

Tsunami Hazard Map

Reference handbook

When an earthquake occurs, a tsunami (very high wave) may happen. Please move away from the ocean and rivers if a major earthquake hits. Also when it is shaking slowly for a long period of time, please flee from the ocean and rivers. You can receive updates on the tsunami situation through the disaster broadcast system (speaker tower) and radio. In the case of a tsunami occurring, please evacuate to a tsunami evacuation facility. (a place where you can safely escape in the event of a tsunami)

Let's decide on a meeting point with the family

Let's look for the tsunami evacuation facilities

Please choose a tsunami evacuation facility where you will evacuate.

Please write down your selected location

Please prepare the necessary items for staying in a house temporarily in a disaster. In order to be prepared to escape from the house quickly, please keep them in an accessible place. For a list of necessary items, please refer to the Disaster Preparedness in Kawasaki brochure.



Issued in March 2019

How to use the Tsunami Hazard Map

This map indicates the locations with a risk of tsunamis. Please check the tsunami evacuation facilities and evacuation routes (designated routes to safe places) beforehand.

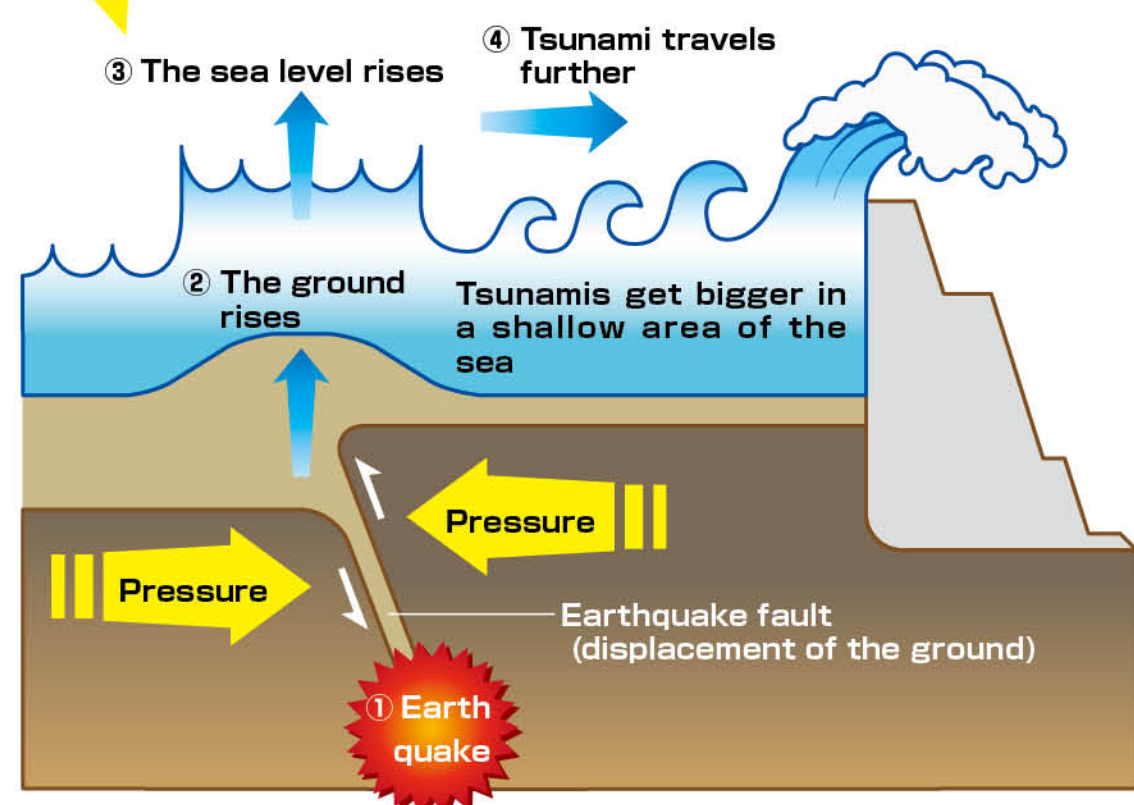
About Tsunamis

What is a tsunami?

