# Hiroshima City Tsunami Hazard Map

This map was created to help facilitate smooth evacuation in the event where inundation due to a tsunami is expected. Please use this to think about evacuation before a disaster occurs, as well as to create region-specific disaster preparedness maps based on this map or to hold evacuation drills.

This hazard map is based on the "Tsunami Disaster Danger Zones" map published by Hiroshima Prefecture in March of 2019, and shows "methods to acquire disaster preparedness information." "evacuation sites." and "dangerous locations when evacuating" so that residents can consider evacuating.

To prepare for a tsunami, use this map to check the risk of inundation (scope and depth) around your home, school, or workplace and consider where you will evacuate to and your evacuation route in advance.

### To protect yourself from tsunamis, check what kind of **Expected Tsunamis and Cautionary Notes** tsunami is expected to arrive.

Hiroshima City designates "Nankai Trough megathrust earthquakes," "earthquakes in Akinada-Iyonada-Bungosuido," and "earthquakes due to the Akinada fault zone" as earthquakes that may cause significant tsunami damage. This hazard map shows forecasts for the deepest flood depths assuming the "largest class" of tsunami due to these earthquakes occurs under poor conditions. However, the inundation area. standard water level, and arrival time of a tsunami vary depending on the earthquake, and an actual tsunami may be larger or arrive more quickly than expected.

Therefore, it is particularly necessary to be cautious of the following points.

### [Common to all earthquakes]

In locations where the ground is lower than the sea surface (areas 0 m above sea level), embankments or the like may have collapsed due to the earthquake, and flooding may start before the tsunami arrives.

### [Nankai Trough megathrust earthquakes]

- The tsunami will have a maximum height of 1.5 m (3.6 m above sea level\*), with a significant flood depth and wide inundation area. Please evacuate to a high location.
- \*"3.6 m above sea level" is calculated by adding the tsunami height of 1.5 m onto the annual maximum tide level of 2.1 m.
- The arrival time of the largest tsunami is estimated to be about 4 hours after the earthquake. However, the effects of the tsunami may start occurring as early as about 30 minutes after the earthquake. Please promptly evacuate to a safe location.

### [Earthquakes in Akinada-Iyonada-Bungosuido]

The arrival time of the largest tsunami, is estimated to be about 2 hours after the earthquake. However, the effects of the tsunami may start occurring sooner than a Nankai Trough megathrust earthquake with an inundation area larger than an earthquake due to the Akinada fault zone. Please immediately evacuate to a safe location.

[Earthquakes due to the Akinada fault zone]

Effects of the tsunami will start occurring immediately after the earthquake. As soon as the shaking stops, please immediately evacuate to a safe location, such as the upper floors of a sturdy building.

# **Evacuation Awareness**

## 1. Get accurate information.

The appropriate evacuation actions and timing for evacuating vary depending on each individual's unique situation. In an emergency, check the evacuation information and status of your surrounding area and make your own decision about how to evacuate appropriately.

# **2. Evacuate accordingly based on the situation.** In principle, you should evacuate to a safe place (such as high ground

outside of the expected inundation area). However, if it is difficult to evacuate, consider evacuating to an emergency shelter facility during inundation or the highest floor of a nearby, sturdy building.

## 3. Tsunamis come in multiple waves.

Absolutely do not go near the shore or near any rivers until the tsunami advisory, tsunami warning, or major tsunami warning is lifted.

### 4. Prepare a bag of emergency goods.

To prepare for evacuating in an emergency, place the minimum required goods to bring when evacuating in a backpack and place that backpack where you can easily reach it.



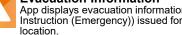
□ Handheld radio □ Emergency food □ Water □ Flashlight/Batteries □ Clothes □ Daily goods □ First-aid medicine □ Raingear □ Cash □ Valuables □ Face masks □ Disinfectant □ Antiseptic wipes □ Thermometer Etc.

# Deciding on the Timing for Evacuating and Method for Gaining Information Check the meaning of and method for gaining weather and evacuation information in advance and consider the timing for evacuating in the event of an emergency.

If a tsunami is expected to cause damage, the Japan Meteorological Agency announces a "major tsunami warning," "tsunami warning," or "tsunami advisory" about 3 minutes after the earthquake. After that, information such as the "estimated maximum tsunami height" and "estimated initial tsunami arrival time" is announced. Also, "Nankai Trough Earthquake Extra Information" is announced when the likelihood of a Nankai Trough earthquake has risen, and other times

# You can check evacuation information and risk level information on the Emergency Evacuation Guide App.

Hiroshima City provides The Hiroshima City Emergency Evacuation Guide App "避難所へGo! (Go to the Evacuation Site!)" which allows residents to check evacuation information and risk Issued for level information such as tsunami inundation areas. Download the app and check the risk level of your home. (App Functions) **Evacuation Information** 



App displays evacuation information (Evacuation Instruction (Emergency)) issued for your current

## Risk Level Information

Check information about risk levels in your current location (tsunami inundation areas, etc.).

### Directions to the Nearest Evacuation Site

If it is necessary to leave and evacuate, this displays the shortest route to your nearest open evacuation site based on your current location.

Even if you stray from the designated route, or if you've designated places you want to walk by, the app will automatically display new, updated routes.





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### iOS/iOS 10.0 or later Recommended environments

Android/Android terminal 6.0 or later

Announced by JMA			Corresponding School Districts by Hiroshima City	
Туре	Criteria for Announcement	Announcement by Numbers	Issued Evacuation Information	
	The expected maximum tsunami height is 0.2 m or higher but not exceeding 1 m, and the tsunami may cause damage.	1 m (0.2 m $\leq$ Expected height $\leq$ 1 m)		
	The expected maximum tsunami height is over 1 m but not exceeding 3 m.	3 m (1m < Expected height $\leq$ 3 m)	Evacuation Instruction (Emergency)	
Major Tsunami Warning	The expected maximum tsunami height is over 3 m.	5 m (3 m < Expected height $\leq$ 5 m)		
		10 m (5 m < Expected height $\leq$ 10 m)		
		Over 10 m (10 m < Expected height)		

- Based on announcements from the Japan Meteorological Agency, Hiroshima City issues an evacuation instruction (emergency) for areas where residents must evacuate, taking into consideration factors such as the status of functional failure at structures such as embankments. If a tsunami warning or the like is issued, immediately evacuate to a safe location or high ground away from the sea and rivers.
- If Nankai Trough Earthquake Extra Information is announced, re-check your earthquake preparedness.