many lives lost in Nishinomiya City. We must not let the memory of the disaster fade, and should put to use our experiences and training. We must be prepared to take action in case of a disaster.

## What to do in an emergency... at home

If you suddenly feel large shaking, first make sure you are safe. Hide under a desk or table, and hang on tightly to a table leg. If possible, use a cushion or pillow to protect your head and stay away from large pieces of furniture while you wait for the shaking to stop.

### Bathroom

If you feel shaking, first open the door, and secure an escape route, then wait for the shaking to stop. If you're in the bathtub, cover yourself with the lid and protect your head.

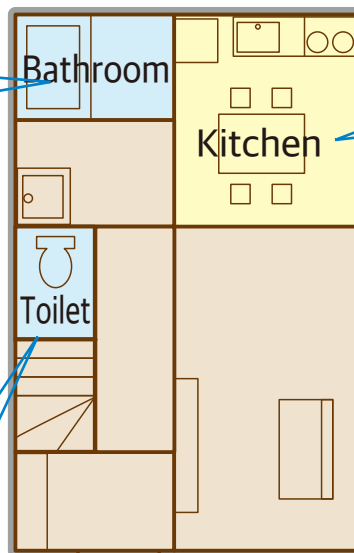


### Toilet

If you feel shaking, open the door and secure an escape route, then wait for the shaking to stop. The toilet tank might fall down, so be careful.



### In an ordinary house



### Kitchen

Hide under a table, and wait for the shaking to stop. It's dangerous to try to turn off the stove. Wait until the shaking stops.



### Bedroom

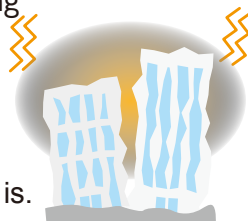
If you are woken up by shaking, hide under your blankets, or if possible, crawl under the bed and protect yourself.



### In a high-rise condominium

In the higher floors of a condominium, the shaking can be greater than on the ground,

- so be careful. Hide under a sturdy desk, and wait for the shaking to stop.
- Don't use the elevator.
- Make sure you know where the emergency exit is.



### Around the house

Be careful of low walls that might collapse and things like potted plants on a veranda.

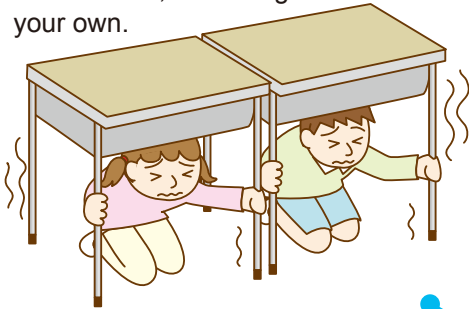




# What to do in an emergency... away from home

## At School

- Hide under a desk and protect yourself from falling objects. Don't move on your own, but wait for instruction of the teacher.
- If you are in the gymnasium, school grounds, or a hallway, gather in the middle and crouch together.
- There can be dangers along the school route, so don't go home on your own.



## Workplace

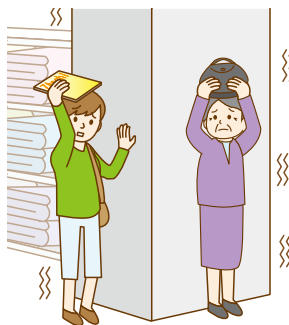
- Watch out for falling office machines, hide under a desk and grip a leg until the shaking stops.
- Window glass can break, so stay away from the windows.
- When evacuating outside, watch out for falling objects and avoid using the elevator.



## Inside a building

### Supermarkets, Department Stores

- Protect your head with a bag or something, and stay away from showcases and other items that can break.
- Hide under a sturdy table, or stand near a pillar or against a wall.
- Rather than run for the exit, follow instructions of staff. Use the stairs to evacuate.



### Theatre, Hall

- Crouch down between the seats, and protect your head with your bag.
- Rather than run for the exit, follow instructions of staff.



### Underground Street

- Even if the power goes out, stay calm and wait for the emergency lights to go on.
- If there's a fire, hold a handkerchief or something over your mouth and nose, crouch down, and hug the wall as you evacuate.
- Rather than run for the exit, follow instructions of staff.



