

Disaster	River	Scenario conditions	Released	Contact Information	Telephone number
River flooding	① Yodogawa River	24-hour total rainfall: 360 mm/hour	Probable maximum precipitation (Likelihood: about 1/1,000 years)	Jun. 2017	Yodogawa River Office, Kinki Regional Development Bureau, MLIT 072-843-2861
	② Yamato River	12-hour total rainfall: 316 mm/hour	Probable maximum precipitation (Likelihood: about 1/1,000 years)	May 2016	Yamatogawa River Office, Kinki Regional Development Bureau, MLIT 072-971-1381
	Higashiyoko and Nishiyoko Rivers	24-hour total rainfall: 904.1 mm/hour	Maximum rainfall: 102.5 mm/hour	Nov. 2019	Tondabayashi Civil Engineering Office, Osaka Prefecture 0721-25-1131
	Ishikawa River	24-hour total rainfall: 724 mm/hour	Maximum rainfall: 195.5 mm/hour	Jan. 2021	Probable maximum precipitation (Likelihood: 1 more than 1,000 years)
	Kanzaki River	24-hour total rainfall: 737 mm/hour	Maximum rainfall: 81.1 mm/hour	Jan. 2020	Nishi Osaka Flood Control Office, Osaka Prefecture 06-6541-7771
	Tenjiku River	24-hour total rainfall: 1,150 mm/hour	Maximum rainfall: 142.6 mm/hour	Jan. 2020	Ikeda Civil Engineering Office, Osaka Prefecture 072-752-4111
	Taka River	24-hour total rainfall: 1,150 mm/hour	Maximum rainfall: 145.4 mm/hour	Jan. 2020	Ikeda Civil Engineering Office, Osaka Prefecture 072-752-4111 072-627-1121
	Ai River	24-hour total rainfall: 776 mm/hour	Maximum rainfall: 189 mm/hour	Mar. 2020	Ibaraki Civil Engineering Office, Osaka Prefecture 072-627-1121
High tide	④ Neyagawa, Daini-Neyagawa, and Hirano Rivers, Hirayagawa-bunairo Channel, Furukawa River	24-hour total rainfall: 683 mm/hour	Maximum rainfall: 138.1 mm/hour	Mar. 2019	Neyagawa River Basin Flood Control Office, Osaka Prefecture 06-6962-7661
	⑤ High tide	Scenario in which the central pressure is 910 hPa (Muroto Typhoon level), radius of maximum cyclogenetic wind speed is 75 km (Isewan Typhoon level), traveling speed is 73 km/h, and the path is the same as that of Muroto Typhoon	24-hour total rainfall: 549 mm/hour	Aug. 2020	Person in charge of emergency management, Port & Harbor Bureau, Osaka City 0725-21-7246
Inland flooding	⑥ Inland flooding	24-hour total rainfall: 147 mm/hour	Maximum rainfall: 147 mm/hour	Mar. 2021	Probable maximum precipitation (Likelihood: about 1/1,000 years)
Tsunami	⑦ Nankai and Nankai earthquake and tsunami	Scenario in which an earthquake with a magnitude of around 8.6 occurs, causing flooding due to a tsunami, and tide gates (those open at night), etc. did not close (high tide assumed)	24-hour total rainfall: 147 mm/hour	Mar. 2021	Probable maximum precipitation (Likelihood: about 1/1,000 years)
	⑧ Nankai Trough mega earthquake and tsunami	Scenario in which an earthquake with a magnitude of around 9.1 occurs, causing flooding due to a maximum class tsunami (breakwater and opening/closing of tidal barriers taken into account) (high tide assumed)	24-hour total rainfall: 147 mm/hour	Aug. 2013	Planning Section, Port & Harbor Bureau, Osaka City 06-6615-7782 Disaster Prevention Planning Division, Office of Emergency Management, Osaka Prefecture 06-6944-6487

Creator of this pamphlet: Office of Emergency Management, Osaka City (Tel: 06-6208-7384)

This pamphlet is also available for view on the official website of the Office of Emergency Management, Osaka City.

