

UNESCO/IOC – NOAA ITIC Training Program in Hawaii (ITP-Hawaii) TSUNAMI EARLY WARNING SYSTEMS AND THE PACIFIC TSUNAMI WARNING CENTER (PTWC) ENHANCED PRODUCTS TSUNAMI EVACUATION PLANNING AND UNESCO IOC TSUNAMI READY PROGRAMME 7-18 August 2023, Honolulu, Hawaii USA

Intergovernmental Oceanographic Commission

14.8 TR PREP-3 and PREP-4: Building Awareness and Community Preparedness Strategies and examples

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



The community should have **Public Awareness and Education Resources**:

- That include 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)
- Tailored to meet local information needs and be based on locationspecific tsunami threats
- Distributed in <u>three or more</u> widereaching diverse methods physically or electronically.
- Distributed to community residents, businesses, and visitors.

Outreach methods

A wide range of outreach methods can be employed and new methods can be devised. Outreach material should always be tailored to meet local information needs and should be based on location-specific tsunami threats. <u>Three or more methods should be used</u>, 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

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Public awareness and education resources





- 1. Provide information on basic tsunami hazard and tsunami safety guidance
- 2. Build community's awareness and preparedness.
 - Evacuation Map (Instruction and Guidelines)
 - Tsunami signs
 - Tsunami Early Warning
 - Previous Tsunami Event / History
 - Tsunami Safety

Content



Content

What is a tsunami

- Type of tsunamis
- Key Facts about tsunami

Knowing the signs

- What are the warning / Official Warning
- Natural Signs / Natural warnings

WRAT IS A TSUBARD? KNOW THE SIGNS

TSUNAMI EVACUATION INFORMATION KNOW THE SIGNS - ARE YOU READY? WAIKAWA BEACH EVACUATION ZONE WHAT IS A TSUNAMI? KNOW THE SIGNS WHAT ARE THE WARNINGS? HE THREE TYPES OF TSUR AMI - NATURAL SIGN REMEMBER Horowhenua 😣 CUATION ZONE RED IN A LONG OR STRONG EARTHQUAK is at risk of tsunami. The EVACUATION "AN A MINUTE OR HARD TO STAND UP) nce of tsunami signa CHATE ALL ZONES of tsunami risl Remember New Zealand's entire cost is at risk of Tsunami. The absence of tsunami signage

does not mean an absence of tsunami risk

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WHANGAMJI EX

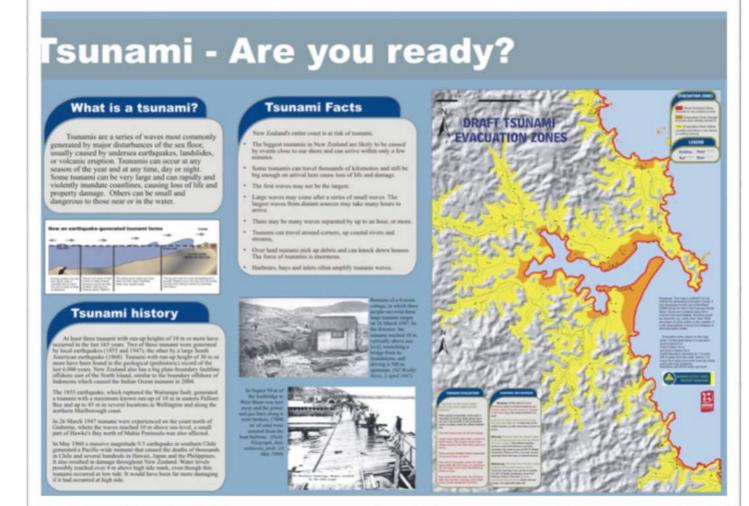
MANUFACTION PRODUCTS AND DESCRIPTION

TSUNAMI EVACUATION INFORMATION

KNOW THE SIGNS - ARE YOU READY?