### Shopping Area, Residential Area

- Protect your head with your bag, and escape to an open area.
- In shopping areas, watch out for falling glass and billboards, as well as vending machines that can tip over.
- In a residential area, stay away from walls made of concrete blocks or rocks, gateposts, and other things that could fall down.



### On the Train

- The train may stop suddenly, so hang on to a rail or strap.
- If the train stops outside a station, wait for directions of a staff member before leaving the train.
- Stay calm and follow the instructions of the staff.



### Seaside, Riverbank

- Quickly move away from the area to a safe place.
- If on the seaside, find out if there is a tsunami coming.



## Outside

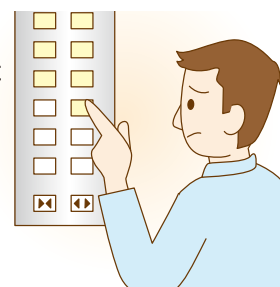
### Driving in a Car

- If you hear an earthquake early warning or other warning, gradually slow down, pull over to the left side of the road, turn on your hazard lights, and turn off the engine.
- After the shaking stops, stay in your car and listen to earthquake information on the car radio.
- When you leave your car, keep the key in the ignition and leave the car unlocked.



### In an Elevator

- Push all the floor buttons, and get off at the first floor it stops at.
- If you are trapped in the elevator, push the emergency button until someone comes to help you.



In Nishinomiya City, the Uemachi Fault Group could cause another level 7 near-field earthquake like the Hanshin-Awaji Earthquake, so it's important to be prepared to take action in an emergency.

# 4 What to do in an emergency...Tsunami

When the Nankai Trough Megathrust Earthquake happens, a large tsunami is likely to come inland. The maximum height of a tsunami that would come to Nishinomiya is 3.7m (Hyogo Prefecture estimate released December 2013), which is about the height of the second story of a house.

## Preparing for a Tsunami

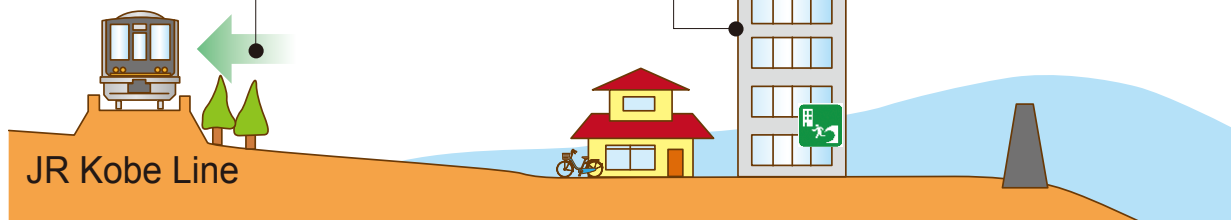
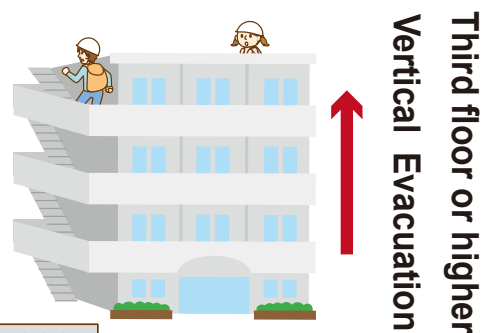
When the Nankai Trough Megathrust Earthquake comes, it is predicted that a tsunami will arrive approximately 90 minutes later, and 112 minutes later a 1m tsunami will come. The only way to protect yourself from a tsunami is to take shelter **“as fast as possible”**, **“as far as possible”**, and **“as high as possible”**. If a tsunami warning is issued for the Hyogo Prefecture Seto Inland Sea coast, or if a slow shaking continues for more than one minute, take shelter immediately.

## What to do in an emergency

- 1 If possible, take shelter on the north side of the JR Kobe Line (horizontal evacuation)



- 2 For elderly people, people who can't evacuate quickly, and people who don't have much time to evacuate, go to the nearest Tsunami Evacuation Building. (vertical evacuation)



- 3 When evacuating, don't use a car. Walk, or use a bicycle.



- 4 A tsunami will come more than once, so take shelter until the tsunami warning is canceled.



