

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

## 12.4 Local Source Tsunami Response Best Practice

Laura Kong Director International Tsunami Information Center



### **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 selfevacuations & 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 sealevel, NZ "long, strong, get gone"

- Official Issued by TSPs and/or NTWCs
  - $\odot$  Designed to reinforce natural warnings
  - $\odot$  Released within 10 minutes
  - $\circ$  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 form official wanring, 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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