

# Toin Town Disaster Prevention Hazard Map

In recent years, there has been frequent sudden heavy rain, typhoons, and earthquakes throughout Japan. Do not be complacent because there have been no disasters so far in your area. Instead, take necessary disaster measures to reduce damage as much as possible using this hazard map.



### How to use the hazard map

- 1 Check whether you should evacuate during a flooding/landslide disaster and during an earthquake at the "Consider evacuation action" section on the back of this leaflet.
- 2 Check when you should evacuate during a typhoon and heavy rain at the "Your required evacuation action" section on the right if you are a person who must evacuate the area.
- 3 Create a "Family evacuation plan" based on 1 and 2 above.

## How to obtain disaster prevention information

### Information delivered automatically

**Toin Town Official Twitter**  
Provides emergency and other information for Toin Town.

**Toin Town administrative information email delivery service**  
Provides emergency information such as evacuation information and evacuation shelter information by email. (Must register in advance)

**Official emergency broadcast system**  
Information is broadcast over speakers installed throughout the town to deliver evacuation instructions, etc.

**Early warning email**  
Mobile carriers simultaneously notify all people who own a cell phone or smartphone in the applicable area about urgent evacuation information, etc.

### Information you can obtain by yourself

**Japan Meteorological Agency website**  
Disaster information can be obtained from such as the Kikikuru and Rain Cloud Movement disaster websites.  
<https://www.jma.go.jp/jma/menu/menuflash.html>

**Toin Town website**  
Emergency information is posted at the top of the page.  
<https://www.town.toin.lg.jp/>

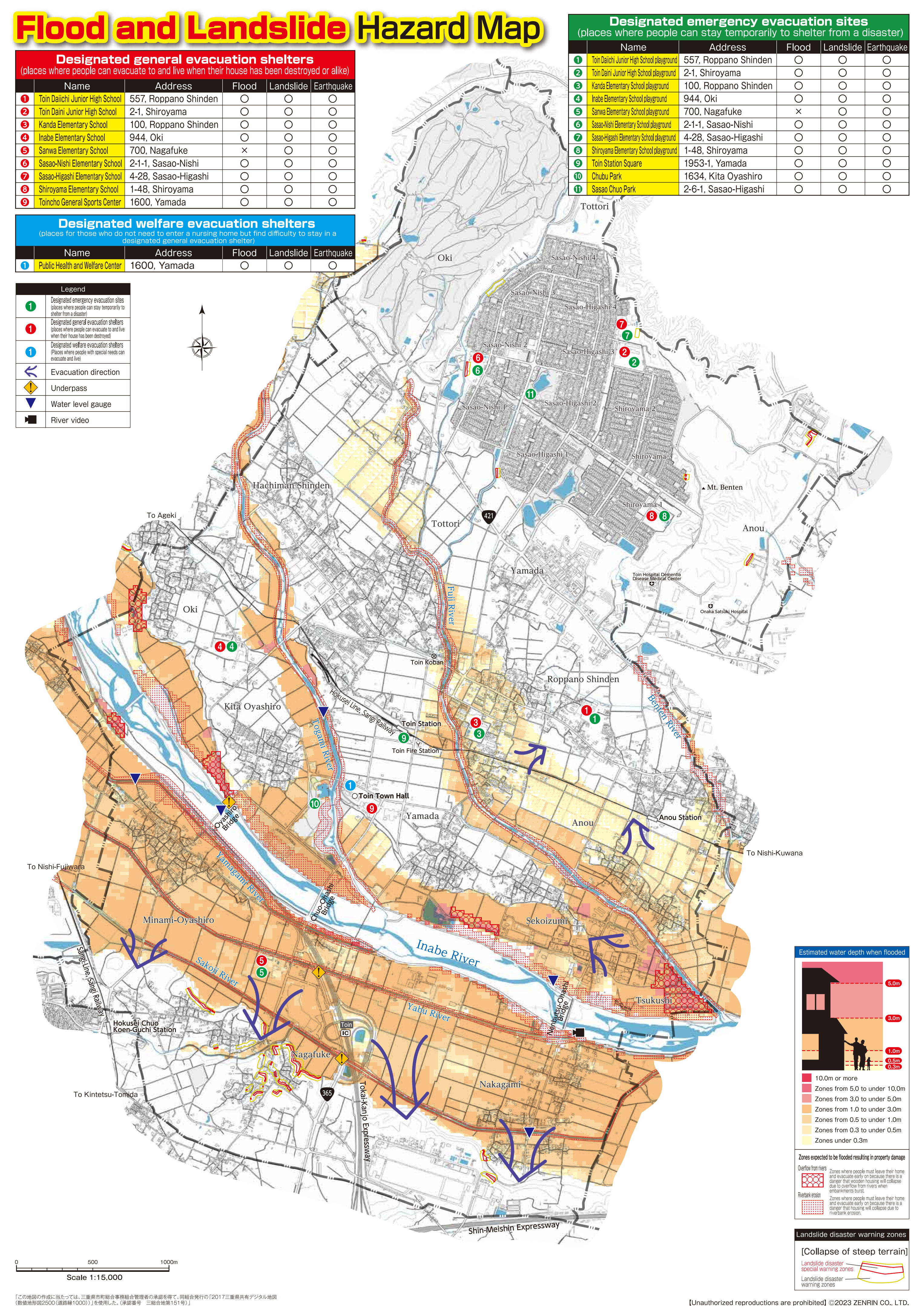
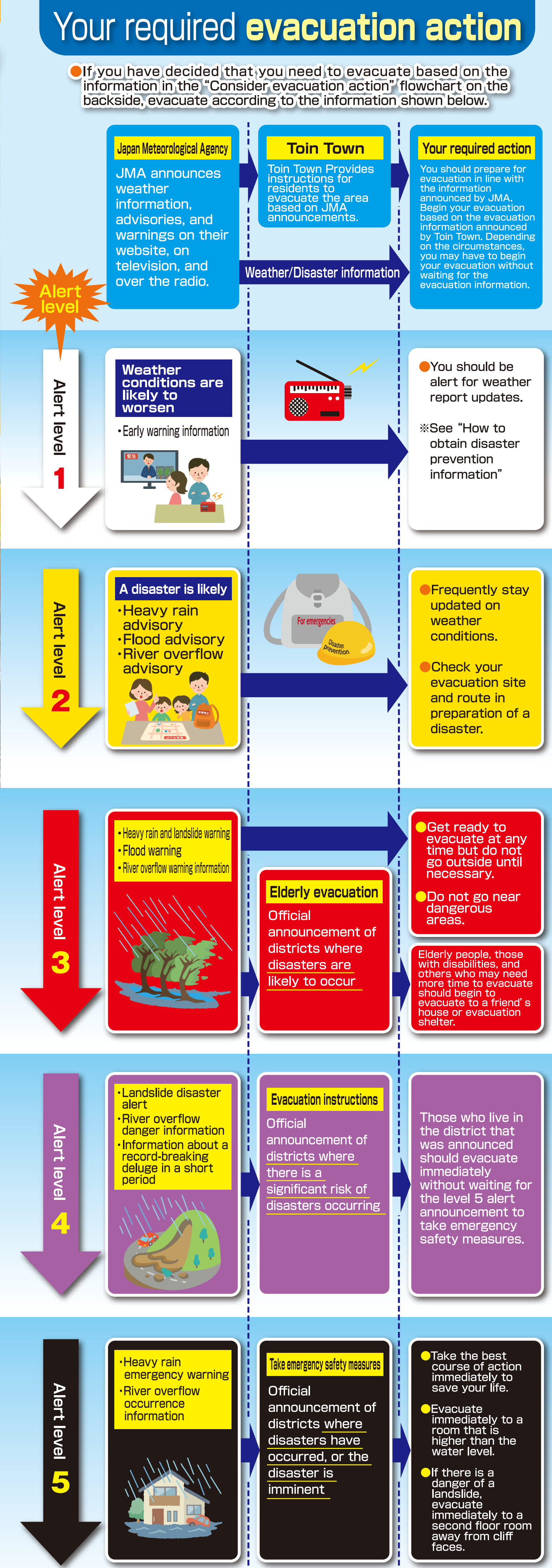
**BOSAIMIE**  
Mie Prefecture disaster information and disaster prevention resources can be viewed here.  
<https://www.bosaimie.jp/>