<https://www.city.osaka.lg.jp/kikikanri/shitsu/>

Mar. 2021

Transmission of information

Receiving Information

Bosai Information Mail Creates the city's disaster measures information and information needed in times of disaster to your registered mobile phone or PC e-mail address

Must preregister

E-mail toukou@osaka-bosai.net

Send a blank e-mail to the e-mail address above to register. The e-mail address can also be read from the 2D code on the right.

Emergency Warning E-mail Emergency information will be sent to mobile phones that support emergency alert emails.

Check in advance to see if you can receive it

You may need to change your settings. Please ask your mobile phone provider for more information.

Yahoo! disaster prevention bulletin app It provides evacuation and earthquake information via push notifications.

When setting the region, enter XX Ward, Osaka City. Then you can receive information for the entire area of Osaka City.

Finding Information

- If outdoor emergency speaker broadcasts could not be heard: call the Government Disaster Wireless Telephone Service (06-6210-3899), charges apply.
- In times of disaster, switch your TV to NHK and press the "d" button for data broadcasting to view evacuation advisories, if evacuation shelters are open, and other information.

Osaka Disaster Prevention Net

Evacuation information

URL <http://www.osaka-bosai.net/prelin/420.html>

Disaster Information for River (Ministry of Land, Infrastructure, Transport and Tourism)

River level information

URL <https://www.river.go.jp/>

River Disaster Management Information (River Office, Osaka Prefecture)

River level information

URL <http://www.osaka-kasen-portal.net/s>

Japan Meteorological Agency

Weather information, tsunami information, etc.

URL <https://www.jma.go.jp/>

Osaka City Rainfall Information

Weather information, etc.

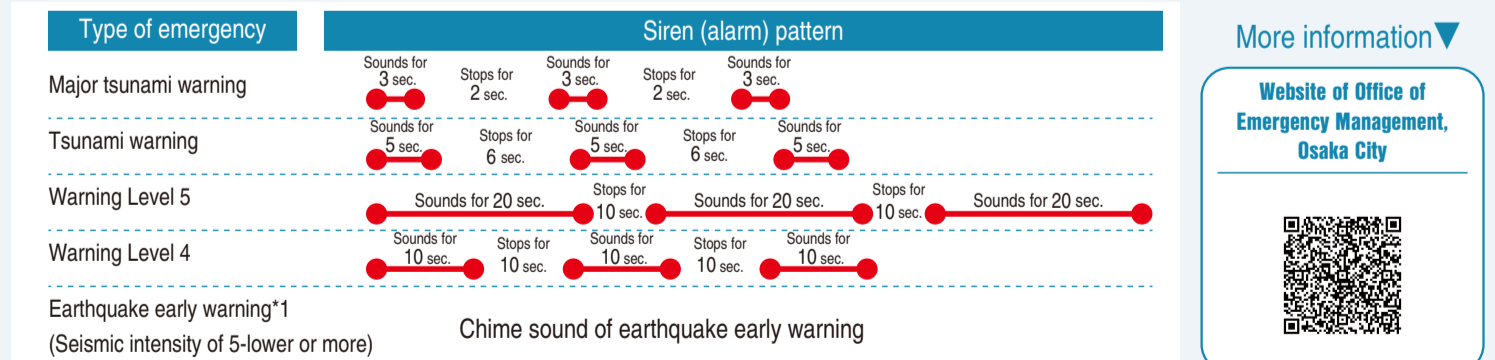
URL <http://www.ame.city.osaka.lg.jp/pw/0/>

Osaka Safe Travels

Weather information, etc.

URL <https://www.osakasafetravels.com/>

Emergency Siren Patterns(Outdoor emergency speaker)



Safety Confirmation Message Services

Disaster Emergency Message Dial 171 You can record or play messages in times of disaster.

Call 1-7-1

Press 1 To leave message (recording method)

Phone number of your home, yourself, or family member (in affected area)

Listen to message

Press 2 To listen to message (confirmation method)

Phone number of the person you want to contact (in affected area)

Leave message

Dial from the area code

Dial from the area code

Dates you can try out the services

1st and 15th of every month (24 hours), Jan. 1 to 3 (24 hours)

Disaster Preparedness and Volunteer Week (Jan. 15, 9 am to Jan. 21, 5 pm)

Disaster Preparedness Week (Aug. 30, 9 am to Sep. 5, 5 pm)

Disaster Emergency Message Board It can be accessed if internet connection is available in times of disaster.