## Tsunami Evacuation Building

- When you need to take emergency shelter from a tsunami, use a tsunami evacuation building. As of April 2014, there are 235 facilities, 388 buildings.
- Tsunami evacuation buildings display the sign shown at the right. Check the included tsunami hazard map and make sure you know where to find the tsunami evacuation buildings in your neighborhood.
- \*Apartment buildings and other private buildings are designated tsunami evacuation buildings thanks to the good graces of the owners and residents. They can also be used to evacuate during a flood.



つなみひなん  
津波避難ビル  
Tsunami Evacuation Building

## Tsunami Awareness Signs

Please take note of the various signs displayed in areas south of the JR Kobe Line.

### Elevation Sign



Elevation of that spot  
\*The height above sea level of that place.

### Call to Tsunami Evacuation



This place will be dangerous during a tsunami, so people should evacuate.

### Emergency Evacuation Site Sign



Indicates a place that is safe during a tsunami

In the Tohoku Earthquake, the cause of death for 90% of the victims was drowning in the tsunami. The only way to protect yourself from a tsunami is to **run away**. Every minute, every second counts.

**If a tsunami warning is issued for Hyogo Prefecture Seto Inland Sea coast, or if an earthquake continues for more than a minute,**



## Participate in Drills

It's easy to think that disasters can't happen to you, but it's impossible to know when they will happen. It's hard to quickly think and do things you don't do normally. Actively participate in a variety of local drills conducted by the city so you can stay calm and do the right thing in an emergency.

# 5 What to do in an emergency...Landslides

In Nishinomiya City, places that are at risk of landslide damage are given designations such as “Landslide Disaster Risk Area” and “Cliff Failure Risk Area”.

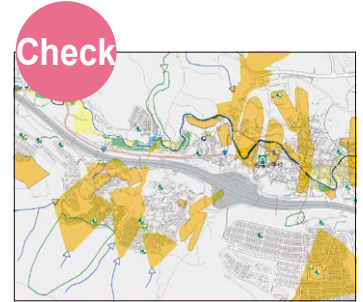
Learn when to take shelter, so you can protect yourself from landslide disasters.

## Preparing for a Landslide Disaster

After a heavy rain alert or heavy rain warning is issued, if it continues to rain heavily, risks of landslide disasters such as mudslides increase.

**Check the position of your home on the Landslide Disaster Hazard Map**

- Find out if your home is in a Landslide Disaster Risk Area on the Landslide Disaster Hazard Map. (There are no landslide disaster risk areas south of the JR Kobe Line.)



**Watch Rainfall Information**

- Rain is the main cause of landslide disasters. Generally, you should exercise caution if more than 30mm falls in an hour, or total rainfall exceeds 100mm. (For sources of this information, see page 8)



**Be Aware of Landslide Disaster Warning Information**

- When a heavy rain warning is in effect and danger of landslides increases, Hyogo Prefecture and the Japan Meteorological Agency will release landslide disaster warning information together.
- If landslide disaster warning information is issued, be extremely vigilant, and decide if you need to take shelter. Even if landslide disaster warning information is not issued, be aware of other disaster reduction information as well as possible signs of an impending landslide.



Landslide Disaster Warning Information

## Types and Characteristics of Different Landslide Disasters

Type	Advance signs
<p><b>Cliff Failure (The collapse of a steep slope)</b></p> <p>Steep slopes and mountain faces can suddenly collapse after heavy rain, continuing rain, or earthquakes.</p>	<p>Little stones start coming down.</p> <p>Water comes up to the surface.</p> <p>Cracks appear in the cliff.</p>

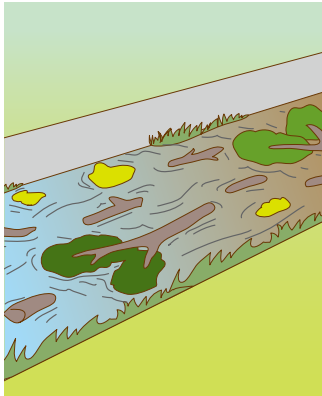
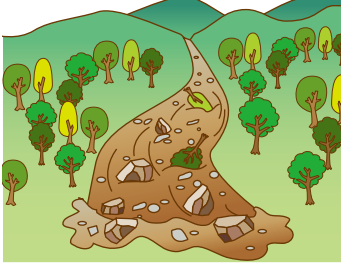


**Type**

**Advance signs**

**Mudslides**

Large amounts of dirt and rocks full of water suddenly flow along mountain streams and valley bottoms.