**Mie Prefecture Landslide Information Provision System**  
Mie Prefecture's landslide and weather information can be viewed here.  
<https://www.sabo.pref.mie.jp/Top.aspx>

**Disaster Information for River**  
River levels can be viewed here in real time using cameras installed along rivers.  
<https://www.river.go.jp/index>

### Contact information for disaster prevention organizations

Organization	Address	Telephone number
Toin Town Hall	1600, Ooaza-Yamada, Toin Town	0594-86-2800 Out of hours: 0594-76-6045
Kuwana City Fire Department	7, Ooaza-Eba, Kuwana City	0594-24-0119
Toin Fire Station	86-1, Ooaza-Roppanshinden, Toin Town	0594-76-7599
Inabe Police Station	320-1, Uno, Inabe Town, Inabe City	0594-84-0110
Inabe Police Station (Toin Koban)	133-4, Ooaza-Tottori, Toin Town	0594-76-7410
Inabe General Hospital	771, Ageki, Hokusei Town, Inabe City	0594-72-2000
Tsu District Meteorological Observatory	327-2, Shimazaki Town, Tsu City	059-225-7515





# Types of evacuation

## Horizontal evacuation (leaving the home to evacuate)

Evacuate to a designated general evacuation shelter or a **relative or friend's house located in a safe spot** when there is enough time to do so.

- ▶ Coordinate with neighbors to quickly evacuate the elderly, disabled, and children.
- ▶ Check to ensure that all fire sources have been turned off and that all windows and doors have been locked when leaving the home.
- ▶ Use familiar paths that pose no danger for evacuation routes.
- ▶ Evacuating at night is dangerous so be sure to evacuate while it is light outside.



