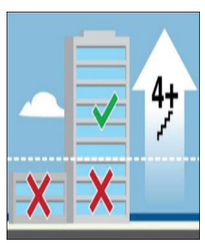
WHAT TO DO IN A TSUNAMI WARNING?

- When an evacuation is necessary, sirens will sound. Significant and widespread land flooding is expected. Stay away from rivers, streams and any water channels that lead to the ocean due to strong tsunami wave action and currents.

  If you are not in a tsunami evacuation zone, stay where you are to minimize traffic congestion.
- Check Hawaii radio and TV stations, **HNL.info** or NOAA Weather Radio for emergency information. (National news stations may not have information about Hawaii)
- If you are in a metropolitan area with high-rise buildings, vertical evacuation maybe an option. The building must be at least 10 stories of reinforced concrete and you must move to the 4th floor or higher for safety.

  Move boats and ships to deep water if there is time.
- Stay out of Tsunami Evacuation Zones until an “all- clear” is issued by local emergency officials. Obey local emergency and law enforcement authorities. Do not return to Tsunami Evacuation Zones until local authorities say it is safe.
- Check local Hawaii radio/TV stations, **HNL.info** or NOAA Weather Radio for emergency information, regarding long-term public shelters and/or disaster assistance centers.

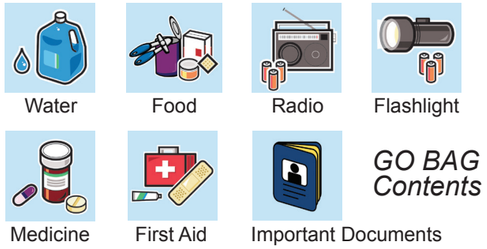


IF YOU EXPERIENCE ANY OF THE NATURAL WARNING SIGNS, FOLLOW THIS ADVICE:

- Evacuate immediately to safe zones, inland to high ground and away from low-lying coastal areas. Or move vertically into a building that is at least 10 stories, to the 4th floor or higher.
- Do not wait for an official warning.
- Go on foot or bicycle if at all possible.
- Do not pack your belongings or delay.
- Do not return to the beach – large waves may continue to come onshore for hours.

HOW DO I PREPARE?

- Double check if you live, work, play, or travel in a Tsunami Evacuation Zone, an Extreme Tsunami Evacuation Zone or in a Safe Zone.
- Study the Tsunami Evacuation Information and Maps online at **www.honolulu.gov/dem**, in the local Hawaiian Telcom White Pages Telephone Book, or at any Public Library.
- Prepare a GO BAG of essential items beforehand. A GO BAG is a bag, suitcase, or kit that you can quickly grab and take with you during an emergency situation.



WHAT TO DO FOR DISTANT EARTHQUAKES AND TSUNAMIS?

For earthquakes that occur around the Pacific Rim, check if there is a tsunami Watch, Advisory, or Warning for Hawaii.

WHAT TO DO FOR LOCAL EARTHQUAKES AND TSUNAMIS?

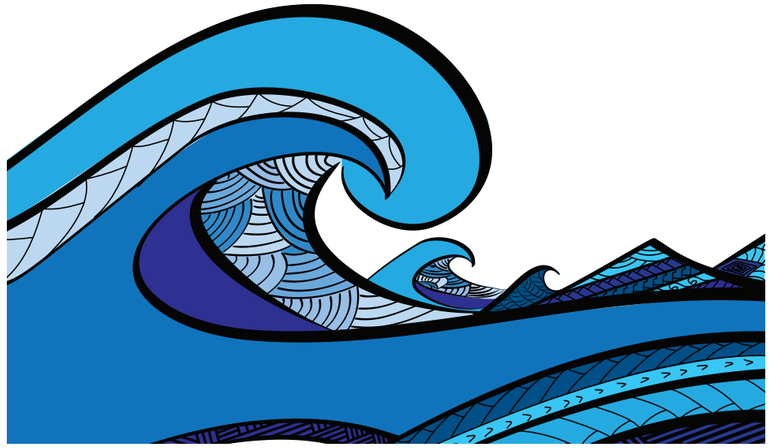
DROP
Drop down onto your hands and knees so the earthquake doesn’t knock you down.

