

Tsunami

● Method to Consider Tsunami Inundation Prediction for Fukuroi City

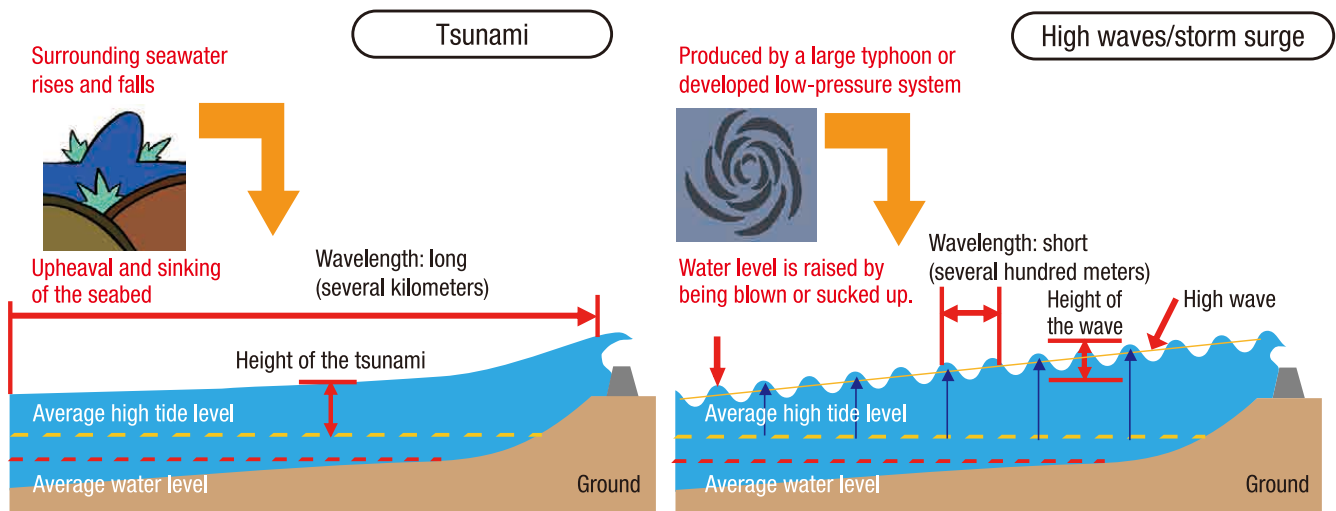
This Tsunami Inundation Prediction Map for Fukuroi City has been independently formulated by predicting, based on Level 2 prediction information (a major earthquake or tsunami that, while extremely rare in frequency of occurrence, would inflict significant damage should it occur) simulated by the national and prefectural governments, together with further detailed data collection and analysis results, a condition where all coastal disaster prevention forests and river embankments collapse simultaneously with the occurrence of an earthquake.

Source: Fukuroi City Tsunami Evacuation Plan

● What is a Tsunami?

A tsunami is a wave with a long wavelength that is triggered as the result of an event in which the upheaval and sinking of the seabed, a seabed landslide or another event, are produced such as by an earthquake, etc., which occurs at the bottom of the sea, causing the surrounding seawater to rise and fall. When the movement (vertical movement) of the sea surface produced is particularly large, the water surface rises greatly and forms a huge mass of water that is extremely destructive should it make landfall.

Unlike the high waves and storm surges caused by typhoons or developed low-pressure systems that raise the sea level, a tsunami that makes landfall rushes inland while maintaining its height and destructive force and flows upstream against rivers.



Source: Fukuroi City Tsunami Hazard Map

● Characteristics of Tsunami

① A tsunami strikes repeatedly.

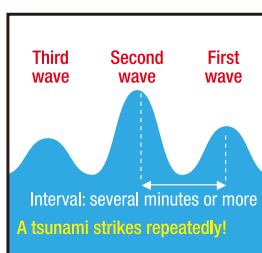
Regarding the height of a tsunami that makes landfall, there are cases when the largest wave is not the first wave, but the second and subsequent waves. Remain cautious until a tsunami warning has been canceled and safety has been confirmed.

② When the water depth decreases, the height of a tsunami suddenly increases.

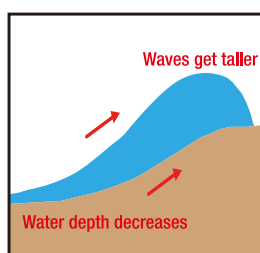
Since tsunamis have the characteristic of curving in the direction toward shallow seabed topography, the height of a tsunami will differ depending on the area.

③ Tsunamis are very fast, and travel offshore at speeds comparable to jet aircraft.

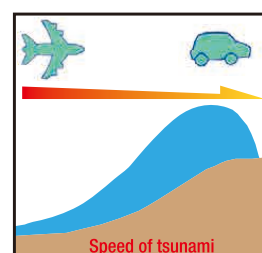
Although tsunamis slow down considerably when they make landfall, the tsunami pushes into land at the same speed as automobiles. Only starting to evacuate after seeing a tsunami approaching will be too late.



① Repeatedly



② As water depth decreases, waves get taller



③ Tsunamis are fast

Source: Fukuroi City Tsunami Hazard Map

● Criteria for Announcing Tsunami Warning Information

Type	Description of information	Details			
Earthquake information	Earthquake early warning	Names of areas that experienced an earthquake with a seismic intensity of 3 or more and the time it occurred			
	Information regarding hypocenter	The place (hypocenter) where an earthquake occurred and its scale (magnitude)			
	Information regarding the seismic intensity of individual areas	Hypocenter elements, the scale of hypocenter and point seismic intensity			
	Information regarding remote earthquakes	The time and scale when an earthquake with a magnitude of 7.0 or more occurs outside of Japan			
Tsunami information	Tsunami warning/advisory	When the occurrence of a tsunami disaster is expected, an announcement is made within approximately 3 minutes after the occurrence of an earthquake			
		Type		Details	Height of announced tsunami
		Tsunami warning	Large tsunami (Special)	A tsunami exceeding 3 meters is expected	5 meters, 10 meters, exceeding 10 meters
			Tsunami	A tsunami exceeding 1 meter but equal to or less than 3 meters is expected	3 meters
		Tsunami advisory		A tsunami exceeding 20 centimeters but equal to or less than 1 meter is expected	1 meter
	Tsunami information	When a tsunami warning or advisory is announced, the predicted arrival time of the tsunami and the predicted height of the tsunami, etc., are announced.			
		Type		Details	
		Information on the predicted arrival time of the tsunami/predicted height		The predicted arrival time of the tsunami and its predicted height are announced in the forecasted tsunami areas	
		Information on the high tide time/predicted arrival time of the tsunami in each area		The high tide time/predicted arrival time of the tsunami in main areas are announced	
		Information on tsunami observation		When a tsunami is actually observed, the time and height are announced.	

Source: Fukuroi City Tsunami Evacuation Plan



Evacuate while shouting "Tsunami" and "Run away!"

Evacuate on foot!



Stay away until the tsunami warning is canceled!

Tsunami Inundation Prediction Map

