

Tsunamis



A tsunami (pronounced soo-nahm-ee) is a series of giant waves that happen after underwater movement due to a variety of natural events such as earthquakes, volcanic eruptions, landslides, and meteorites. The waves travel in all directions from the area of disturbance, much like the ripples that happen after throwing a rock. The waves may travel in the open sea as fast as 450 miles per hour. As the big waves approach shallow waters along the coast they grow to a great height and smash into the shore. They can be as high as 100 feet. They can cause a lot of destruction on the shore. "Tsunami" is a Japanese word. Tsu means "harbor" and nami means "wave."

Am I at risk?

Tsunamis generally appear in the Pacific Ocean and coastal areas. Hawaii is the state at greatest risk for a tsunami. They get about one a year, with a damaging tsunami happening about every seven years. Alaska is also at high risk. Coastal states, like California, Oregon and Washington experience a damaging tsunami about every 18 years.



FACT CHECK

1. **True or False?** A tsunami is a single tidal wave.
2. **True or False?** You can outrun a tsunami.
3. **Why do boats go out further to sea during a Tsunami?** _____

ANSWERS
 (1) False. Tsunamis are a series of waves; expect more than one wave, each stronger than the next. They have no relation to the daily ocean tides, and often incorrectly called 'tidal waves'.
 (2) False! Tsunamis can travel at speeds up to 600 miles an hour. That's as fast as an airplane!
 (3) Because waves are usually smaller at sea, and most destructive to coastlines.

Did you know?

- On the open ocean, a fast moving tsunami may only be a few feet high, with 100 miles separating wave crests. As they approach shore, waves increase in height and currents intensify, which create a bigger threat to life and property.
- Few tsunamis "break" like the waves seen in wind-generated waves popular with surfers. Tsunamis are more often associated with strong currents and walls of water that do not retreat like normal tidal waves do.



For more facts and info on tsunamis visit
<http://www.ready.gov/kids/know-the-facts/tsunamis>
<http://www.tsunami.noaa.gov/>

Be Prepared

BEFORE

- ✓ Build an emergency kit.
- ✓ Make a family communications plan.
- ✓ If the water recedes from the shoreline, or goes out to sea, in a very noticeable way, get away from the area immediately. This is nature's warning that a tsunami is coming.

DURING

- ✓ Listen to evacuation orders and leave the area immediately.
- ✓ Take any pets with you.
- ✓ Move inland (away from the ocean) and towards higher ground.
- ✓ Stay away from the beach. Never go down to the water to watch a tsunami come in. If you can see the wave, you are too close to escape it.
- ✓ If the water recedes from the shoreline or goes out to sea in a very noticeable way, get away from the area immediately. This is nature's warning that a tsunami is coming.

AFTER

- ✓ Don't return home unless officials tell you it is safe to do so. Tsunami waves can continue for hours and the next wave may be more dangerous than the first.
- ✓ Stay away from debris in the water. It could be dangerous.
- ✓ Stay out of any building with water around it. Water can make floors crack or walls collapse.
- ✓ Text, don't talk. Unless there's a life-threatening situation, if you have a cell phone, send a text so that you don't tie up phone lines needed by emergency workers. Plus, texting may work even if cell service is down.

WORDS TO KNOW

Inland Away from the coastline

Seismic Sea Waves Another way to describe tsunamis

Evacuation Leaving an area that has been declared unsafe

Debris Rubble, trash, random material, like large pieces of wood, metal, or plastic

