

TSUNAMI: MESSAGES

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About the Message Library

People affected by disaster must have access to timely, appropriate and accurate information to help them keep themselves and their families safe and well. They should know their rights, entitlements and be able to give feedback. Responders have a duty to put in place appropriate, systematic and coordinated mechanisms to ensure this.

Our Message Library offers clear, concise and simple messages on a range of topics as templates for you to adapt and use in the context you are working in. These are intended to help you make a quick start on communicating with communities while you further develop mechanisms for on-going dialogue with diverse groups within each community.

For help contextualising and using the messages we recommend you do our e-learning course and read the following technical guidance.

E-learning

<https://kayaconnect.org/course/info.php?id=768>

Guidance

<https://www.cdacnetwork.org/tools-guidance/cdac-message-library-user-guidance>

1. TSUNAMI PREPAREDNESS

What is a tsunami?

Tsunamis are large ocean waves generated by major earthquakes beneath the ocean floor or major landslides into the ocean. Rising to several feet or higher, they can strike the coast with devastating force. People on beaches or in low coastal areas, such as estuaries and rivers, need to be aware that a tsunami could arrive within minutes of a severe earthquake – and the danger period can continue for many hours. Tsunamis can occur any time of year, day or night.

Tsunami preparedness for you and your family

You can prepare for a tsunami by taking these measures:

Talk about tsunamis with your family so that everyone knows what to do in a tsunami situation. Discussing ahead of time helps reduce fear, particularly for younger children.

Check at your workplace and your children's schools and day care centers to learn if they are in a tsunami hazard area or inundation zone. Learn about their evacuation plans, especially the designated spot where you will pick up your children.

Plan evacuation routes from your home, school, workplace and other places you could be where tsunamis present a risk. If possible try to pick areas 100 feet above sea level or 2 miles inland [amend units so they are locally understood].

If you cannot get that high or far, go as high or far as you can. Every step inland or upward may make a difference. You should be able to reach the highest ground possible on foot within 15 minutes.

Practice your evacuation routes. Familiarity may save your life. Be able to follow your escape route at night and during inclement weather.

Identify which radio stations issue tsunami information. You may also be able to download a storm app on your smartphone.[insert more specific information if available]

Check any insurance policies that you have for tsunami clauses.

[insert info on how tsunami alerts are issued / warning mechanisms, e.g. radio stations, sirens].

Tsunami preparedness for your livestock

You can prepare your animals for a tsunami by taking these measures:

Consider a precautionary evacuation of your animals, especially any large or numerous animals. Waiting until the last minute could be fatal for them and dangerous for you.

Where possible, move livestock to higher ground. If using a horse or other trailer to evacuate your animals, move sooner rather than later.

Bring your companion animals indoors and maintain direct control of them.

Protecting your home

You can prepare your home for a tsunami by taking these measures:

Avoid building or living in buildings within several hundred feet of the coastline. These areas are more likely to experience damage from tsunamis, strong winds, or coastal storms.

If you do live in a coastal area, elevate your home to help reduce damage. Most tsunami waves are less than 10 feet (3 meters).

Take precautions to prevent flooding.

Check whether any government or NGO services are available to check your home and advise about ways to make it more resistant to tsunami water. There may be ways to divert waves away from your property. Improperly built walls could make your situation worse.

Make a list of items to bring inside your home in the event of a tsunami watch or warning being issued for your area. But remember, you may need to evacuate immediately – don't risk your safety to save your belongings.

2. DURING A TSUNAMI

What to do if a tsunami occurs

If you feel a strong coastal earthquake:

- Drop, cover, and hold on to protect yourself from the earthquake.
- When the shaking stops, gather members of your household and review your evacuation plan. A tsunami may be coming within minutes.
- Use a local radio or television station for updated emergency information.
- Follow instructions issued by local authorities. Recommended evacuation routes may be different from the one you planned, or you may be advised to climb higher.
- If you hear an official tsunami warning or detect signs of a tsunami, evacuate at once. A tsunami warning is issued when authorities are certain that a tsunami threat exists, and there may be little time to get out.
- Take your emergency preparedness kit. Having supplies will make you more comfortable during the evacuation.
- If you evacuate, take your animals with you if it is safe for you to do so. If it is not safe for you, it is not safe for them.
- Get to higher ground as far inland as possible. Watching a tsunami from the beach or cliffs could put you in grave danger. If you can see the wave, you are too close to escape it.
- Avoid downed power lines and stay away from buildings and bridges from which heavy objects might fall during an aftershock.

- Stay away until local officials tell you it is safe. A tsunami is a series of waves that may continue for hours. Do not assume that after one wave the danger is over. The next wave may be larger than the first one.

3. AFTER A TSUNAMI

Staying safe after a tsunami

After a tsunami, at a minimum you should:

1. Let friends and family know you're safe. [Insert details of government body or organisation] can help you reconnect with family members.
2. If evacuated, return only when authorities say it is safe to do so.
3. Continue listening to local news for updated information and instructions.
4. If people around you are injured, practice CHECK, CALL, CARE. Check the scene to be sure it's safe for you to approach, call for help, and if you are trained, provide first aid to those in need until emergency responders can arrive.

