



Intergovernmental Oceanographic Commission





UNESCO/IOC Tsunami Ready Recognition Programme

Preparedness Indicators – Awareness

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Tsunami Ready Indicators









UNESCO IOC TSUNAMI READY INDICATORS

ASSESSMENT (ASSESS)

- 1 ASSESS-1. Tsunami hazard zones are mapped and designated
- 2 ASSESS-2. The number of people at risk in the tsunami hazard zone is estimated
- ASSESS-3. Economic, infrastructural, political, and social resources are identified

II PREPAREDNESS (PREP)

- PREP-1. Easily understood tsunami evacuation maps are approved
- 5 PREP-2. Tsunami information is publicly displayed
- PREP-2. Outreach and public awareness and education resources are available and distributed
- PREP-3. Outreach or educational activities <u>are held at least</u> three times a year
- 8 PREP-4: A community tsunami exercise is conducted at least every two years

III RESPONSE (RESP)

- RESP-1. A community tsunami emergency response plan (ERP) is approved
- 10 RESP-2. The capacity to manage emergency response operations during a tsunami is in place
- RESP-3. Redundant and reliable means to timely receive 24-hour official tsunami alerts are in place
- 12 RESP-4. Redundant and reliable means to timely disseminate 24-hour official tsunami alerts to the public are in place



PREP-2. Tsunami information, including signage is publicly displayed







Following types of signs suggested:

- Tsunami Danger and/or hazard zones
- Evacuation Routes
- Assembly Meeting areas/points
- Tsunami Response Education
- Tsunami Evacuation Maps

Consider existing signage used by the

country for other hazards



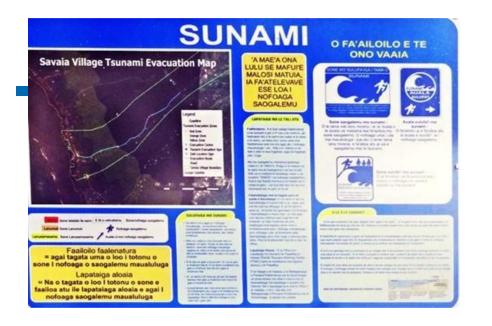
























PREP-3. Outreach and public awareness and education resources are available and distributed





- Materials should include, where appropriate, tsunami evacuation maps, evacuation routes, safety tips and information about when and how to respond to warnings (including natural warnings for regions with a local tsunami threat).
- They should be tailored to <u>meet local</u> <u>information needs</u> and be based on location-specific tsunami threats.
- All schools within the community requesting recognition should receive a copy of the materials.





Tsunamis



Antes

Esté siempre preparado(a), un tsunami puede ocurrir en cualquier momento

- a) Prepare un plan familiar de emergencia
- b) Tenga a mano un maletín de seguridad
- c) Conozca las zonas de evacuación y los lugares de Asamblea
- d) Identifique las rutas de evacuación





Señales

Esté atento(a) a cualquiera de estas señales

- a) Terremoto muy fuerte (se hace difícil caminar, se caen objetos)
- b) Terremoto de larga duración
- c) Mensaje oficial de la CNE
- d) Cambio repentino en el nivel del mar
- e) Ruido fuerte del mar



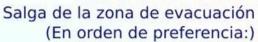


Terremoto

Protéjase en caso de terremoto

- a) Agáchese
- b) Cúbrase
- c) Agárrese

Evacuación



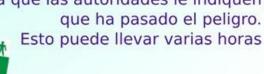


- a) Vaya a un lugar alto y alejado de la costa
- b) Súbase a un segundo piso o más alto
- c) Súbase a un árbol
- d) Vaya a un lugar de reunión (refugio)
- e) Si hay tiempo, lleve las embarcaciones costa afuera
- a 100m de profundidad



Regreso

Quédese fuera de la zona de evacuación hasta que las autoridades le indiquen que ha pasado el peligro.





CNE











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WHAT IS TSUNAMI?

It is a series of waves in the sea produced by a strong earthquake, landslide or volcanic eruption.

WHEN DOES IT HAPPEN?

It can occur at any time and arrive in a few minutes to the coast. Tsunamis travel at the speed of a supersonic jet or plane

EFFECT OF A TSUNAMI

It floods the coast and devastates everything. A tsunami wave can grow up to 10 meters high or even more

SIGNS OF A TSUNAMI



Strong earthquakes, shake severely or for long time



"A descent of the sea level "A wall of water approaching the coast



loud roar.

HEAR

An approaching tsunami creates a



RUN!

Get away from the coastal zones and look for the highest areas

TSUNAMI EVACUATION DRILL



Source: COPECO HONDURAS, IOTIC, ITIC, LIPI

FOR YOUR SAFETY!



EARTHQUAKE READY

- Be alert, a strong or long earthquake may trigger a tsunami in short time.
- Move away from beaches and river banks, and seek information on what has happened.



TSUNAMI WARNING READY

- Seek warning information from BMKG on national TV, local radio, or public announcement in your area.
- If there is a sound of siren or other warning dissemination devices, evacuate immediately.