COVER
Cover your head and neck with your arms to protect yourself from falling debris. Stay away from glass and windows.

HOLD
Hold on to any sturdy covering so you can move with it until the shaking stops.

- Stay where you are until the shaking stops.
  Do not go outside until the shaking stops.
- The earthquake may have caused a local tsunami that could arrive in a few minutes. If you are near the ocean, move immediately to higher ground to a Safe Zone outside of the Tsunami Evacuation Zone once the shaking stops.
- Do not wait for a tsunami warning to be issued.
- Calmly walk or bike to a Safe Zone, do not drive your vehicle.

ENGLISH



TSUNAMI FACTS

FREQUENTLY ASKED QUESTIONS

Prepare today for a tsunami

Learn about tsunami facts
and help save lives!

IMPORTANT INFORMATION YOU NEED TO KNOW

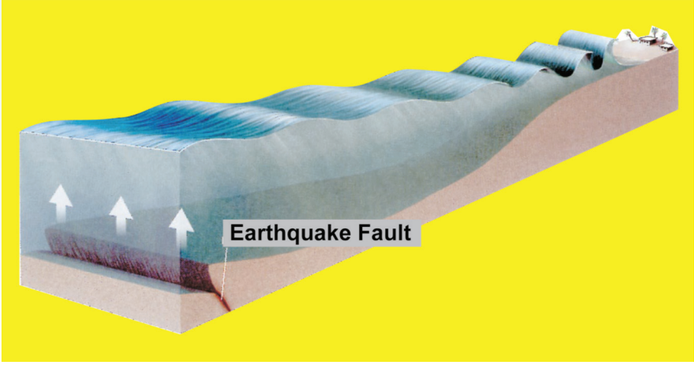
Department of Emergency Management
City and County of Honolulu
www.honolulu.gov/dem dem@honolulu.gov
Phone (808) 723-8960 TTY (808) 723-8966

O‘AHU

WHAT IS A TSUNAMI?

- Tsunamis are a series of very dangerous, large, long ocean waves. You cannot swim or surf tsunamis because they flood the land like a rushing river (or fast-rising tide) rather than curling and breaking like a regular surfing wave. Tsunamis pick up and carry debris, which greatly increases the chance of injury.
- Tsunami waves may keep coming for hours, with waves arriving every 10 minutes to one hour apart. The first wave may not be the largest.
- Tsunamis travel as fast as a jet airliner (approximately 500 mph) in the deep ocean with waves only a few inches high.
- As tsunamis approach the shore they slow down but increase dramatically in height. Tsunamis strike with devastating force and quickly flood all low-lying coastal areas threatening life and property.

  Historically, locations in Hawaii have been flooded with water more than 30 feet deep.
- Tsunamis are usually caused by shallow, undersea earthquakes.
- Tsunamis are less frequently caused by underwater volcanic eruptions, landslides, slumps, and meteorites.
- Homes and small buildings are not designed to withstand tsunami impacts.



THESE ARE NATURAL WARNING SIGNS THAT A TSUNAMI MAY BE APPROACHING

FEEL: Feel the earth shake (earthquake) so strong that you feel you cannot stand.

SEE: See the ocean water recede, swirl or act unusual.

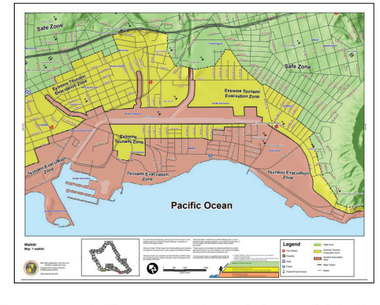
HEAR: Hear the roar of the tsunami that sounds like a jet aircraft or freight train.