## Vertical evacuation

When it is difficult to evacuate to an outdoor area due to sudden rainfall and flooding, first check that there is no risk of the building collapsing due to flooding and then evacuate to the 2nd floor or higher in your house or an adjacent building.



## Shelter at home

Evacuation shelters can have cramped living spaces in which people must live alongside each other during a disaster and it can be difficult to maintain privacy, which causes excessive stress to evacuees. Therefore, it may be better to take shelter at home **as long as there is no danger such as flooding or the house collapsing**. Be sure to stock up on items such as a portable gas stove and emergency toilet.



# Landslide disaster

This disaster occurs when steep terrain collapses (cliff failure), rock and earth avalanches occur, and land begins to move and slide.

■ Zones with a risk of landslide are referred to as "Landslide warning zones (yellow zones)." Among them, zones where there is a risk of severe damage when a disaster occurs are referred to as "Landslide special warning zones (red zones)."



### Cliff failure

A phenomenon in which a slope suddenly crumbles and falls

#### Warning signs

- Water coming from the cliff becomes muddy.
- Cracks form in the cliff.
- Small stones frequently fall from the cliff.

### Rock and earth avalanche

A phenomenon in which sediment from the mountain and valley mix with water and suddenly begin to flow

#### Warning signs

- Rivers become muddy and mixed with driftwood.
- The water level in rivers begins to fall even though it continues to rain.
- Rumbblings in the earth can be heard.

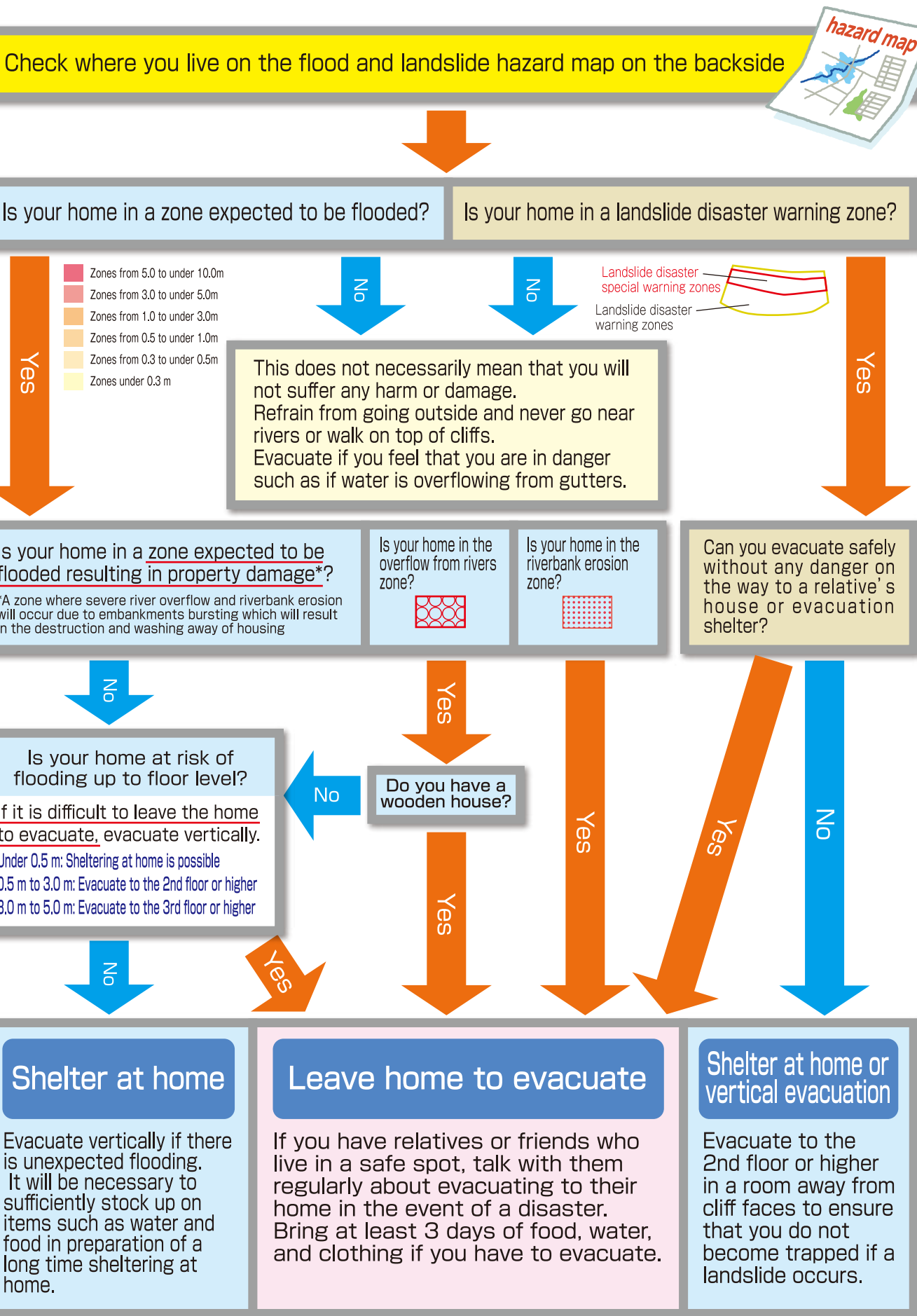
### Landslide

A phenomenon in which a gentle slope begins to slowly slide down over a large area of land

#### Warning signs

- Cracks and fissures can form on slopes and on the ground.
- Water gushes from slopes.

