

Tsunami Facts

- Tsunamis that strike coastal locations are almost always caused by earthquakes. The earthquakes might occur far away or near where you live. While earthquakes occur in all ocean basins around the world, most do not generate tsunamis.
- Some tsunamis can be very large. In coastal areas their height can be as great as 33 ft. or more (90 ft. in extreme cases), and they can move inland several hundred feet.
- All low lying coastal areas can be struck by tsunamis.
- A tsunami consists of a series of waves with crests arriving every 10 to 60 minutes. Often the first wave may not be the largest. The danger from a tsunami can last for several hours after the arrival of the first wave. Tsunami waves typically do not curl and break, so DO NOT try to surf a tsunami.
- Tsunamis can move faster than a person can run.
- A tsunami initially causes the water near shore to recede, exposing the ocean floor.
- The force of some tsunamis is enormous. Large rocks weighing several tons, along with boats and other debris, can be moved inland hundreds of feet by tsunami wave activity, and homes and buildings destroyed. All this material and water move with great force, and can kill or injure people.
- Tsunamis can occur at any time, day or night.
- Tsunamis can travel up rivers and streams from the ocean.
- Tsunamis easily wrap around islands and can be just as dangerous on coasts not facing the source of the tsunami.

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Emergency Phone Numbers

- | | |
|----------------------------|---------------|
| • Police | 911 |
| • Fire & Rescue | 488-1411 |
| • Emergency Room | 488-2558 |
| • Ambulance | 488-1411 |
| • NEMO | 587-6366/6367 |
| • Marine Law | 488-5206 |
| • Palau Red Cross | 488-5780/5781 |
| • National Weather Service | 488-1034/6287 |

Be Prepared!

Talk with family & friends about
TSUNAMI safety.

This could save your life and
theirs....

Know the warning signs

SHAKE...DROP...ROAR...RUN!



Building Safety and Resilience in the Pacific Project

TSUNAMI

Knowledge Is Safety!

**IN CASE OF EARTHQUAKE,
GO TO HIGH GROUND OR
INLAND**

What is a Tsunami?

A tsunami is a series of large waves that are caused by a major disturbance of the sea floor. The disturbance can be a strong and shallow earthquake, a submarine landslide, or a submarine volcanic eruption. Most Tsunamis are earthquake generated with a speed greater than 500 mph in deep water and a height only a few inches in deep water. Most damages caused by Tsunamis is near the source. Tsunami is the Japanese word for harbor wave.

TSUNAMI WARNING PROCEDURES:

The following steps is the Tsunami Warning Response Procedures for the NEMO Office and how they disseminate information to the public in regards to an earthquake and a possible threat of a Tsunami.

Step 1. Information is received about an earthquake and a possibility of a tsunami. The possible source of information is from:

- A. National Weather Service in Koror, Palau
- B. Pacific Tsunami Warning Center in Hawai'i
- C. Other sources: ITIC or JMA

Step 2. NEMO verify information.

Step 3. NEMO inform the National Emergency Committee (NEC) Chairman to relay information. NEC Chairman then advises the ROP President and will further activate the Emergency Operation Center if there is a threat to Palau.

Step 4. NEMO will then contact most vulnerable states/locations closest to coastal areas.

Step 5. NEMO contact all Schools/Hotels located on the coast areas.

If Tsunami occurs during daytime, NEMO will notify the Ministry of Education and all private schools located on the coastline.

Step 6. The Public Information Officer from the President's Office will issue an official warning to Radio Stations, specifically T8AA Radio [Echo Paradise]. This particular radio station is government-owned and is mandated to disseminate emergency announcements from NEMO and EOC during times of emergencies.

IMPORTANT FACTS:

- Depending on the location of the earthquake, lead-time before a tsunami strikes may be longer or shorter. If an earthquake occurs within one hundred miles radius from Palau, warning time may be within minutes.
- An earthquake with a magnitude of 6.7 or more generally produces a tsunami. However, not all earthquakes generate tsunamis. Volcanic activities, submarine landslides can cause tsunamis.
- Only low lying islands and coastal areas are vulnerable to tsunamis. People living on higher grounds are not vulnerable.
- Tsunamis can travel up to 500 to 600 miles per hour, slowing down when reaching shallow waters.

PEOPLE MUST MAKE THEIR OWN WARNING

Because there is no time to give an official warning during local earthquakes, people must make their own decisions. That is why it is important that each person in your school, village or hamlet knows the warning signs and knows what to do. So how much lead time and warning do you have before a generated tsunami strikes? That simply depends on where the tsunami was generated. If it has been generated locally by a local quake or submarine slide, the tsunami can push onshore in minutes or less leaving little time to "escape or evacuate." If you are at a coast and feel a large quake, ALWAYS run away from waters edge as quickly as possible. Seek high ground and high well built structures immediately.

PREPARE ESCAPE PATHS AND SAFE AREAS

Communities and schools on the coast should plan and prepare for tsunamis. Locate a safe area, and prepare escape paths so that people can reach the safe area. The safe area should be on high ground, or a height of a 6-storey building.

THE WARNINGS OF A TSUNAMI ARE:

1. An earthquake
2. Any unusual change in sea level (commonly the sea level drops before the TSUNAMI wave arrives)
3. A roaring noise

IF YOU NOTICE ANY OF THE WARNING SIGNS

1. Run to a safe place
2. Do not wait to be told.
3. Do not wait until you see the wave because it will be too late. The wave travels as fast as a speeding car.

HOW TO SAVE YOUR LIFE!

- You are safe from the wave if you are more than 800 feet from the water's edge, or are on high ground.
- Most TSUNAMI waves are 3 to 6 feet high. Less commonly the 9 to 12 feet high and rarely 30 to 60 feet high.
- If you cannot run away to a safe place, climb a tree. Probably you will be safe.
- Wait at the safe place for several hours.

IF YOU ARE ON A SHIP OR BOAT.

If you are at sea, DO NOT return to the coast until the waves have ceased. You are safe if you stay out in the open sea. If there is no time to take the ship at a wharf or jetty out to sea, leave the ship and run to a safe place.

IF YOU ARE CAUGHT BY A TSUNAMI WAVE.

1. Swim as strongly as you can!
2. Find something that floats and hang on to it!

IF YOU BECOME AWARE OF ANY OF THE WARNING SIGNS.

- Run to a safe place, immediately!
- If trapped on low ground near the sea, climb a tree; you may be safe.
- Stay at the safe area for several hours. Remember more waves may come.
- DO NOT stay in a car near the sea. The wave can carry the car along, like another piece of debris.



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