Content

What is a tsunami Tsunami History Tsunami Facts Evacuation Zone



Tsunamis

Evacuación

Salga de la zona de evacuación (En orden de preferencia:)



- 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. Esto puede llevar varias horas









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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

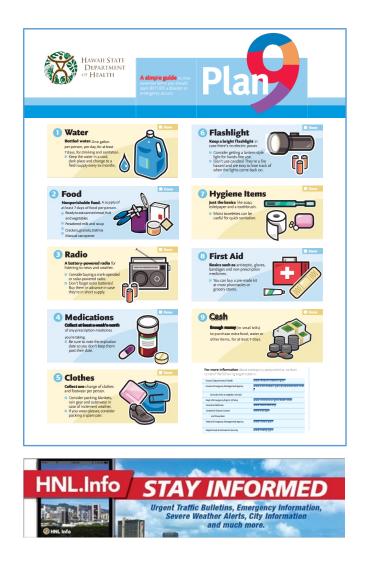


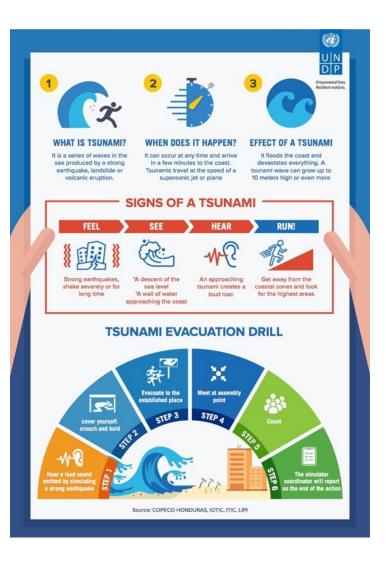
Terremoto



- a) Agáchese b) Cúbrase

c) Agárrese







Text on the back of an vacuation Map Cedeño, Honduras

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

Highest threat level, The communities must evacuate !

WARNING ADVISORY

MAJOR WARNING

Medium threat level, but still dangerous , The communities must evacuate !

Low threat level, The communities must move away

from beaches and riverbanks !

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



Prepare yourself from now !

- · 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 !



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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. It may be most **effective means in a more traditional or remote** community. Additional information on warning systems and evacuation and return arrangements is required.

Community needs:

Awareness material and activities should be **tailored to the specific community**. 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.

Important considerations in developing awareness material and campaigns

A multi-faceted approach:

Target a variety of **formal and informal education**, and awareness-building and preparedness activities.

Content:

Should anticipate and **answer the obvious questions** of the target audience **simple and clear**.

Use different platforms:

Printed materials, videos, and Social Media

Useful sources of information



 ITIC – International Tsunami Information Center

http://itic.ioc-unesco.org

 IOTIC – Indian Ocean Tsunami Information Centre

http://iotic.ioc-unesco.org

 CTIC – Caribbean Tsunami Information Centre

http://ctic.ioc-unesco.org

 NEAMTIC – North East Atlantic and Mediterranean Tsunami Information Centre

http://neamtic.ioc-unesco.org

UNESCO/IOC-NOAA SHOA

PREP-4: Outreach or educational activities are held at least 3 times a year



Mock Drills

The community should have outreach and educational activities:

- To educate community residents, businesses, and visitors, especially in the tsunami hazard zone.
- Educate on hazards, evacuation warning, and response.
- Hold three or more activities annually of which one is community wide.
- Multi-hazard that includes tsunami.
- These activities can be workshops, exhibits, school campaign, cultural activities, etc.

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

- 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 foremployee 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.

Creating Public Awareness Resources



- 1. Create Public Information Awareness Poster
- 2. Work together country, group, etc
- 3. Materials Poster Paper, marker, glue/tape, scissors, evacuation map



- 1. Effectively communicate the <u>hazard</u> information
- 2. <u>Educational</u>, building awareness and preparedness i.e.: What is a tsunami, About tsunami signs, tsunami safety, etc.
- 3. Showing clear <u>tsunami evacuation</u> map, easily understood tsunami evacuation maps as determined to be appropriate by local authorities
- 4. Have all the <u>format: Title, Authority, Legend, Scale,</u> Logos
- 5. Have <u>additional technical information</u> needed to enhance community understanding?





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Thank You

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