# Consider evacuation action during floods and landslide disasters



# Supplies checklist

Prepare **at least 3 days' worth of food, 7 days if possible**.

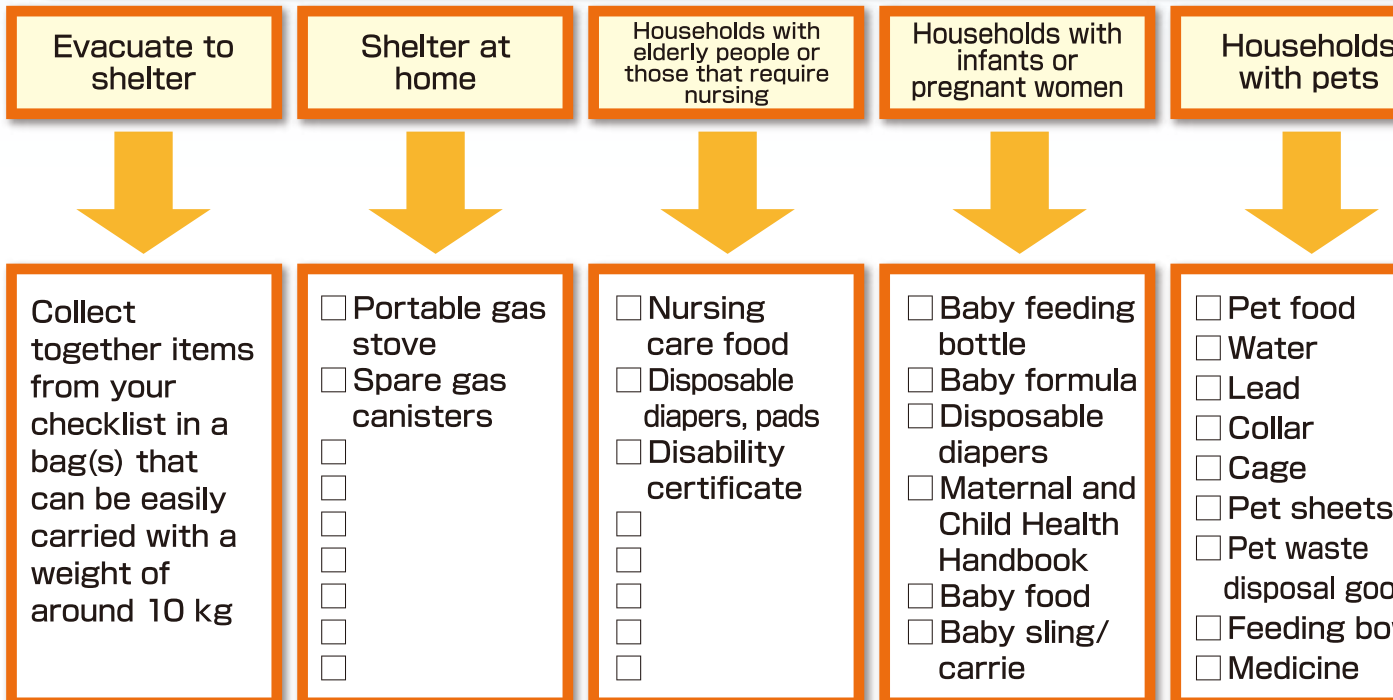
It may take one week to obtain foodstuff and household goods. Prepare for a disaster by preparing items that you need based on the idea that there will be no electricity or water supply available.

Estimated required drinking water 3 liters per person per day x number of people in your family x 3 to 7 days' worth

