IF YOU FEEL A STRONG EARTHQUAKE WHILE NEAR THE COAST:

1. PROTECT yourself during the earthquake

- If indoors, DROP under a sturdy table or object, COVER your head and neck and HOLD ON.
- If outdoors, move to a clear area if you can safely do so - away from trees, beach cliffs, signs and other hazards - and drop* to the ground.

* If you have mobility impairments that prevent you from getting up on your own, do not drop to the ground but do cover your head and neck and hold on.

2. MOVE to High Ground

- As soon as it is safe to move, go to higher ground. DO NOT WAIT for an official tsunami warning.
- Avoid downed power lines and weakened overpasses.
- If you are outside of a tsunami hazard zone, stay where you are.

3. STAY There

- Remain on high ground. Waves from a tsunami may arrive for eight hours or longer.
- Return to the coast only when officials have announced that it is safe to do so.

THINGS YOU SHOULD KNOW ABOUT TSUNAMIS

- A tsunami is a series of waves or surges most commonly caused by an earthquake beneath the sea floor.
- An unusual lowering of ocean water, exposing the sea floor, is a warning of a tsunami or other large wave. This "draw back" means the water will surge back strongly.
- Beaches, lagoons, bays, estuaries, tidal flats and river mouths are the most dangerous places to be. It is rare for a tsunami to penetrate more than a mile inland.
- Tsunami waves are unlike normal coastal waves. Tsunamis are more like a river in flood or a sloping mountain of water and filled with debris.
- Tsunamis cannot be surfed. They have no face for a surfboard to dig into and are usually filled with debris.
- Large tsunamis may reach heights of twenty to fifty feet along the coast and even higher in a few locales. The first tsunami surge is not the highest and the largest surge may occur hours after the first wave. It is not possible to predict how many surges or how much time will elapse between waves be for a particular tsunami.
- The entire California Coast is vulnerable to tsunamis. The Crescent City Harbor on California's North Coast suffered significant tsunami damage as recently as 2006. A dozen people were killed in California following the 1964 Alaska earthquake.

ADDITIONAL RESOURCES

About tsunamis: http://wcatwc.arh.noaa.gov/

Identifying natural hazards in your neighborhood
www.myhazards.calema.ca.gov

Preparing for earthquakes and tsunamis
www.earthquakecountry.org

The California Geological Survey www.consrv.ca.gov/cgs

Or contact your county Office of Emergency Services.

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How to Survive a Tsunami

- Protect yourself during the earthquake
- Move to high ground or inland as soon as you can
- Stay there

Prepared by:

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CALIFORNIA EMERGENCY MANAGEMENT AGENCY

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TWO WAYS TO FIND OUT IF A TSUNAMI MAY BE COMING

1. NATURAL WARNING

Strong 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 go to higher ground or inland. A tsunami may arrive within minutes and may last for eight hours or longer. Stay away from coastal areas until officials announce that it is safe to return.

2. OFFICIAL WARNING

You may hear that a Tsunami Warning has been issued. Tsunami Warnings might come via radio, television, telephone, text message, door-to-door contact by emergency responders, NOAA weather radios, or in some cases by outdoor sirens. Move away from the beach and seek more information on local radio or television stations. Follow the directions of emergency personnel who may request you to evacuate beaches and low-lying coastal areas. Use your phone only for life-threatening emergencies.

Natural and official warnings are equally important. Respond to whichever comes first.

WHEN SHOULD I EVACUATE?

Evacuation should not be automatic. Before evacuating you should determine if you are in a hazard zone and consider possible hazards that may exist along your evacuation route.

- Know if you live, work, or play in a tsunami hazard zone.
- COUNT how long the earthquake lasts. If you feel more than 20 seconds of very strong ground shaking and are in a tsunami hazard zone, evacuate as soon as it is safe to do so.
- If you are on the beach or in a harbor and feel an earthquake—no matter how small—immediately move inland or to high ground.
- GO ON FOOT. Roads and bridges may be damaged.
- Avoid downed power lines.
- If evacuation is impossible, go to the third or higher floor of a sturdy building or climb a tree. This should only be used as a last resort.
- If you hear that a tsunami warning has been issued but did not feel an earthquake, get more information. Listen to the radio, television or other information sources and follow the instructions of emergency personnel.
- If you are outside of a tsunami hazard zone, take no action. You are safer staying where you are.

PREPARE NOW

How you prepare will affect how you recover. And being prepared for earthquakes and tsunamis prepares you for all kinds of disasters.

- Know if you live, work, or play in a tsunami hazard zone.
- Learn what the recommended tsunami evacuation routes are in your city, county and region. Identify safety zone(s) near you, and decide on your primary and secondary evacuation routes.
- If you live or work in a tsunami hazard zone get a NOAA weather radio with the public alert feature for your home and office. It will alert you even if turned off.
- Assemble a small evacuation kit with essential documents, medications, a flashlight, a portable NOAA weather radio and batteries, water, snacks and warm clothes. Include a silver "space blanket" in your kit – it can be used to signal your location to air search teams. Keep your evacuation kit by the door so you can "grab & go".
- Walk your route – consider what you would do at night or in stormy weather.
- Make a reunification plan with your loved ones. Decide when and where you will meet if you are separated, and what out of state relative or friend you will call if it is not possible to meet at your pre-designated reunification spot.
- Discuss plans with family, coworkers and neighbors.
- Make plans for how to address any functional needs or disabilities you might have. If you need help evacuating, prearrange assistance from neighbors including transport of mobility devices and durable medical equipment. If you are mobility impaired, account for the extra time that you may need.
- Decide on the best strategy for protecting your pets.
- Prepare to be on your own for several days or longer.
- Consider joining your Community Emergency Response Team (www.csc.ca.gov/cc/cert.asp)

WHERE SHOULD I GO?

All California coastal counties have tsunami hazard guidance maps and are in the process of posting tsunami hazard zone signs. These signs and maps will show you what areas are safe and what areas may be at risk. Use them to guide you to a safe area.

If no maps or signs are available, go to an area 100 feet above sea level or two miles inland, away from the coast. If you cannot get this far, go as high as possible. Every foot inland or upwards can make a difference.