The river gets cloudy and floating wood can be seen.



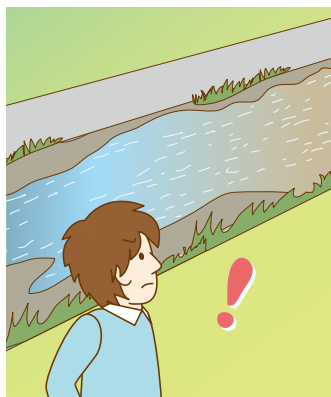
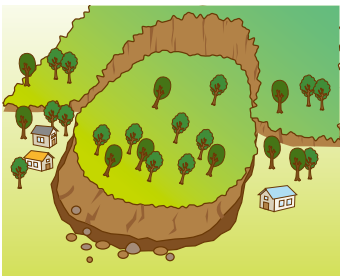
A rumbling can be heard in the mountains.



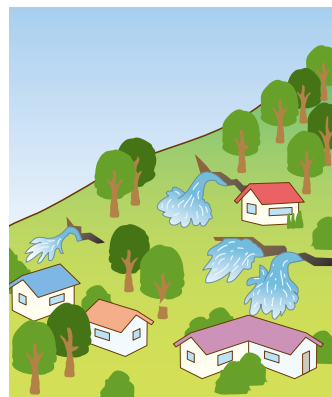
The water level in the river goes down.

**Landslide**

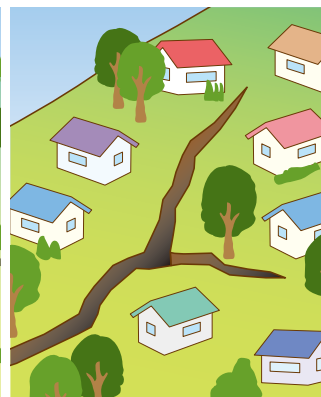
Part of a slope develops cracks and slides down. Similar to a cliff failure but it can happen even on gentle slopes.



The river gets cloudy.



Water comes out of the ground.



Cracks can be seen in the ground.

**What to do in an emergency**

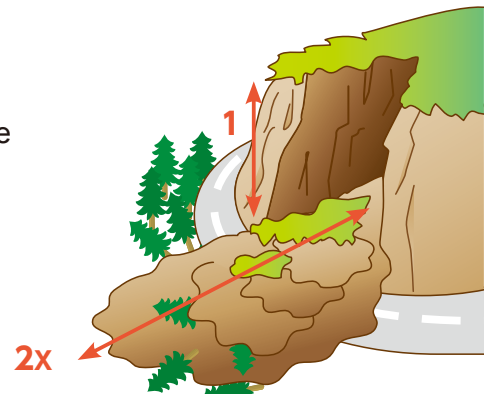
**Cliff Failure – Mudslide - Landslide**

If you start to feel something is strange or you might be in danger, seek shelter immediately.



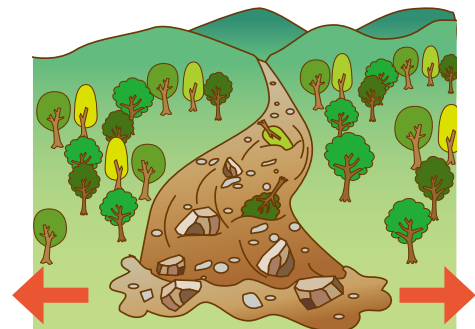
**Cliff Failure**

With a cliff failure, dirt can spread two times the distance of the cliff itself. Run as far away as possible.



**Mudslide**

With a mudslide, run away at a right angle to the mud flow.

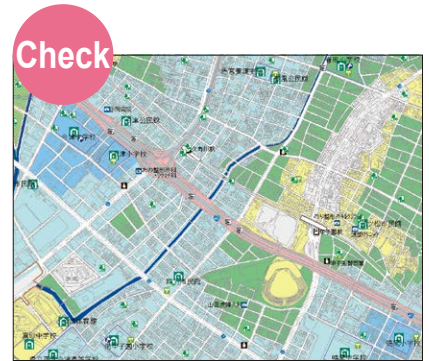


# 6 What to do in an emergency...Floods

In recent years, there have been more incidents of extremely heavy rain where over 50mm per hour falls in a local area. With extremely heavy rainfall like this, river levels can rise rapidly, and there is increased risk of flooding. It's important to be aware of weather information and rainfall patterns, and evacuate well in advance when necessary.