## Emergency supplies checklist

Items that everyone should prepare

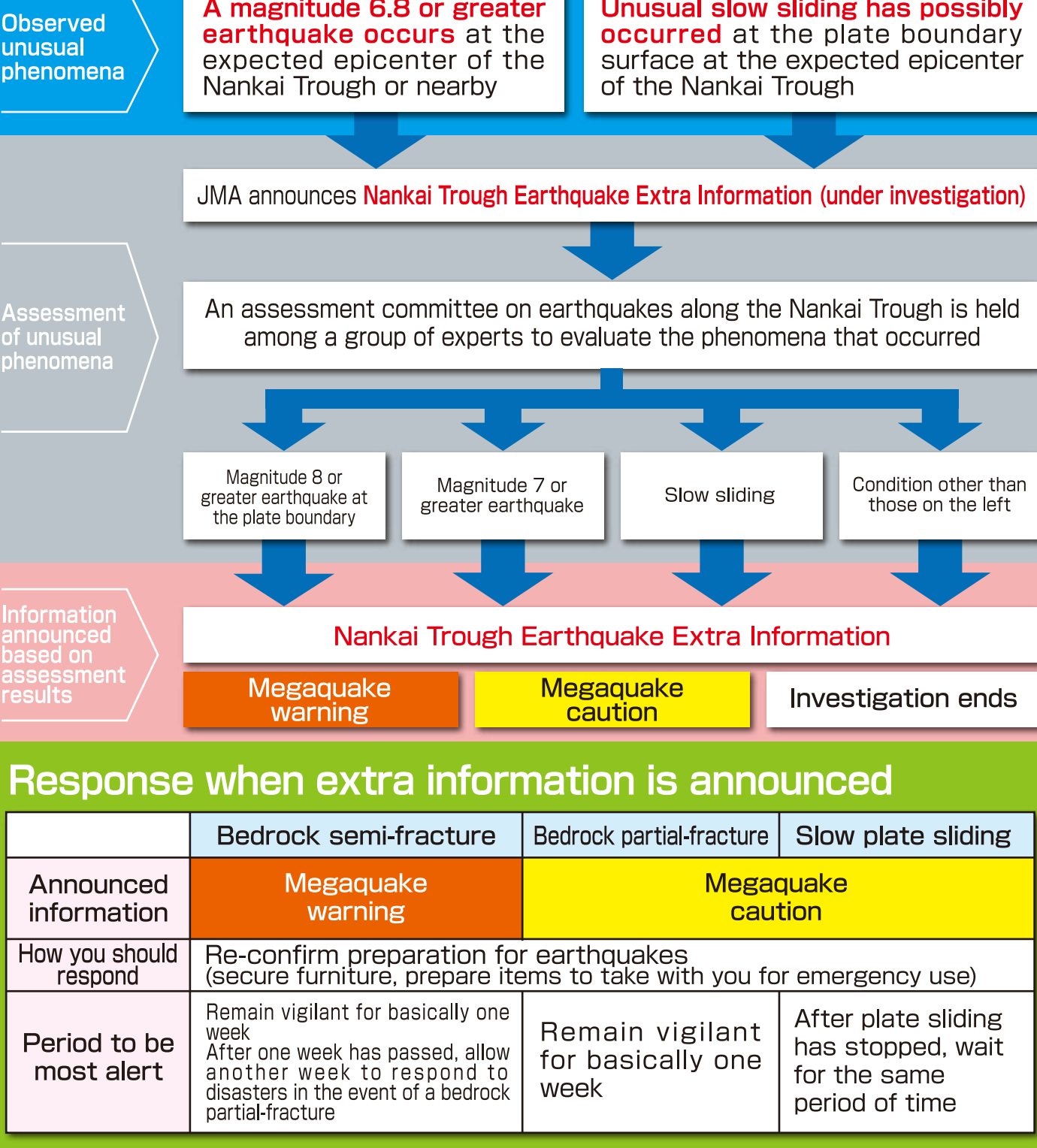
- Water
- Food
- Clothes including underwear and jackets
- Towel, gloves, plastic bags
- Rain gear, cold weather gear
- Helmet
- Portable radio
- Flashlight, lantern, LED light
- Mobile battery
- Matches, lighter
- Notepad, writing implement
- Spare glasses, contact lens, contact lens cleaning solution
- Tissues, wet tissues
- Toilet paper
- Soap, dry shampoo
- Oral care products such as waterless toothpaste
- Cold remedy, digestive medicine, band aids
- Medicine you take normally, medication notebook
- Infectious disease control items (mask, sanitizer)
- Items important to your child (something to keep their spirits up)
- Cash (mostly small change)
- ID, driving license, health insurance card (can also be copies)
- Seal, savings bankbook
- Memo with passwords and login ID
- Other items you need