Caring for yourself & loved ones

Avoid disaster areas. Your presence might hamper rescue and other emergency operations and put you at further risk from the residual effects of the tsunami, such as contaminated water, crumbled roads, landslides, mudflows, and other hazards.

Expect aftershocks if the earthquake was very large (magnitude 8 to 9+ on the Richter scale) and located nearby. Some aftershocks could be as large as magnitude 7+ and capable of generating another tsunami. It may take days, weeks, or months for the aftershocks to subside.

Pay attention to how you and your loved ones are experiencing and handling stress. Your local Red Cross / Crescent can give you information about how to cope with disaster and trauma and help children and others to do so.

Watch animals closely and keep them under your direct control.

Help people who require additional assistance—infants, elderly people, those without transportation, large families who may need additional help in an emergency situation, people with disabilities, and the people who care for them.

Returning home safely

Stay out of damaged buildings and those surrounded by water. Tsunami water, like floodwater, can undermine foundations, causing buildings to sink, floors to crack, or walls to collapse.

Check food supplies. Any food that has come in contact with floodwater may be contaminated and should be thrown out.

Watch out for fallen power lines or broken gas lines and report them to the utility company immediately. If you smell gas or hear a blowing or 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 from a neighbor's home.

Inspect your home's structure and utilities & systems [see next message]. Take pictures of home damage, both of the buildings and its contents, for insurance purposes if you hold insurance.

Returning home safely – inspecting your home's structure

Follow these tips for inspecting your home's structure and utilities & systems after a tsunami:

If you had to leave your home, return only when local authorities advise that it is safe to do so. Do not cut or walk past colored tape that was placed over doors or windows to mark damaged areas unless you have been told that it is safe to do so. If a building inspector has placed a color-coded sign on the home, do not enter it until you get more information, advice and instructions from your local authorities.

If you have children, leave them with a relative or friend while you conduct your first inspection of your home after the disaster. The site may be unsafe for children, and seeing the damage firsthand may upset them even more and cause long-term effects, including nightmares.

Make a careful and thorough inspection of your home's structural elements:

Check the outside of your home before you enter. Look for loose power lines, broken or damaged gas lines, foundation cracks, missing support beams or other damage. Damage on the outside can indicate a serious problem inside. Ask a building inspector or contractor to check the structure before you enter. If the door is jammed, don't force it open – it may be providing support to the rest of your home. Find another way to get inside.

Sniff for gas. If you detect natural or propane gas, or hear a hissing noise, leave the property immediately and get far away from it. Call the fire department after you reach safety.

If you have a propane tank system, turn off all valves and contact a propane supplier to check the system out before you use it again.

Beware of animals, such as rodents, snakes, spiders and insects, that may have entered your home. As you inspect your home, tap loudly and often on the floor with a stick to give notice that you are there.

Damaged objects, such as furniture or stairs, may be unstable. Be very cautious when moving near them. Avoid holding, pushing or leaning against damaged building parts.

Is your ceiling sagging? That means it got wet – which makes it heavy and dangerous. It will have to be replaced, so you can try to knock it down. Be careful: wear eye protection and a hard hat, use a long stick, and stand away from the damaged area. Poke holes in the ceiling starting from the outside of

the bulge to let any water drain out slowly. Striking the center of the damaged area may cause the whole ceiling to collapse.

Is the floor sagging? It could collapse under your weight, so don't walk there! Small sections that are sagging can be bridged by thick plywood panels or thick, strong boards that extend at least 8–12 inches on each side of the sagging area.

If the weather is dry, open windows and doors to ventilate and/or dry your home.

If power is out, use a flashlight. Do not use any open flame, including candles, to inspect for damage or serve as alternate lighting.

Make temporary repairs such as covering holes, bracing walls, and removing debris. Save all receipts.

Take photographs of the damage. You may need these to substantiate insurance claims later.

Once you have evaluated your home's structural elements, the next step is to check the major systems to determine what repairs need to be done before your home is habitable.

Returning home safely – inspecting electrical, plumbing and heating systems

If you see sparks, broken or frayed wires, or if you smell hot insulation, turn off the electricity at the main fuse box or circuit breaker.

If there is a pool of water on the floor between you and the fuse box or circuit breaker panel, use a dry wooden stick to try to reach to turn off the main fuse or breaker, but do not step or stand in water to do that. If you cannot reach the fuse box or breaker panel, call a qualified electrician for assistance.

Inspect the panel box for any breakers that may have tripped. A tripped breaker may indicate damaged wiring inside your home. Do not turn them on. Call an electrician.

Use a flashlight to inspect fuses. Replace broken fuses with exactly the same amperage rating and never use an object such as a coin or strip of metal to bypass the protection that fuses provide.

If you suspect sewage lines are damaged, avoid using sinks, showers or toilets and call a plumber.

If water pipes are damaged, turn off the water at the main valve. Call a plumber for assistance.

If you have a heating oil tank system, turn off all valves and contact a professional specializing in maintenance of such equipment before using it again.