A tsunami is a series of very high waves caused by earthquakes. Tsunamis occur not only in sea areas but also river areas.

How does a tsunami occur?

- ① Earthquake occurs
- ② The ground rises
- ③ The sea level rises
- ④ Tsunami travels further



Characteristics of tsunamis

- Tsunamis come several times, please do not go back to the area from where you evacuated.
- In an earthquake, a large wave may arise suddenly.
- Tsunamis are very fast. They can move as fast as cars.

Tsunami forecast by Kawasaki City

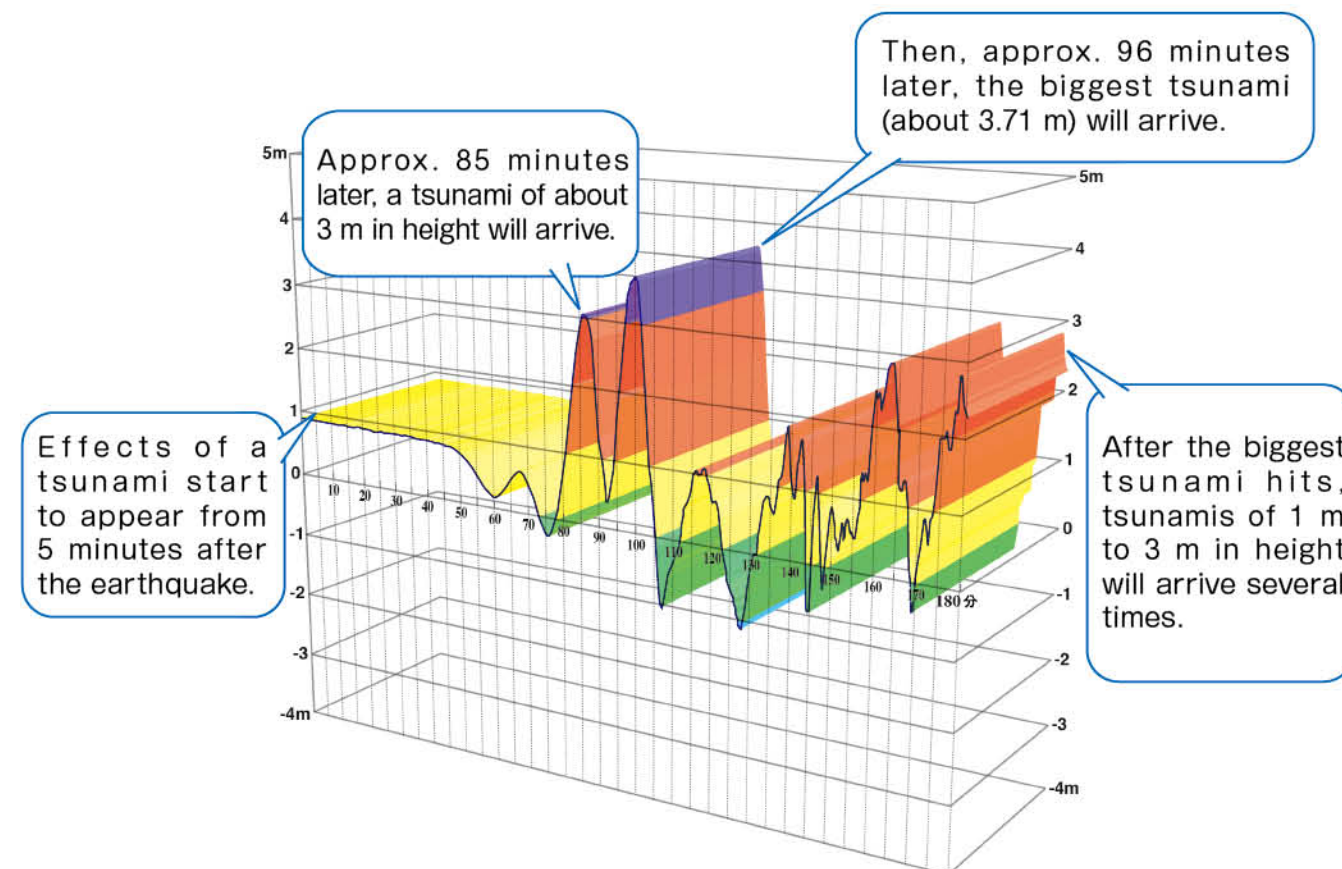
- Kawasaki City is prepared for the largest possible tsunami.

