

What You Can Do Before the Next Tsunami:

BE PREPARED

- Know the best evacuation route — practice walking your route at night and in stormy weather
- Keep a “grab and go” kit by the door with what you need to survive for a day
- Discuss emergency plans with family, coworkers and neighbors
- Have a NOAA Weather Radio at home and at work
- Consider how to evacuate pets — such as dogs on leashes and cats in crates
- Prearrange assistance from neighbors if you need help evacuating

Questions or want more information?

Humboldt Co. Red Cross (707) 443-4521

Humboldt Co. Sheriff's Office OES (707) 268-2500

National Weather Service (707) 443-6484

HSU Geology Department (707) 826-3931

NOAA National Weather Service Tsunami Program
tsunami.gov

Living on Shaky Ground
humboldt.edu/shakyground

Cal EMA My Hazards
myhazards.calema.ca.gov

Great California ShakeOut
shakeout.org

U.S. Geological Survey
earthquake.usgs.gov/prepare

California Geological Survey
consvr.ca.gov/cgs/geologic_hazards

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HUMBOLDT
STATE UNIVERSITY

Redwood Coast
Tsunami Work Group
a member of the
Earthquake Country Alliance
We're all in this together



How to survive a TSUNAMI

in MANILA, CALIFORNIA

A component of *Living on Shaky Ground*



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What is a Tsunami?

A tsunami is a series of water surges usually caused by an earthquake beneath the sea floor.

TSUNAMIS CAN TRICK YOU!

- **The first surge is not the largest.**
- **It is not unusual for tsunami surges to last at least 12 hours and in some cases much longer.**
- **Just when you think it is all over, another very large surge may come.**

What areas are at risk?

The beach, harbors, the bay, and river mouths are at greatest risk. If you are in the **YELLOW** area on the map (inside), you should leave after feeling an earthquake that lasts a long time. If you are in the white area, stay where you are.

How do I know if an earthquake is big enough to cause a tsunami?

- If you are on the beach and feel an earthquake, no matter how small, **move inland or to high ground immediately.**
- In other low-lying areas, **COUNT** how long the earthquake lasts. If you count 20 seconds or more of ground shaking and are located in a tsunami hazard zone, **evacuate as soon as it is safe to do so.**
- **GO ON FOOT.** Roads and bridges may be damaged by strong ground shaking. Avoid downed power lines — some may retain a charge even when they are on the ground. **If evacuation is impossible, go to the upper floor of a sturdy building or climb a tree** — but only as a last resort.

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2011–JAPAN in Kesennuma, cars and other debris were swept away by tsunami waves.



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2004–THAILAND When the water rushed in, it looked like a river in flood.

Two Ways to Know if a Tsunami is Coming:

Natural Warnings

GROUND SHAKING, a **LOUD OCEAN ROAR**, or the **WATER RECEDING UNUSUALLY FAR** exposing the sea floor are all nature's warnings that a tsunami may be coming. If you observe any of these warning signs, **immediately walk to higher ground or inland.** A tsunami may arrive within minutes and damaging surges are likely to occur for at least 12 hours and possibly longer. **Stay away from coastal areas** until officials permit you to return.

Official Warnings

You may be notified that a Tsunami Warning has been issued via TV, radio stations, door-to-door contact by emergency responders, NOAA weather radios, or in some cases, by outdoor sirens and announcements from airplanes. Move away from the beach and **seek more information without using a phone.** Tune into local radio or television stations for more information. Follow the directions of emergency personnel who may ask you to evacuate low-lying coastal areas.

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NATURAL AND OFFICIAL WARNINGS ARE EQUALLY IMPORTANT. RESPOND TO WHICHEVER YOU HEAR OR OBSERVE FIRST!
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How to use this Map:

Locate where you live, work, and play. **If you are in the yellow area, evacuate by foot immediately after feeling an earthquake that lasts 20 seconds or longer.** Use this map to plan a safe evacuation route. Practice evacuating so that you and your family know what to do during a real tsunami. Remember—**GO ON FOOT.** Roads are likely to be impassable.

Entering and Leaving Tsunami Zone signs are placed on roads near where you cross from the white safe area into the yellow tsunami zone. Take note of where these signs are located. If a large earthquake occurs, return at least as far as this point to be in a safe area. If you cannot reach this point, go as far or high as you can. Every foot inland or upwards can make a difference.

In some areas, **evacuation route** signs and **evacuation site** signs have been posted to help guide you to safe zones. In other areas, routes are in the planning stages.

Don't know where the evacuation zone is?

If there are no maps or signs posted, head to an area 100 feet above sea level or two miles inland. These numbers are overly conservative and should be used as a guideline only when you have no maps or signs to guide you.

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SAMOA, CA—Residents practice tsunami evacuation in an annual drill.



This map is to help you protect yourself from the biggest tsunami likely to hit our area. It is based on the Relative Tsunami Hazard Maps developed by Humboldt State University and tsunami inundation mapping by the California Geological Survey. It uses the best currently available data and may be changed or updated as

additional scientific information becomes available. It includes no information about the probability of a tsunami hitting our area and does not reflect how an actual tsunami may impact the region. **It is intended to support tsunami evacuation planning and should not be used for any other purposes.**