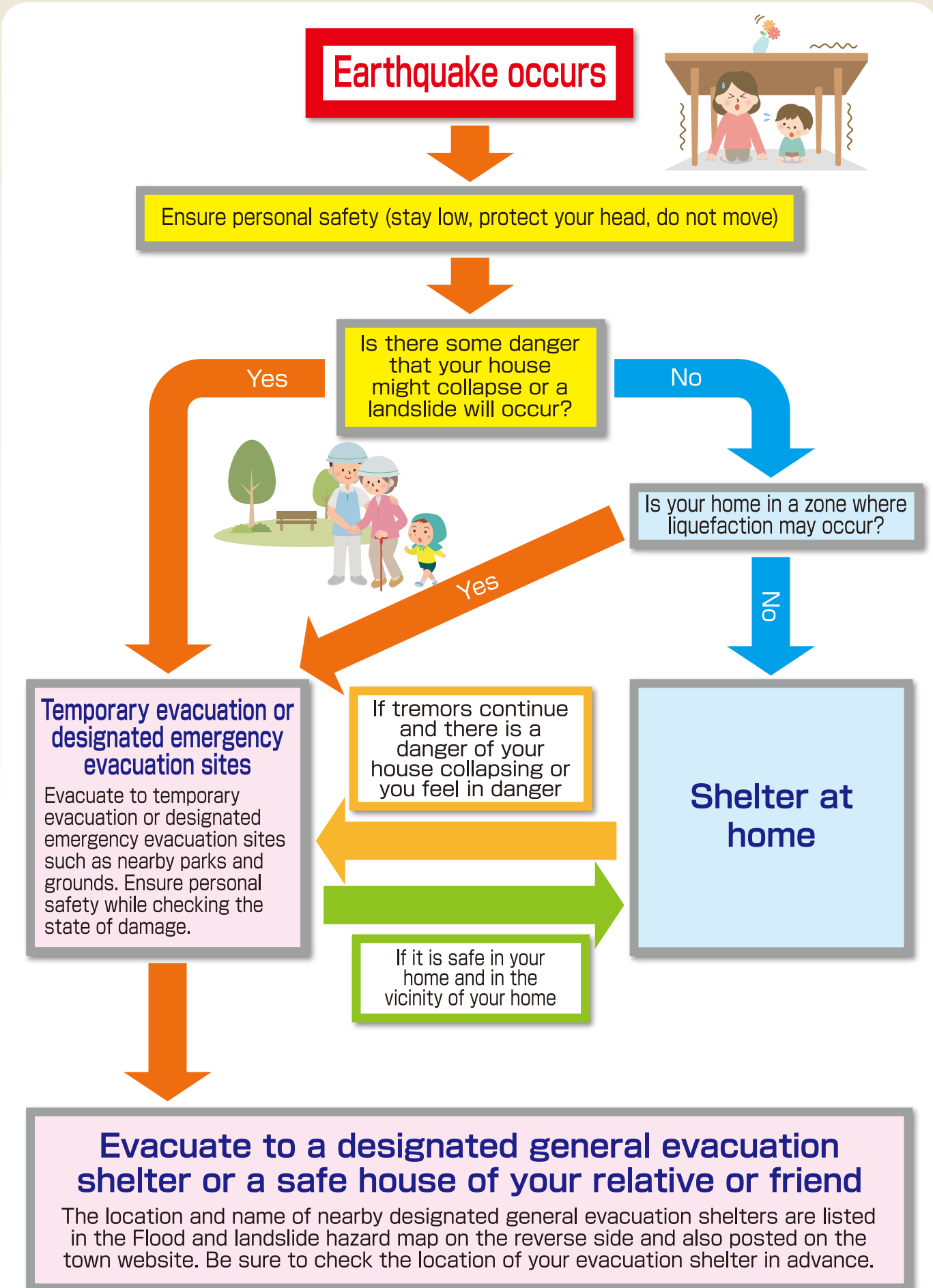
# Nankai Trough Earthquake Extra Information

## About Nankai Trough Earthquake Extra Information

The public is notified when there is an increased possibility of an earthquake occurring in regions around the Nankai Trough. When an unusual phenomenon is observed such as a major earthquake or large-scale deformation of the Earth's crust within the expected earthquake epicenter, Japan Meteorological Agency announces information on the event. For example, such as when an earthquake occurs at the eastern side along the Nankai Trough and it is highly likely that the earthquake will continue along to the western side as well (a subsequent earthquake event).