Maximum tsunami height predicted at Kawasaki Port during high tide	Approx. 3.71 m
The maximum height of just the tsunami wave when it occurs	Approx. 2.81 m
Flood depth in Kawasaki City (water depth above ground)	Some parts of Asanochi and others: 2 m to 3 m, other areas: below 2 m
Expected time for the largest possible tsunami to reach Kawasaki Port	Approx. 96 minutes
Area size in Kawasaki City which is expected to be affected by tsunamis	Approx. 18.3 km ² (about 45% of Kawasaki Ward)

Height of tsunami and length of time for a tsunami to arrive (Kawasaki Port)

When a major earthquake occurs, the first tsunami will arrive after approx. 85 minutes, then the next wave will hit in approx. 11 minutes.

Height of tsunami



To escape from a tsunami

Discuss with your family in preparation for evacuation

- **Check basic information at home**
 - Confirm the location of your house, school, and workplace on your map.
 - Confirm the height of a tsunami that could arrive in these places.
- **Check the tsunami evacuation facilities**
 - In Kawasaki City, there are 103 (as of the end of March 2019) places designated as tsunami evacuation facilities or evacuation sites (where people evacuate collectively).
 - Please confirm the location of tsunami evacuation facilities nearby your home and places you often visit.
- **Decide your evacuation routes**
 - Check the evacuation routes on the map. Please discuss with your family the dangerous places and be aware of them.
 - Be aware of falling objects when evacuating.
 - Be aware of damaged houses or buildings when evacuating.
 - There is a risk of a tsunami in such areas as the sea and the river.

