

T sunamis are enormous, powerful waves generally caused by earthquakes beneath the ocean floor. Earthquakes often trigger tsunamis, which can cause considerably more damage and deaths than the earthquakes. Volcanic eruptions and landslides can also trigger a tsunami. Tsunamis can cause flooding, contamination of drinking water, and fires from gas lines or ruptured tanks. Tsunamis can happen anywhere along the United States coasts; however, coasts that border the Pacific Ocean or the Caribbean have the greatest risk.

How it Might Impact Your Utility Service

- If you have time and are able, fill up clean containers, bathtubs, and sinks with water in case you lose service.
- Have electric can openers, batteries for flashlights and radios, and backup chargers for phones and other essential devices in case of power outages
- Refer to the appendix "Utilities 101: Importance of Shutting Off & Unplugging."



Sign up for your community's warning system. The Emergency Alert System and National Oceanic and Atmospheric Administration Weather Radio also provide emergency alerts.

A tsunami WARNING means a tsunami may have been generated and could be close to your area.

A tsunami WATCH means a tsunami has not yet been verified but could exist and may be as little as an hour away.

BEFORE A TSUNAMI

• Remember the four steps of emergency planning:

Review your family preparedness plan.

- Establish a communications plan.
- Assemble a disaster supply kit.
- **D**evelop a household evacuation plan that includes your pets.
- Talk to your family so that everyone knows what to do.
- Know the height of your street above sea level and the distance of your street from the coast or other high-risk waters. Evacuation orders may be based on these numbers.
- If you are a tourist, familiarize yourself with local tsunami evacuation protocols. You may be able to safely evacuate to the third floor and higher in reinforced concrete hotel structures.
- If an earthquake occurs and you are in a coastal area, turn on your radio to learn if there is a tsunami warning.

- Learn the signs of a potential tsunami, such as an earthquake, a loud roar from the ocean, or unusual ocean behavior, such as a sudden rise or wall of water or sudden draining of water showing the ocean floor.
- Know and practice community evacuation plans and map out your routes from home, work, and play. Pick shelters 100 feet or more above sea level, or at least one mile inland.
- Create a family emergency communication plan that has an out-of-state contact. Plan where to meet if you get separated.
- Consider earthquake insurance and a flood insurance policy through the National Flood Insurance Program. Standard homeowner's insurance does not cover flood or earthquake damage.
- Listen to emergency information and alerts.
- If you are under a tsunami warning, evacuate. Do not wait. Leave as soon as you see any natural signs of a tsunami or receive an official tsunami warning.
- Prepare a pet emergency kit and make a plan to take your pets with you in the event of an evacuation.
- Ensure that any outbuildings, pastures, or corrals are protected the same way as your home. Fence lines should enable your animals to move to higher ground in the event of a tsunami.
- Take precautions to prevent flooding in your home and consult an engineer to identify ways to divert waves from your property.
- Make a list of items to bring inside in the event of a tsunami watch or warning for your area. But remember, you may have to evacuate immediately and may not have time to gather belongings.

DURING A TSUNAMI

- If you are in a tsunami area and there is an earthquake, first protect yourself from the earthquake. Refer to Earthquake section for safety tips during an earthquake.
- When the shaking stops, if there are natural signs or official warnings of a tsunami, then move immediately to a safe place as high and as far inland as possible. Listen to the authorities, but do not wait for tsunami warnings and evacuation orders.
- If you are outside of the tsunami hazard zone and receive a warning, then stay where you are unless officials tell you otherwise.
- Leave immediately if you are told to do so. Evacuation routes are often marked by a wave with an arrow in the direction of higher ground.
- If you are in the water, grab onto something that floats, such as a raft, tree trunk, or door.
- If you are in a boat, then face the direction of the waves and head out to sea. If you are in a harbor, then go inland.
- Move inland to higher ground immediately. Pick areas 100 feet (30 meters) above sea level or go as far as 2 miles (3 kilometers) inland, away from the coastline. If you cannot get this high or far, go as high or far as you can. Every foot inland or upward may make a difference.

- Stay away from the beach. Never go down to the beach to watch a tsunami come in. If you can see the wave you are too close to escape it. CAUTION — If there is noticeable recession in water away from the shoreline, this is nature's tsunami warning and it should be heeded. You should move away immediately.
- If you evacuate, take your pets with you.
- Stay away until local officials tell you it is safe to return. A tsunami is a series of waves that may continue for hours.

AFTER A TSUNAMI

- Listen to local alerts and authorities for information on areas to avoid and shelter locations.
- Be aware of the risk of electrocution. Underground or downed power lines can electrically charge water. Do not touch electrical equipment if it is wet or if you are standing in water.
- Report fallen power lines or broken gas lines to the utility company. If you smell gas or hear a hissing noise, open a window and get everyone outside quickly. Turn off the gas using the outside main valve if you can and call the gas company once you are outside and away from your home.
- Save phone calls for emergencies. Phone systems are often down or busy after a disaster. Use text messages or social media to communicate with family and friends.
- Avoid wading in floodwater, which can contain dangerous debris. Water may be deeper than it appears.
- tay away from damaged buildings, roads, and bridges.
- Check food supplies. Discard any food that has come in contact with floodwater, as it may be contaminated.
- Take photos of your home and its contents for insurance purposes.