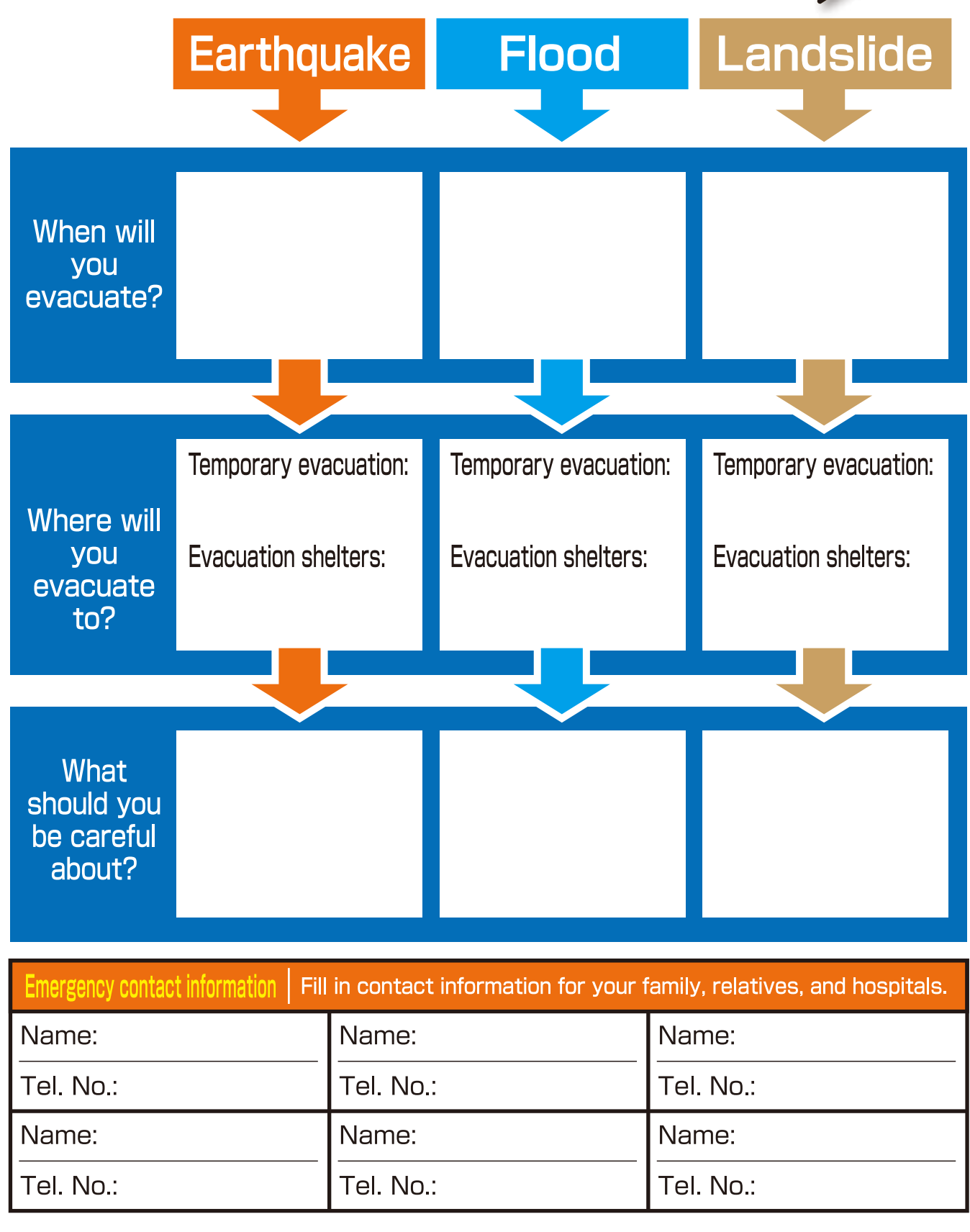


# Consider evacuation action during an earthquake



# Family evacuation plan

Write your evacuation plan below to ensure that you can evacuate smoothly in the event of a disaster.



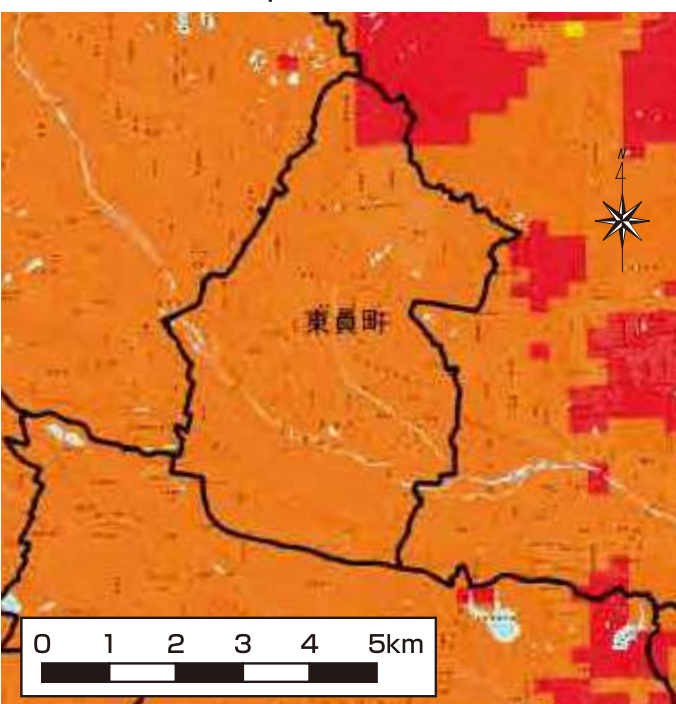
# Earthquake hazard map

Seismic intensity guide Tremors may be greater than expected depending on the size of the earthquake and ground conditions.

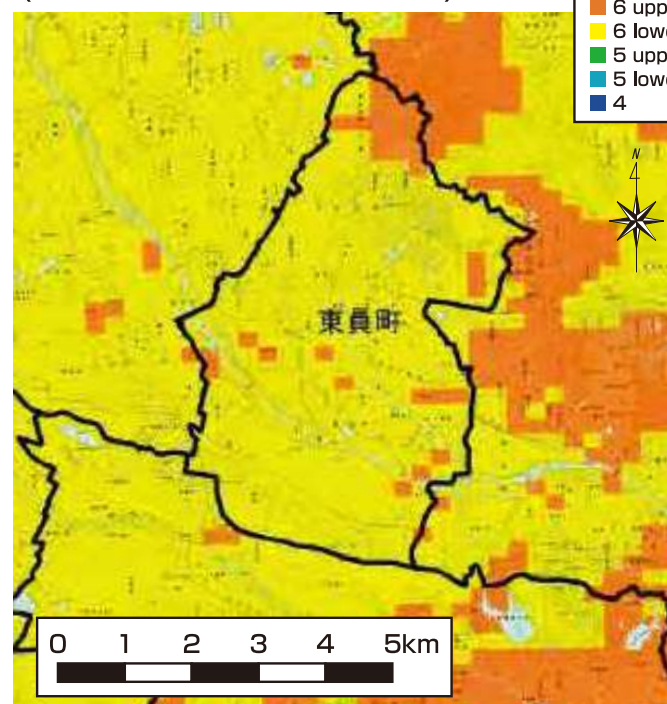
Seismic intensity	5 lower	5 upper	6 lower	6 upper	7
How people feel it	People feel afraid of the shaking and tend to grab onto objects.	People will find it difficult to walk unless they hold onto objects.	People will find it difficult to stand.	People will not be able to stand and be unable to move unless they crawl.	People will not be able to stand and be unable to move unless they crawl.
Situation inside buildings	Unsecured furniture may move around and unstable objects may fall over.	TVs may fall from their stand and unsecured furniture may fall over.	Most unsecured furniture will move around and may fall over. Doors may no longer open.	Almost all unsecured furniture will move around and most will fall over.	Almost all unsecured furniture will move around and most will fall over.
Difference in seismic proofing	Small cracks and fissures may appear in walls on buildings with low seismic proofing.	Cracks and fissures may appear in walls on buildings with low seismic proofing and non-reinforced cinder block walls may topple over.	Buildings with low seismic proofing will tilt and roof tiles will fall from the roof.	Many buildings with low seismic proofing will tilt and collapse.	The number of buildings with low seismic proofing that tilt and collapse will further increase. Wooden buildings with high seismic proofing and concrete buildings with low seismic proofing may be damaged.

