



UNESCO/IOC – NOAA ITIC Training Program in Hawaii (ITP-TEWS Hawaii)
TSUNAMI EARLY WARNING SYSTEMS
AND THE PACIFIC TSUNAMI WARNING CENTER (PTWC) ENHANCED PRODUCTS
TSUNAMI EVACUATION PLANNING AND UNESCO IOC TSUNAMI READY PROGRAMME
15-26 September 2025, Honolulu, Hawaii

Local-Source Tsunami Response Best Practice

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1.0 Local-Source Tsunami Priorities

- **Self Evacuation** – Key to Surviving Local Tsunamis with very short lead times
- **Official Warnings** **Supplementary** to Natural Warnings – Official warnings reinforce self-evacuations & assist **all-clear** decisions
- **Official warning systems** – Must have fast and simple warning chains, conservative, pre-scripted products, don't delay

2.0 Warning Types

- **Natural** – Strong ground shaking and/or rapidly receding sea-level, NZ
“long, strong, get gone”
- **Official** – Issued by TSPs and/or NTWCs
 - Designed to reinforce natural warnings
 - Released within 10 minutes
 - Be Conservative
 - Regular warning updates, cancellation
 - All Clear – what it is, how it is communicated
 - Multi-media, redundant
 - Consistent (same alert, same mechanism)
- **Unofficial** – Word-of-mouth, Social Media

3.0 Public Awareness and Education

- **Effective, comprehensive and Continuous Public Education Programs** – what to expect from official warning, how to recognize and respond to natural warnings
- **Exercises** – Local, Regional, National
- **Debriefings and post-event public response analysis** – learn and improve locally and internationally, SOPs
- **Communication Tests**

4.0 Detection and Characterization

- **Ground Shaking** – Strength and Intensity/Duration. Proxy but depends on source location and person feeling
- **Magnitude Threshold Tables** – Agree before. Follow during actual event. Conservative
- **Refine With more Information** – Procedures should be in place as to how updates are managed and communicated
- **Regular SOP Training and Exercising**

5.0 For Future Consideration

- **Inclusion of False Alarms in 3.0** – need to maintain confidence and ensure proactive action
- **Dealing with non-tectonic events** (landslides, volcanoes) **or slow earthquakes** (long shaking, not abrupt, but large tsunami)
- **Refinement of definition of Natural Warnings**
- **Recommendations on communications channels.**



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Thank You

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