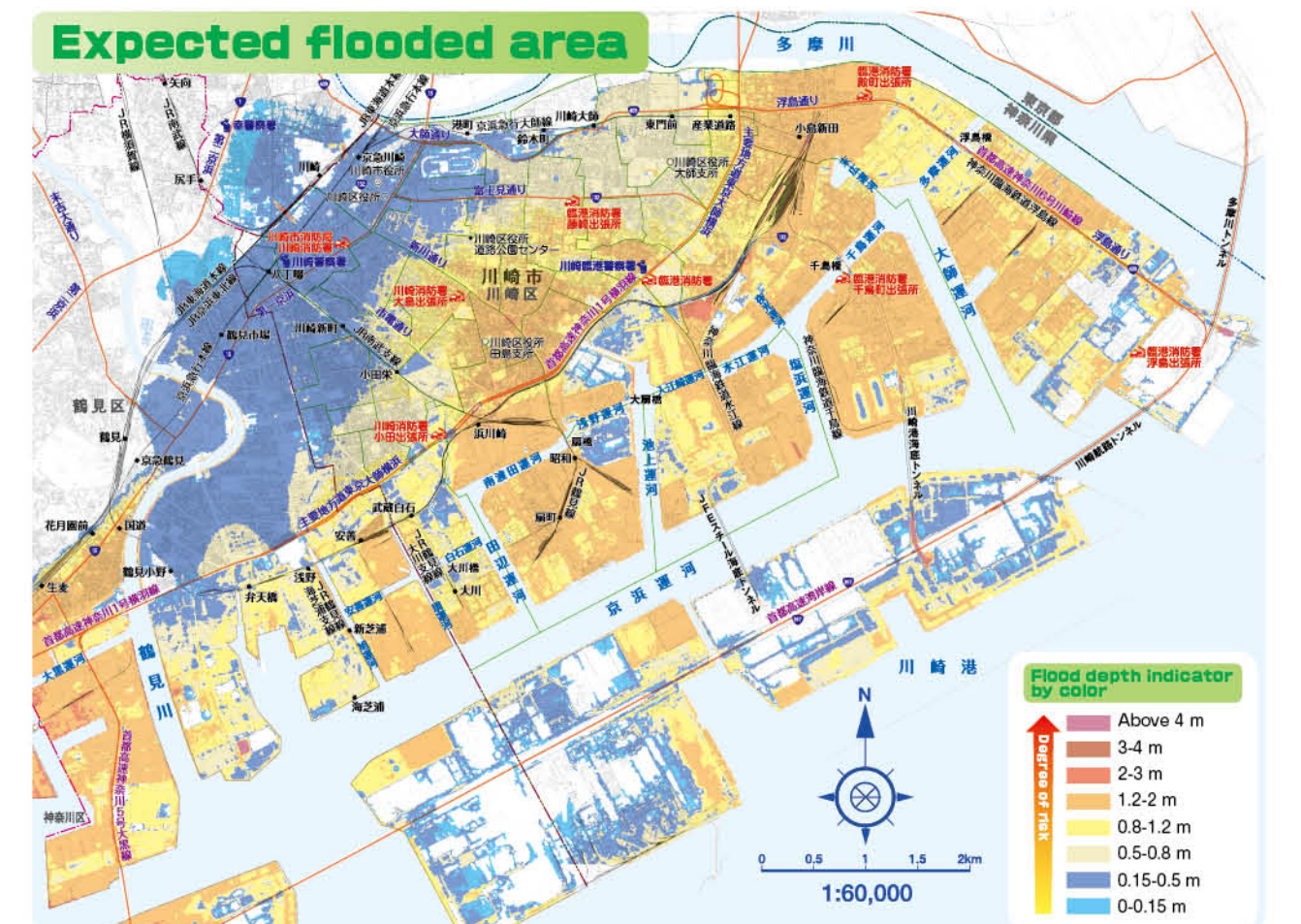
In Kawasaki City, tsunami evacuation facilities are indicated by signs

There are signs indicating flood depth on street lights, public facilities, etc.



(Reference) A tsunami caused by the largest possible earthquake along the Sagami Trough

- ① This is the largest possible tsunami predicted by Kanagawa Prefecture, which is different from the tsunami Kawasaki City forecasts. Please also read this information.
- ② Forecast of tsunami caused by the largest possible earthquake along the Sagami Trough (predicted magnitude [a size of earthquake]: 8.7)
 - (1) Recurrence intervals: about 2,000 years to 3,000 years
 - (2) Maximum tsunami height: Approx. 2.9 m
 - (3) Length of time before the arrival of the tsunami of maximum height: Approx. 134 minutes
 - (4) Flooded (tsunami-affected) area: Approx. 32.9 km²



How to gather information in a disaster

Registration for Mailnews Kawasaki

- Updates on earthquakes and tsunamis will be sent by email.
- Please send a blank message to the email address below to subscribe.

Mailnews Kawasaki Email address for registration

For PCs, smartphones
mailnews@k-mail.city.kawasaki.jp
 For mobile phones
mailnews-m@k-mail.city.kawasaki.jp

Attention

Please make sure that you can receive messages from the domains below.
 @k-mail.city.kawasaki.jp
 @k-mail.kikikanri.city.kawasaki.jp

Internet, mobile phones

Kawasaki City Disaster Prevention Information Online Portal

- Announcement and updates of disasters and useful information on disaster prevention.
- Information is also available in English.