BMKG Warning information provides tsunami THREAT LEVEL for each region

MAJOR WARNING

Highest threat level, The communities must evacuate!

Medium threat level, but still dangerous ,

WARNING

The communities must evacuate!

Low threat level, The communities must move away

from beaches and riverbanks!

ADVISORY

EVACUATION READY



- Upon feeling the earthquake or receiving tsunami warning, evacuate immediately to designated safe locations.
- Follow the evacuation route and signage, if available.
- If you don't know the location of the safe zone, run as far as possible from the coast

WARNING INFORMATION DISPLAY ON NATIONAL TV

Information on the time of origin of the earthquake



Prepare yourself from now!

Red colour = MAJOR WARNING
Orange colour = WARNING level

Yellow colour = ADVISORY level

- · Learn about tsunami and its signs!
- Find information from your local government about tsunami evacuation procedures in your area!
- Plan with your family on how to respond to a tsunami!



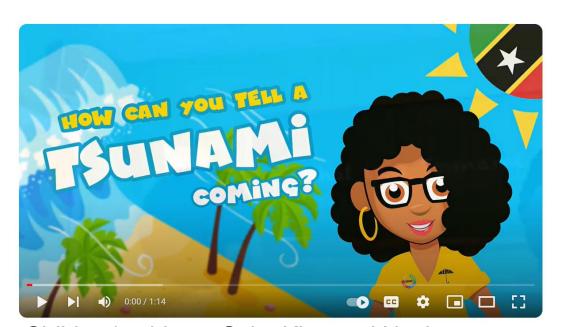


Examples - Caribbean TR Projects









Children's video – Saint Kitts and Nevis https://www.youtube.com/watch?v=RhDLyTkly50





Material in Braille (request of Saint Lucia gone global)





Murals painted by the community supported by local artist in Saint Kitts and Nevis

Example from Fiji









World Tsunami Awareness Day – Tsunami Preparedness video contest - students

Distribution methods







Three or more methods should be used, including:

- Brochures and flyers distributed at public venues and/or bulk mailed to local residents and businesses
- Comics and boardgames
- Newspaper articles and inserts
- Public utility/service industry bill safety notices
- Local faith-based and civic organization bulletins/mailings
- Local radio and television
- Billboard, roadside, highway or educational signs
- Historical markers and interpretative signs
- Websites/Social media
- Bulk email







Possible physical locations for distribution of material







Locations for the distribution of outreach material will depend on the nature of the material, some other examples include:

- Schools
- Visitor centres and local tourist businesses (e.g. restaurants, bars etc)
- Hotels, motels and campgrounds
- Public libraries
- Community centres
- Kiosks or information centres (e.g. malls, stores etc)
- Childcare centres
- Banks
- Utility companies
- Health centres
- Ports of entry



Important considerations in developing awareness material and campaigns



- Local or traditional knowledge: This can be a powerful tool to support scientific knowledge in community preparedness. Although it may be the most effective means in a more traditional or remote community, in general, local traditional knowledge alone will not be enough to ensure an effective response. Additional information on warning systems and evacuation and return arrangements is required.
- <u>Community needs</u>: To be effective, awareness activities and material should be tailored to the country or area-specific community needs.
 Factors such as geography, demographics, language, cultural, religious and social orientations should influence the awareness approach. They will present both strengths and opportunities.
- Coordination and collaboration: Working together among the different agencies involved is essential. Involvement and commitment by all stakeholders will support sustainability.







- Public policy: A formal tsunami education and awareness programme that is able to sustain itself over political cycles and generations can be highly effective, and may be the only feasible (funded) mitigation for localities where the occurrence of tsunamis is infrequent.
- A multi-faceted approach: The awareness programme should target a variety of formal and informal education, and awareness-building and preparedness activities such as exercises or drills
- Content: Campaigns and material should anticipate and answer the obvious questions of the target audience simply and clearly.

PREP-4. Outreach or educational activities are held at least three times a year.







Public outreach and educational activities should be conducted annually.

- Activities may be multi-hazard as long as they include tsunamis in content.
- Number of activities required for given community will be three, where at least one is community-wide event. TRB may determine another amount.
- Leveraging of national, state and regional campaigns, including use of social media.
- Multi-hazard events or presentations.
- Booths at community events and fairs.
- Community tsunami safety workshops, town hall or similar public meetings.
- Presentations or workshops for faith-based or cultural
- organizations, community or civic groups.
- Local public safety campaigns, such as "Tsunami Preparedness" week/month.

- Media workshops.
- Local business workshops to help them develop
- response and business continuity plans.
- Information for business owners for
- employee training, outreach or education that targets high-occupancy businesses in tsunami hazard zones (e.g. hotels, restaurants, fisheries, industrial sites).
- Door-to-door safety campaigns targeted to
- residents and businesses living or working in the community's tsunami hazard zone.





THANK YOU

For more information:

web: tsunamiready.org

e-mail: itic@unesco.org