Web171(NTT)

URL <https://www.web171.jp>

SoftBank/Y!mobile

URL <http://dengon.softbank.ne.jp>

au(KDDI)

URL <http://dengon.ezweb.ne.jp>

J-anpi for one-stop searches of all safety status information

It enables the one-stop search of all safety status information posted on the disaster message boards of communication carriers.

URL <https://anpi.jp/>

¹ Disaster Emergency Message Boards become available when a major disaster occurs. For service details, please see the explanation provided by NTT and the respective mobile phone companies.

What is My Timeline?

My Timeline provides an opportunity to prepare for wind and flood disasters, such as heavy rains and typhoons, and plan in advance how to escape using your own evacuation route while giving due consideration to the circumstances or evacuation behavior of each family member. Creating a schedule that summarizes who does what and when will help you act in an appropriate manner in the event of an emergency.

Family Evacuation Plan

1 Evacuation place Determine where you will evacuate to and write it down. Determine all ① to ③ evacuation places that you will evacuate to depending on the situation.

2 Plan what to do until you start evacuating.

3 Fill in when you will start evacuating and when you will do what.

Collect information

Check weather and evacuation information

Prepare for evacuation

Check emergency kit and stockpile

Buy necessary items

Begin moving household items to 2F, etc.

Inspect area around the house

Put away items that may blow away

Check window locks

Charge mobile phone

Check opening of evacuation shelter

Contact and call out

Call out to neighbors

To evacuate To evacuate together

Name

Contact

To evacuate To evacuate together

Name

Contact

Communicate with family (If you're not together)

Contact the person who will assist your evacuation (If you cannot evacuate by yourself)

Miscellaneous

Family Evacuation Plan

Heavy rain is forecasted

Warning Level 1 Early advisory information

Warning Level 2 Flood advisory Heavy rain advisory

Warning Level 3 Evacuation of the elderly from a dangerous area

Warning Level 4 Evacuation of all people from a dangerous area

Warning Level 5 Ensuring safety during an emergency

High

Fill in When will you evacuate? When will you do what?

Ex: Double check emergency grab-and-go bag (mom)

Ex: Double check evacuation shelter (everyone)

Ex: Grandma and mom evacuate to a relative's house by car

Likely evacuation place at this stage

Evacuation place ①, ②

Ex: Evacuate to XX Elementary School (dad and children)

Likely evacuation place at this stage

Evacuation place ①, ②

Likely evacuation place at this stage

Evacuation place ③

* Depending on the situation of the disaster, information may not necessarily be released in this order. It is important to respond flexibly to the situation.

After evacuating

Contact method

After evacuating, inform your family and other important people that you have evacuated safely

Family meeting place

It is extremely dangerous to leave or relocate from your evacuation place before the evacuation information is lifted.

When a record typhoon is approaching(High tide)

Disaster Information(Warning Level)

Warning Level 1

Issued by JMA

Possibility of storm warning-class disaster

Early call for evacuation from Osaka City in collaboration with the Message to Osaka Prefectural Residents from the Governor of Osaka Prefecture

Warning Level 2

Issued by the city

Out of a dangerous area

The elderly, etc. should evacuate

Warning Level 3

Equivalent to Warning Level 3

Issued by MLIT, JMA, and the prefecture

Flood alert information, Flood warning, etc.

Issued by JMA

High tide special warning

Warning Level 4

Issued by the city

Out of a dangerous area

Everyone must evacuate!

Equivalent to Warning Level 4

Issued by MLIT, JMA, and the prefecture

Flood danger information, etc.

Issued by the prefecture

High tide flood danger information

Warning Level 5

Issued by the city to the extent possible

Ensuring safety during an emergency

Equivalent to Warning Level 5

Issued by MLIT, JMA, and the prefecture

Flood inundation information, Heavy rain emergency warning, etc.