## Seismic intensity hazard map

Yoro-Kuwana-Yokkaichi Fault zone earthquake



Nankai Trough earthquake (maximum theoretical class)



90% of deaths during the Great Hanshin Earthquake were due to house and furniture collapsing and falling over onto people. Have you secured the furniture in your home? Toin Town provides a free service to secure furniture in homes inhabited only by people of 65 years and older and people who are disabled. Please see the Toin Town website or contact the Disaster Prevention Office, General Affairs Section at Toin Town Government for details.

# Liquefaction hazard map

## What is liquefaction?

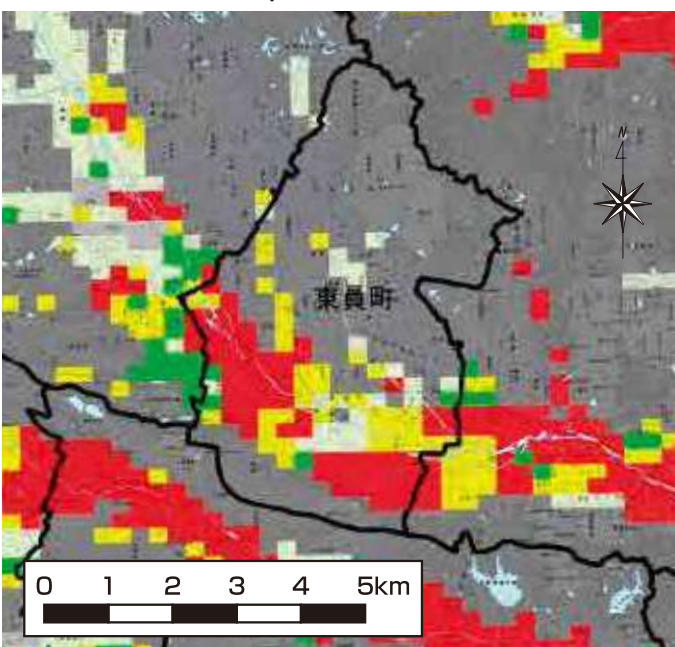
It is a phenomenon in which the ground becomes liquid when an earthquake has occurred. When a loosely packed sand layer or similar is violently shaken by an earthquake, it temporarily softens as though it were completely liquid resulting in liquefaction. When stepping on ground after rain has subsided, water gradually oozes from the ground. This is exactly what liquefaction is.

Damage due to liquefaction causes significant impact on the lives of people following an earthquake and can last for a long time.

Major damage	Examples of damage	Main impact on livelihood	Estimated duration of impact
Jats of water and sand can form		Delayed emergency evacuation due to buried vehicles Sediment deposits form on roads and residential land Dust damage due to the dispersion of dry sediment	Around one month including dust damage caused by dry sediment
Residential land and building damage		Damage to structures such as water and sewer pipes when residential land sinks Housing functionality is hindered (faults occur such as doors not being able to open and close, health hazard (dizziness, nausea, etc.) due to living in a home that has tilted)	May last for a long time depending on the extent of damage
Road damage		Hindrance to emergency evacuation and rescue work due to damaged roads Suspension of goods distribution due to traffic disruption falls and accidents occur due to road damage	Approximately one month until emergency repairs
Damage to utility lines that support life		Life-related hindrances due to suspension of the water supply (drinking water, cleaning water, toilet water, bath water, etc.) Life-related hindrances due to damage to sewer pipes (unable to flush toilet water and drain cleaning water, etc.) Life-related hindrances due to suspension of electricity and gas supply	Around one month at the most depending on the amount of damage

## Liquefaction hazard map

Yoro-Kuwana-Yokkaichi Fault zone earthquake



Nankai Trough earthquake (maximum theoretical class)