Disaster prevention information online portal QR code for mobile phones --

Disaster prevention information online portal QR code for PCs --

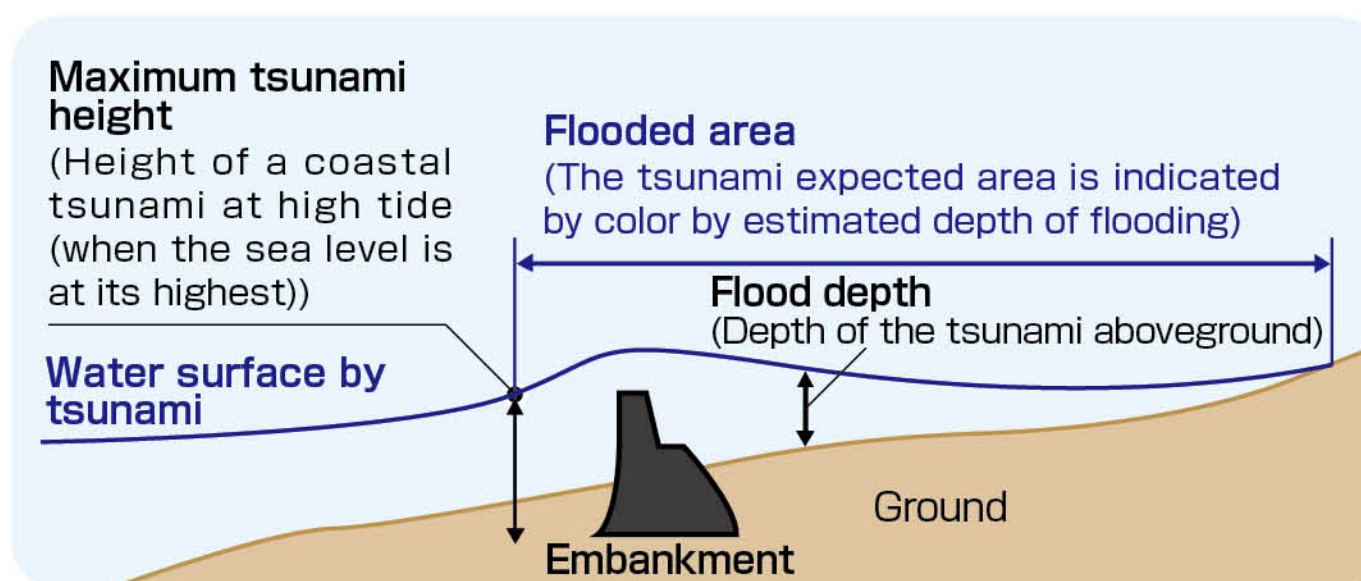
Radio Kawasaki FM 79.1 MHz

- Information on earthquakes and tsunamis will be announced by Kawasaki City.
- Available in Japanese, English, Chinese, Korean, Portuguese, Spanish, and Tagalog.

Emergency alert email, the early warning Area Mail

- Alert messages will be sent to your mobile phone/smartphone regardless of whether you are registered.
- You will receive announcement on matters listed below.
 - Occurrence of a large earthquake or tsunamis
 - Missile attack
 - Terrorism by bombing
 - Other dangerous incidents
- You can choose the language of your message from English, Chinese, Korean, and others.

Forecast of flood depth caused by a tsunami



Mutual help in the community

In order to reduce the damage from a disaster, it is important to be mindful and prepared in daily life. Please help each other with your neighbors and get prepared for an emergency.



Escape from a tsunami

- When a tsunami warning (very strong warning) or a tsunami alert (notification of possible danger) is issued.
- In such times, an evacuation advisory (you are advised to evacuate) or an evacuation order (you are officially asked to evacuate) will be announced.

- Please leave areas close to the ocean or rivers immediately and evacuate to one of the tsunami evacuation facilities.
- When you arrive at a tsunami evacuation facility, check the escape route signs (signs to show the direction to escape to) and go to a high place.
- Please do not use a car; walk when evacuating.
- Tsunamis come not only once but several times. Information on tsunamis will be updated on the news. Please stay in a safe area until you receive updates.

○ Please collect information (news)

- Please collect accurate information from the disaster broadcast system, radio, TV, and the internet. Please refer to Disaster Preparedness in Kawasaki for accurate information.