Actions to Protect Yourself

Be on heightened alert, check evacuation actions, prepare for evacuation

For example:

- Stay alert of weather information
- Find an evacuation place on the hazard map
- Begin evacuating to places that will not flood
- To a relative's home, friend's home, workplace, etc., including those not in Osaka City
- Evacuate people requiring time to evacuate
- To the elderly
- For example:
- To a safer place that will not flood (incl. 3F or higher), e.g., a relative's home, friend's home, workplace
- To your closest evacuation shelter
- Double check your emergency grab-and-go bag in preparation for Warning Level 4 (evacuate everyone)
- Evacuate quickly to an evacuation site
- For example:
- To a safer place that will not flood (incl. 3F or higher), e.g., a relative's home, friend's home, workplace
- To your closest evacuation shelter
- To a tall building or other elevated place
- If you feel you are in danger on your way to an evacuation site, go to the nearest safe place
- It is very dangerous to evacuate in a flood. Your life is in danger. Immediately secure your safety!
- For example:
- To your closest evacuation shelter
- To your closest evacuation shelter (to a flood/tsunami evacuation building)
- To a tall building or other elevated place

Evacuation Precautions

Go to a place higher than flood level

Driving or evacuating in strong wind is dangerous

The strength of the wind affects evacuation. When strong wind gusts are blowing due to a typhoon, etc., a traveling truck may flip over, or block walls and houses may begin to collapse.

Higher than flood level

Evacuation Precautions

Upon feeling massive or slow earthquake tremors, move away from the beach or river as soon as possible.

Remain at the safe place until the tsunami warning is canceled.

When a tsunami strikes

How Will You Evacuate?

Move to an inundation-free place as soon as possible.

Upon feeling earthquake tremors or receiving a tsunami warning, evacuate to an inundation-free place as soon as possible.

- Outside the assumed flood inundation zone
- Safe, inundation-free floors of the nearest tsunami evacuation building
- Safe, inundation-free floors of the nearest tall building or on high places

Tsunami (higher than 1 m) caused by a massive Nankai Trough earthquake is expected to reach Osaka City within 110 minutes after the occurrence of the earthquake.

Tsunami Information

Quantitative expression (indication)	Qualitative expression	Warning name	Your responses
Over 10 m			
10 m	5m<Height≤10m	Huge	Major tsunami warning (Emergency warning)
5 m	3m<Height≤5m		As quickly and high as possible
3 m	1m<Height≤3m	High	Tsunami warning
1 m	20cm≤Height≤1m	N/A	Tsunami advisory

Abeno Ward

Save

Protect Yourself from Flooding and Tsunami!

How to Use this Hazard Map

How to Use 1 Check the disaster risks for your neighborhood

Use this hazard map to check risks, including which river will cause flooding and whether you will be affected by high tide in times of heavy rain or typhoon, and whether your area is subject to tsunami damage following an earthquake.

How to Use 2 Determine when and where to evacuate to for each type of disaster

Your evacuation actions to protect yourself will be different depending on the situation of the disaster and the situation you are in. Determine when and where you will evacuate to for protecting yourself from each type of disaster: heavy rain; typhoon; and tsunami.

How to Use 3 Check your daily preparedness by making use of the information in here and My Timeline to protect yourself

A variety of information is released in times of disaster. Take daily preparedness measures by making use of the information in here which will facilitate immediate actions in an emergency, as well as My Timeline which you can fill out.

Evacuation and meeting place

Determine and write down the evacuation and meeting places by type of disaster.

Heavy rain Flooding

Contact

Typhoon Flooding / High Tide

Contact

What kinds of natural disasters happen in Osaka?

In Osaka, inundation is assumed by river administrators (Kinki Regional Development Bureau, Osaka Prefecture, and Osaka City) in the event of heavy rains or when a tsunami occurs because of an earthquake. Specifically, river flooding, inland flooding, tsunami inundation, and a high tide are assumed to occur.

River Flooding

Long-duration heavy rainfall events can lead to levee breaks and inundation due to increased river water.

Inland Flooding

If it rains heavily and the river level rises beyond the drainage capacity of a waterway or a sewer system, rainwater will overflow, submerging housing areas and roads.

Tsunami Inundation

Seismogenic faulting that has occurred in the seabed makes the seabed rise or fall, causing waves on the sea surface. The waves will then spread in every direction, forming a tsunami.

1. The seabed and sea level rise or fall due to an earthquake.

2. The sea level change produces big waves, which spread in all directions - Hit the shore.

High tide

A storm surge is a phenomenon where the sea level (tide level) becomes higher than the normal tide level due to the approach of a typhoon or low atmospheric pressure. The main causes of the abnormal rise in tide level are the low atmospheric pressure pulling water from the sea surface and a storm's winds pushing water onshore.