Other household items

Normal household items, such as cleaning products, can cause toxic fumes and other hazards if they mix. See our chemical emergency safety tips.

Spilled chemicals that don't pose a health risk must still be carefully cleaned up. Wear rubber gloves and discard spilled chemicals and rags used for cleaning according to the advice of local authorities.

Throw away food, beverages and medicine exposed to heat, smoke or soot. Food that was in the freezer can be used if it still has ice crystals on it. If not, discard it.

Disconnect and check all appliances for damage before using them.

Cleaning and repairing your home

Wear protective clothing, including long pants, a long-sleeved shirt and sturdy shoes, and be cautious.

If your home has been flooded:

Shovel out any mud before it solidifies.

Open the windows and doors to help dry the building.

You may have a lot to accomplish, so be sure to take breaks when the task seems overwhelming. Step outside, get some fresh air, and focus on the improvements you've already made. And don't be afraid to ask for help when you need it!

Cleaning and repairing your home – detailed advice

It's up to you whether you prefer to start by tackling the largest issues across the entire home, or by focusing on one or two key rooms where you can make substantial progress.

If this is your first visit to the home, follow our tips for checking your home's structural elements and utilities and systems.

Open doors and windows. If the house was closed for more than 48 hours, air it out before staying inside for any length of time.

Remove any remaining water, large amounts of dirt/mud, damaged items and other trash.

Clean hard surfaces throughout your home (flooring, countertops and appliances) thoroughly with hot water and soap or a detergent. Then disinfect with bleach or a commercial disinfectant (be sure to follow directions on the bottle).

Dry soft surfaces (upholstered furniture, rugs, bedding and clothing) in the open air if possible, before cleaning.

Throw out all food, beverages and medicine exposed to flood waters and mud. When in doubt, throw it out. This includes canned goods, plastic utensils, baby bottle nipples and containers with food or liquid that has been sealed shut.

Any appliances that were inundated by flood water should be checked by a professional before you use them.

Cleaning and sanitizing food contact surfaces

Throw away wooden cutting boards, wood or plastic utensils, and baby bottle nipples and pacifiers that have come into contact with floodwater.

Use hot, soapy water to thoroughly wash metal pans, ceramic dishes and utensils that have come into contact with floodwater.

Sanitize dishes by boiling them in a clean or properly treated water or by immersing them for 10 to 15 min in a solution of 1 tablespoons of unscented liquid of unscented liquid chlorine bleach per gallon of water.

Water damage

Water damage, such as from a flood or in the aftermath of a fire, is not just unsightly and unsanitary – it can also be dangerous. From wallboards to rugs, items that are not thoroughly dried can sprout mold and mildew.

Your first task in addressing water damage is to remove any water that remains. That means pumping out standing water and drying out waterlogged surfaces.

Pump out flooded basements gradually (about one-third of the water per day) to avoid structural damage. If the water is pumped out completely in a short period of time, pressure from water-saturated soil on the outside could cause basement walls to collapse.

Bring all soft items (such as sofas, clothing, bedding, and throw rugs) outside if possible – sunlight and wind will help them dry faster.

Throw out items that have absorbed water and cannot be cleaned or disinfected. This includes mattresses, carpeting, cosmetics, stuffed animals and baby toys.

Remove all drywall and insulation that has been in contact with flood waters.

Consider removing vinyl floor coverings and tile to allow the substructures beneath or behind them to dry.

Keep the windows open and run fans – or keep them shut and run dehumidifiers – to pull moisture out of wood floors and subfloors, beams, doors, etc.

Be patient. Depending on the level of water damage incurred, it can take weeks or months for your home's structural elements to be thoroughly dried. Only then should you replace drywall, carpets and other floorcoverings.

Smoke damage

Smoke odors and soot are difficult to remove, so the work may be best handled by professional fire restorers. However, there are some steps you can take to rid your home of these reminders of the fire.

Most of all: avoid touching soot. It smears easily and will leave oily black stains on everything it touches. If one is available, use a shop vac to remove soot, being careful that the vacuum nozzle doesn't contact the surface you are cleaning.

If you have soot stains on your walls or hard surfaces, visit your local hardware stores to find a cleaner designed to address soot.

For smoke odors, ventilation is key. Open windows and run fans. Don't neglect your attic and other insulated spaces, since insulation often retains odors.

Wash hard surfaces with hot soapy water. Consider using trisodium phosphate (TSP) if it is available where you live. Be sure to follow directions for safe use and disposal of TSP!

For soft, washable items, such as clothing and bedding, first decide if the item is worth keeping. Smoke is difficult to fully remove, and you may have more important things to spend time on. Multiple wash cycles – without letting the items dry in between – may be required.

REFERENCES

For more information on this topic, we recommend you read the following references.

American Red Cross (2022). **Tsunami Preparedness**.
www.redcross.org/get-help/how-to-prepare-for-emergencies/types-of-emergencies/tsunami.html

HELP US KEEP THE LIBRARY UP TO DATE

If you would like to contribute to topic reviews, have found a message that needs greater clarity, or wish to create a new topic, please contact us at info@cdacnetwork.org.