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.

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 and are usually filled with debris.

Large tsunamis may reach heights of twenty to fifty feet along the coast. 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.

**How to Survive a Tsunami**

**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.
- Avoid downed power lines and weakened over passes.
- 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**

**ADDITIONAL RESOURCES**

FEMA’s emergency preparedness information site:
www.Ready.gov

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

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

Preparing for earthquakes and tsunamis
www.earthquakecountry.org

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

LA County Office of Emergency Services
http://lacoo.org
**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, or NOAA weather radios. Move away from the beach and seek more information on local radio or television stations. Register with the city’s alert notification system, SM Alerts, to receive emergency updates via phone, email or text message.

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**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.
- GO ON FOOT. Roads and bridges may be damaged.
- Avoid downed power lines.
- 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.

**WHERE SHOULD I GO?**

Coastal areas contain signage that will show you what areas are safe and what areas may be at risk. Use them to guide you to a safe area.

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**PREPARE NOW**

How you prepare will affect how you recover. 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. 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. 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.
- 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.
- If you live in the tsunami hazard zone, sign up for SM Alerts now. In the case of a tsunami, you will receive up to date information and instructions.

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*California Incline under construction 2013 – 2015*