Typhoon and Low Atmospheric Pressure

High waves from the offing

Storm Surge

Normal tide level (forecasted tide level)

Blowing effect

Sucking effect

Source: Official website of the Japan Meteorological Agency

Emergency contact information			
Abeno Ward Office	06-6622-9986	Road (Hirano Construction and Maintenance Office)	06-6705-0102
Abeno Ward Public Health and Welfare Center	06-6622-9882	Electricity (common to all branches of Kansai Electric Power)	0800-777-8810
Police Station	110	Gas leak (Osaka Gas)	0120-0-19424
Fire Department	119	Telephone trouble (NTT)	113
Sewer (Hirano Sewer System Maintenance Center)	06-6705-0342	When using a fiber optic telephone or mobile phone	0120-444113
Water Service (Customer Center)	06-6458-1132		

When heavy rain could cause river flooding

Disaster Information(Warning Level)

Warning Level 1

Issued by JMA

Early advisory information

Warning Level 2

Issued by JMA

Flood advisory, heavy rain advisory, etc.

Warning Level 3

Issued by the city

Out of a dangerous area

The elderly, etc. should evacuate

Warning Level 4

Equivalent to Warning Level 3

Issued by MLIT, JMA, and the prefecture

Flood alert information, Flood warning, etc.

Issued by city

Out of a dangerous area

Everyone must evacuate!

Warning Level 5

Equivalent to Warning Level 4

Issued by MLIT, JMA, and the prefecture

Flood danger information, etc.

Issued by the city to the extent possible

Ensuring safety during an emergency

Equivalent to Warning Level 5

Issued by MLIT, JMA, and the prefecture

Flood inundation information, Heavy rain emergency warning, etc.

Actions to Protect Yourself

Be on heightened alert

For example:

- Stay alert of weather information.

Check evacuation actions

For example:

- Double check evacuation route on the hazard map
- Stay alert of the rainfall situation in your area
- Evacuate people requiring time to evacuate
- To the elderly
- For example:
- To a safer place that will not flood (incl. 3F or higher), e.g., a relative's home, friend's home, workplace
- To your closest evacuation shelter
- Double check your emergency grab-and-go bag in preparation for Warning Level 4 (evacuate everyone)
- Evacuate quickly to an evacuation site
- For example:
- To a safer place that will not flood (incl. 3F or higher), e.g., a relative's home, friend's home, workplace
- To your closest evacuation shelter
- To a tall building or other elevated place
- If you feel you are in danger on your way to an evacuation site, go to the nearest safe place
- It is very dangerous to evacuate in a flood. Your life is in danger. Immediately secure your safety!
- For example:
- To your closest evacuation shelter
- To your closest evacuation shelter (to a flood/tsunami evacuation building)
- To a tall building or other elevated place

Evacuation Precautions

It is dangerous to go outside in torrential rain or to flooded areas

If the flood risk is high, do not go walk outside. Wait indoors.

As a rule, evacuate by foot

If you need to evacuate by car, begin evacuating earlier, e.g., the elderly and others requiring assistance.

Do not use flooded roads

The water will be muddy, and you will have a hard time seeing where you are going. It is dangerous as you can fall into a manhole, drain, or other openings.

Manhole

Danger

* Depending on the situation of the river(s) and the disaster, information may not necessarily be released in this order. It is necessary to respond flexibly to the situation.

How Will You Evacuate?

If you can stay at home due to shallow flooding, low risk of house collapse, etc.

If you cannot stay at home due to deep flooding, high risk of house collapse, etc.

Do not go outside if it is unwise

Depending on the wind and rain situation, it may be safer to stay at home. Evacuate to a safe place in your home that will not flood.

Evacuate early

Evacuate early to a place that is unlikely to flood. Your options may include evacuating to a relative's home, a friend's home, or workplace.

If evacuating to an evacuation shelter, check if it is open

Do not go outside if it is unwise

Depending on the wind and rain situation, it may be safer to stay at home. Evacuate to a safe place in your home that will not flood.

Evacuate early

Evacuate early to a place that is unlikely to flood. Your options may include evacuating to a relative's home, a friend's home, or workplace.

If evacuating to an evacuation shelter, check if it is open