## Preparing for a Flood

- Check the position of your home on the flood map (flood area and flood depth).
- Be ready to evacuate well in advance.
- Underground areas are dangerous when it's raining heavily. Come up from underground as soon as possible.
- If the sky suddenly gets dark or thunder can be heard, stay away from rivers.
- If there is a change in weather, check disaster reduction information. (For sources of this information, see page 8.)



## What to do in an emergency

### When evacuating

- Always evacuate with at least one other person. Tie yourselves together with a rope before you go.
- If you have to walk through a flooded area to take shelter, be aware that muddy water may block visibility of ditches, manholes, and water channels. Use a pole or something to check before you walk.
- If the water is deeper than your knees, wait in place for rescue.



### If it's too late to run away

If you try to evacuate through a flood, it can become impossible to walk through the water. There is also the danger of falling through a manhole. If you're surrounded by floodwater, take shelter on the second floor of your home, or another sturdy and tall building nearby.

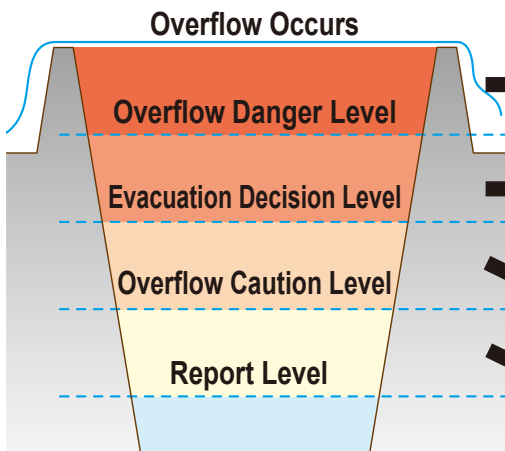


# Names for Different Water Levels – Guidelines for When to Evacuate

## Water Level

## Guidelines for When to Evacuate

Muko-gawa System



Water Level Measurement Location	Takedao	Namaze	Kobu-bashi	Kosone
Level at which the city issues evacuation orders	4.2m	4.3m	4.5m	6.0m
Level at which the city issues an evacuation advisory	3.1m	3.3m	3.8m	5.0m
Level at which the city issues evacuation preparation information	2.7m	3.2m	3.2m	4.0m
Level where it becomes necessary to monitor the water level	1.8m	1.8m	2.2m	2.6m

## Be Prepared for Sudden Rain

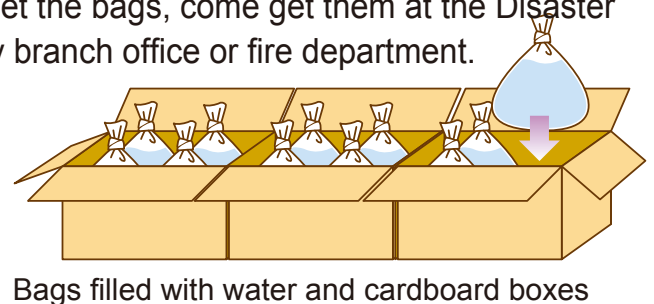
- During a sudden and unexpected strong rain, rainwater can flood into low areas. It's necessary to be cautious around places like rivers and channels where water builds up.
- Water can reach dangerous levels in just a short time.
- If you see dark clouds gather, monitor the weather reports.



Underground passageways could be submerged

## Protect Against Flooding at Home

At the early stages of a small-scale flood, knowing how to use household materials to keep out water can be very useful. The city provides each household with up to ten sandbags (just the bags) free of charge. To get the bags, come get them at the Disaster Response Division (6F of City Hall), or at any branch office or fire department.