TSUNAMI ALERT LEVELS PACIFIC TSUNAMI WARNING CENTER (PTWC)

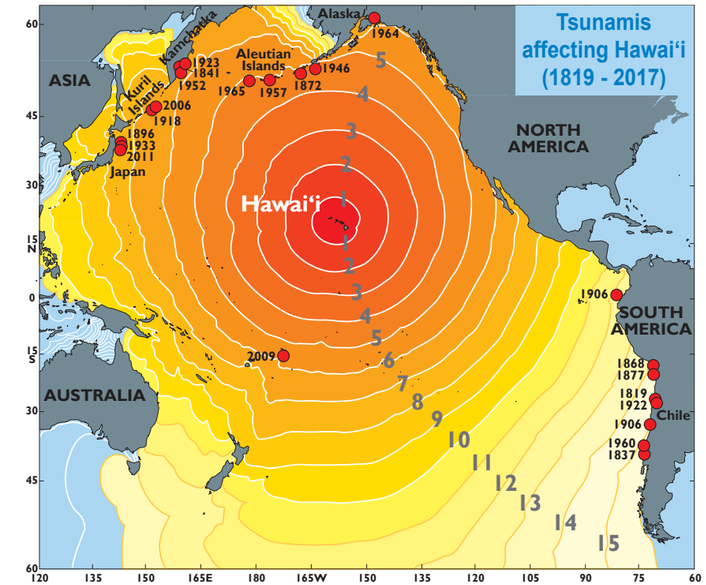
- **Tsunami Information Statement:**
  If a Tsunami Information Statement is issued, there is no tsunami threat.
- **Tsunami Watch**
  If a Tsunami Watch is issued, you should prepare and be ready to act because a tsunami may occur.
- **Tsunami Advisory**
  If a Tsunami Advisory is issued, you should move away from beaches and low-lying coastal areas and evacuate harbors/ marinas.

  Move boats and ships to deep water if there is time.
  You can expect strong currents and dangerous waves in coastal areas and waterways. But significant land flooding is not expected.
- **Tsunami Warning**
  If a Tsunami Warning is issued, quickly leave Red Tsunami Evacuation Zones (outlined in a bold line) to Green Safe Zones as indicated on the Tsunami Evacuation Map.
- **Extreme Tsunami Warning**
  If an Extreme Tsunami Warning is issued, quickly leave Yellow Extreme Tsunami Evacuation Zones (outlined in a dotted line) and Red Tsunami Evacuation Zones (outlined in a bold line) to Green Safe Zones as indicated on the Tsunami Evacuation Map.

  A very large magnitude 9+ earthquake may cause an extreme tsunami. There may only be 3.5 hours to evacuate before the first wave arrives.



Tsunami Evacuation Map (Waikīkī)



Each ring equals 1 hour of tsunami travel time coming to Hawai'i.

AFTER A TSUNAMI, WHEN IS IT SAFE TO RETURN?

- A tsunami may have been destructive or non- destructive. If it was destructive, emergency search and rescue operations will immediately start on land and at sea. An "all clear" to return to impacted areas may not be issued for hours or days.
- If the tsunami was non-destructive, an "all clear" allowing return to coastal areas may be issued. But an "all clear" to return to the water, may not necessarily be issued.
- Coastal areas could be devastated with flooding, damaged homes, buildings, debris, fires, hazardous material spills (HAZMAT) and inoperable utility lifeline systems (electrical, telecommunications, roads / bridges, natural gas lines, etc.) The public will not be able to re-enter these areas until roadway debris is cleared.
- Wait for an "all clear" from local emergency officials before returning to low-lying areas or the water.

FOR MORE INFORMATION:

DEPARTMENT OF EMERGENCY MANAGEMENT
CITY AND COUNTY OF HONOLULU
WWW.HONOLULU.GOV/DEM DEM@HONOLULU.GOV
PHONE (808) 723-8960 TTY (808) 723-8966

INTERNATIONAL TSUNAMI INFORMATION CENTER
PACIFIC TSUNAMI WARNING CENTER
TSUNAMIHAWAII.ORG TSUNAMI.GOV ITIC.TSUNAMI@NOAA.GOV
PHONE (808) 725-6050