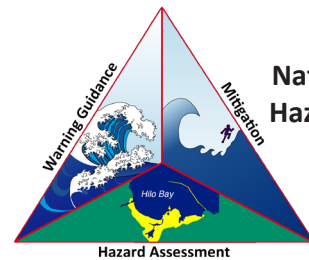


Tsunami Awareness & Safety



National Tsunami Hazard Mitigation Program

If you live, work, or play at the coast, you should prepare for tsunamis. Tsunamis do not occur very often, but they pose a major threat to coastal communities. While they cannot be prevented, there are things you can do that could save your life and the lives of your loved ones.

How will I be warned about a tsunami?

There are two types of tsunami warnings: official and natural. Both are important. You may not get both. Respond immediately to whichever you receive first.

Official tsunami warnings are broadcast through radio, television, and wireless emergency alerts. They may also come through outdoor sirens, officials, text message alerts, and telephone notifications.

There may not be time to wait for an official warning. A natural tsunami warning may be your only warning. Natural warnings include:

- A strong or long earthquake
- A loud roar (like a train or an airplane) from the ocean
- Unusual ocean behavior (the ocean could look like a fast-rising flood or a wall of water or it could drain away suddenly like a very low, low tide)

If you experience any of these natural warnings, even just one, a tsunami could be coming.



How do I respond to a tsunami warning?

If you are in a tsunami hazard zone and receive an official warning:

- Stay out of the water and away from beaches and waterways.
- Get more information from radio, television, or your mobile device (text or data).
- If officials ask you to evacuate, move quickly to a safe place. Follow evacuation signs or go as high or far inland (away from the water) as possible.

If you are in a tsunami hazard zone and receive a natural warning, a tsunami could arrive within minutes:

- In case of an earthquake, protect yourself. Drop, cover, and hold on. Be prepared for aftershocks. Each time the earth shakes, drop, cover, and hold on.
- Take action. Do not wait for an official warning or instructions from officials.
- As soon as you can move safely, move quickly to a safe place. Follow evacuation signs or go as high or far inland (away from the water) as possible.
- If there is earthquake damage, avoid fallen power lines, and stay away from weakened structures.
- When you are in a safe place, get more information from radio, television, or your mobile device (text or data).

If you are on the beach or near water and feel an earthquake of any size and length, move quickly to high ground or inland (away from the water) as soon as you can move safely. Get more information from radio, television, or your mobile device (text or data).

If you are outside of the tsunami hazard zone and receive a warning, stay where you are unless officials tell you otherwise.

Knowledge saves lives!

What is a tsunami and where do they happen?

A tsunami is a series of waves caused by a large, sudden disturbance of the sea. Undersea earthquakes are the most common cause, but landslides, volcanic activity, certain types of weather, and near-earth objects (e.g., asteroids, comets) can also cause tsunamis.

Most tsunami waves are less than 10 feet high. In extreme events, they can exceed 100 feet. Large tsunamis can flood more than a mile inland. The first wave may not be the largest or most damaging, and the danger may last for hours or days. Tsunamis are a serious threat to life and property. Even small tsunamis can be dangerous, especially to swimmers, surfers, and boats in harbors.

Tsunamis can strike any U.S. coast, but risk is greatest for states and territories with Pacific and Caribbean coastlines. Low-lying areas such as beaches, bays, lagoons, harbors, river mouths, and areas along rivers and streams leading to the ocean are the most vulnerable. Tsunamis can happen any time, any season, and during any weather. They can be generated far away (across the ocean) or locally. Local tsunamis can arrive just minutes after a disturbance.

How can I prepare for a tsunami?

It is easy to prepare for a tsunami. Many preparedness actions are common across hazards. If your home, school, workplace, or other places you visit often are in tsunami hazard zones:

- Ensure you have multiple ways to receive warnings. Get a NOAA Weather Radio, sign up for text message alerts from your local government, and verify that your mobile devices receive wireless emergency alerts.
- Make an emergency plan that includes plans for family communication and evacuation.
- Map out routes from home, work, and other places you visit often to safe places on high ground or inland (away from the water) and outside the tsunami hazard zone. Your community may already have identified evacuation routes and assembly areas. Plan to evacuate on foot if you can; roads may be impassable due to damage, closures, or traffic jams.
- Practice walking your routes, even in darkness and bad weather. This will ease evacuation during an emergency.
- Put together a portable disaster supplies kit with items you and your family (including pets) may need in an emergency. Prepare kits for work and cars, too.
- Be a role model. Share your knowledge and plans with others.

If you have children in school in a tsunami hazard zone, find out the school's plans for evacuating and keeping children safe.



If you are visiting the coast, find out about local tsunami safety. Your hotel or campground should have this information.

What should I do after a tsunami?

- Stay out of the tsunami hazard zone until officials say it is safe. The cancellation of a warning does not mean danger has passed.
- Stay out of any building with damage or water around it until a professional or official says it is safe.
- Get updates and safety instructions from radio, television, or your mobile device (text or data).

Where can I learn more?

Tsunami safety: www.weather.gov/tsunamisafety

Tsunami alerts: www.tsunami.gov

Emergency planning: www.ready.gov

Information provided by the National Tsunami Hazard Mitigation Program (<http://nws.weather.gov/nthmp/>), a partnership of the National Oceanic and Atmospheric Administration, Federal Emergency Management Agency, U.S. Geological Survey, and 28 U.S. states and territories.