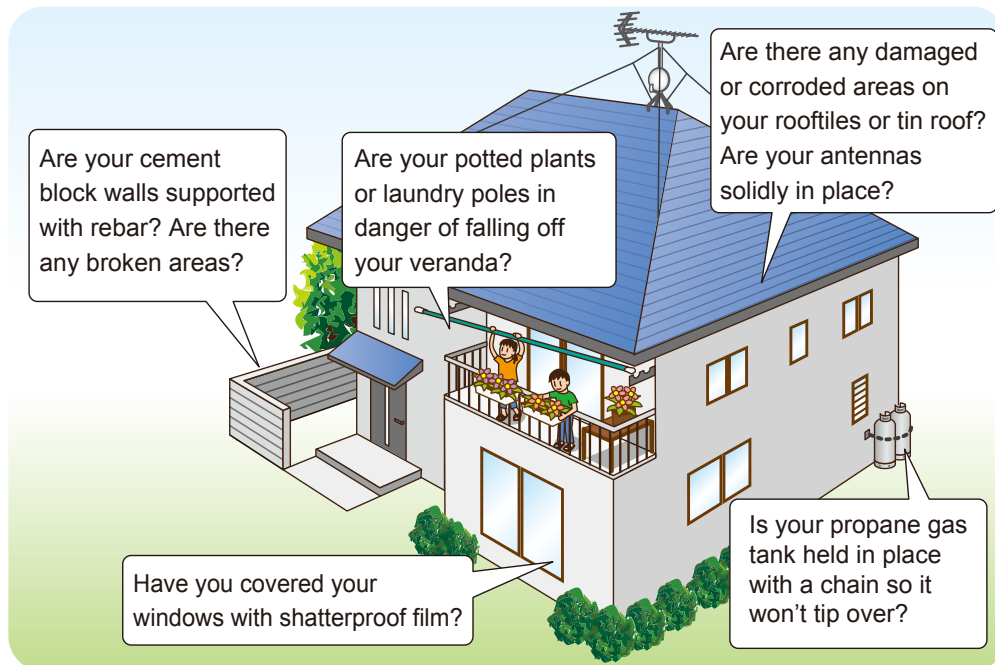
# 7

## What to do in an emergency... Typhoons, tornadoes, lightning strikes

In an average year, approximately 26 typhoons occur in and around Japan, and Nishinomiya City experiences not only damage from typhoons coming nearby, touching down, and raining heavily on the city, but the city also experiences damage from strong winds. Additionally, tornadoes can occur from typhoons, cold fronts, low pressure systems, and more. There are also reports of people being injured from lightning strikes, so be aware of sudden changes in weather.

### Preparing for a Typhoon

The kinds of damage a typhoon can cause include wind damage, water damage, damage from high tide, and damage from waves. It's possible to predict to some degree when a typhoon will come, how big it will be, and the path it will take, so stay informed of the newest weather information, and be prepared in order to avoid damage.



### Strength and Size of Typhoons

The Japan Meteorological Agency uses strength and size ranking to express the overall power of a typhoon.

■ Typhoon Strength Ranking (maximum wind speed) ■ Size ranking

Rank	Maximum wind speed
Strong Typhoon	33m/s to 44m/s
Very Strong Typhoon	44m/s to 54m/s
Violent Typhoon	Over 54m/s

Rank	Diameter of area with a wind speed of over 15m/s
Large Typhoon	500km to 800km
Very Large Typhoon	Over 800km

### What to do in an emergency...Typhoon

- Things will get blown around in the strong winds of a typhoon. Protect your head with a helmet or safety headgear.
- For information on evacuating due to heavy rains in a typhoon, see page 17.

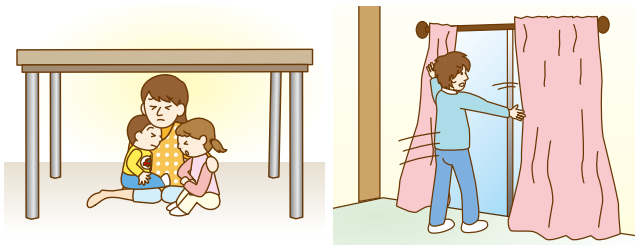
## What to do in an emergency...Tornado

Low, black clouds come near, thunder and lightning appear, large raindrops or hail falls, or a cumulonimbus cloud appears. These clues mean a tornado could be approaching. If you notice these weather changes, take action to protect yourself immediately.

### If you're inside

Flying items can break windows. The top part of a building can be blown off, or in some cases the wall of a building can be destroyed.

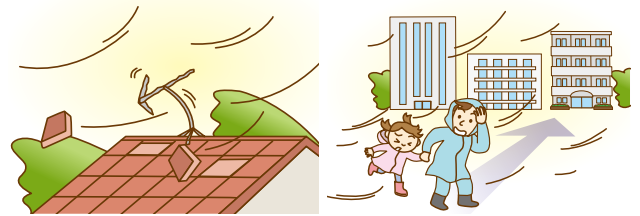
- Shut your windows and curtains
- Shut the storm shutters
- Move to the bottom floor of the building
- Move to the center of the house
- Hide under a strong table



### If you're outside

Many things can fly through the air at great speed, and wooden buildings can be destroyed.

- Escape to a sturdy building
- Watch out for flying objects
- Crouch in a canal or other depression in the ground
- Don't take shelter in a garage or shed
- Don't stay out to watch the tornado



## What to do in an emergency...Lightning

Lightning can strike anywhere, depending on the location of the clouds: on the ocean's surface, in a field, on a mountaintop, and more. If you can hear thunder and see storm clouds approaching, get to a safe place as quickly as possible. This is the best way to protect yourself from lightning. Ferroconcrete buildings, cars (not convertibles), and trains are said to be comparatively safe.

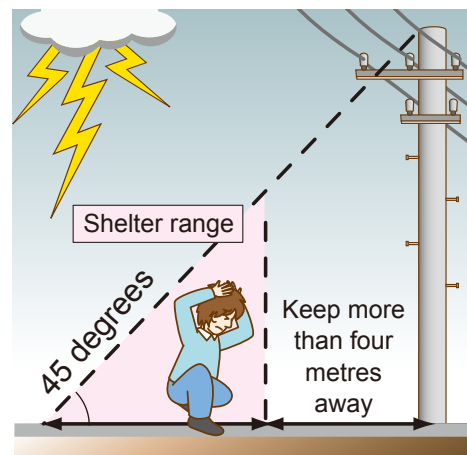
### Some places are more likely to be struck

- Places that are higher than the surrounding area.
- Lightning tends to travel down nearby tall objects.



### If there's no safe place nearby

- Look up at the top of tall objects like power poles at a 45 degree angle, and stay more than four metres away.



# 8 Using the Disaster Reduction Map

In order to be prepared for natural disasters, it's important to be well-informed about the area where you live.

The disaster reduction map can help you learn about what dangers are around your home, and where to evacuate. Use the disaster reduction map to prepare for natural disasters.

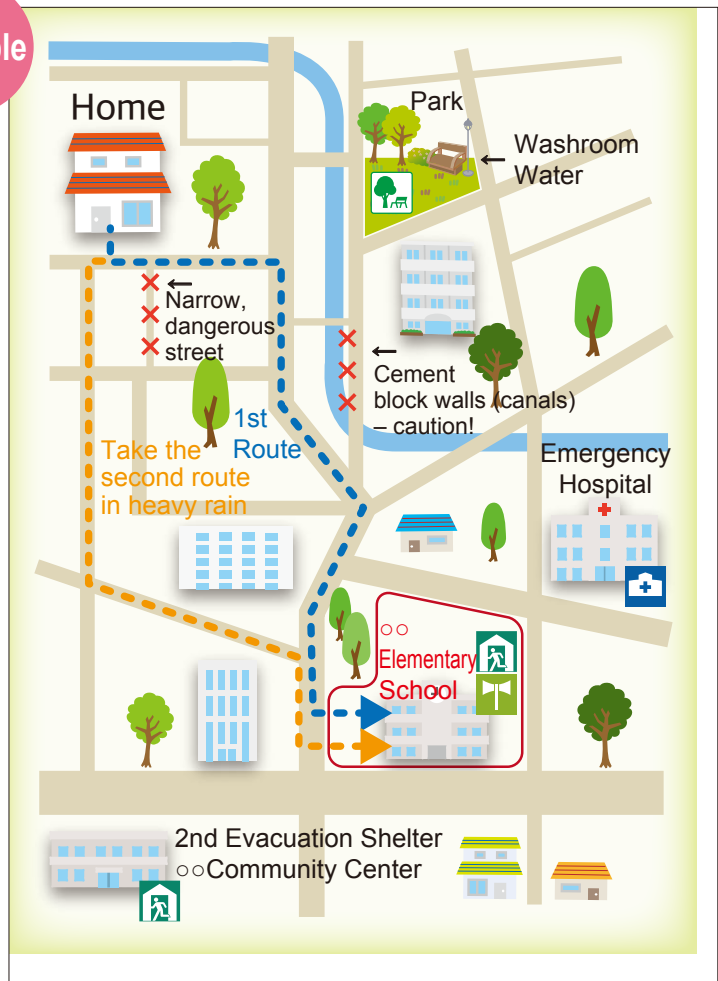
## How to use the disaster reduction map

### Check the disaster reduction map

- ① Find the location of your own home, mark it on the map, and check if you will need to evacuate or not during a natural disaster.
- ② Make sure you know where the nearby evacuation shelters are.
- ③ Try walking to your nearest evacuation shelter, find the safest evacuation route, and mark it on the map.

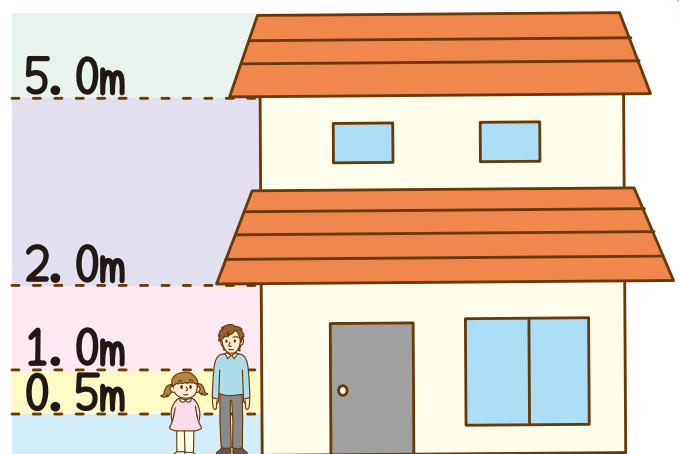
\*Select several shelters and routes so you are prepared in any situation.

### Example



### Buildings and Inundation Depth Indicators

The inundation depth shown on the flood hazard map represent the depth of water from the ground's surface at that point. The water depth indicators are shown in figure. Find your home, and check how deep the water will be.



# Emergency Telephone Numbers

Nishinomiya City

Disaster Prevention and Safety Bureau

**0798-35-3456**

only in cases of a disaster

Police	Telephone	Address
Nishinomiya Police Station	0798-33-0110	3-3, Tsudacho
Koshien Police Station	0798-41-0110	11-14, Koshien-nanabancho

Fire Station	Telephone	Address
Nishinomiya Fire Department	0798-26-0119	13-3, Ikedacho
Nishinomiya Fire Station	0798-23-0119	1-38, Tsuto-otsukacho
Kitashukugawa Branch	0798-74-0119	4-4, Matsukazecho
Naruo Fire Station	0798-49-0119	2-12, Furukawacho
Hama Branch	0798-22-0119	3-5, Nishinomiyahama
Kawaragi Fire Station	0798-63-0119	15-11, Takagi-higashimachi
Koto Branch	0798-54-0119	2-11-66, Kami-kotoen
Kita Fire Station	0797-61-0119	7-1, Najio-shinmachi
Yamaguchi Branch	078-904-0119	4-1-20, Yamaguchicho-shimoyamaguchi

Utilities		Telephone	Explanation
Nishinomiya City Water Department	Call Center	0798-32-2201	water outage muddy water water leakage etc
	weekday 8:45am-8:00pm	0797-61-1703	
	weekend 8:45am-5:30pm	078-904-2481	
	Outside Hours	0798-32-2271	
Kansai Electric Power		0800-777-8043	outage etc
Osaka Gas		0120-7-19424	gas leakage etc
NTT West	from Land Line Phone	113	telephone trouble etc
	from Cell Phone or PHS	0120-444-113	
Disaster Emergency Message Dial		171	record or playback the message according to guidance

What we can do to prepare: protecting ourselves from natural disasters

## Nishinomiya City Disaster Reduction Map



西宮市観光キャラクター  
みやたん  
© 2014 NISHI

**Nishinomiya City**

10-3, Rokutanjicho, Nishinomiya City Hyogo Prefecture, 662-8567

TEL: 0798-35-3151

URL: <http://www.nishi.or.jp/>

Unauthorized copying prohibited