



INTERNATIONAL TSUNAMI INFORMATION CENTER

LEARNING ACTIVITY: TSUNAMI EVENT CHRONOLOGY TSUNAMI WARNING TIMELINE: WHAT HAPPENS AND WHEN DOES IT HAPPEN?

During the occurrence and unfolding of a local tsunami event, reaction time is of the essence. Put the following activities in order of chronological occurrence from 1 to 25 for a local / regional tsunami scenario. Some activities may occur nearly simultaneously. Not all activities are listed. Assume power and communications are still operable after the strong earthquake.

Each major activity undertaken by government should be described by an SOP.

- _____ Drop, Cover, and Hold (Protect yourself from earthquake shaking damage)
- _____ Earthquake is detected by a seismic station
- _____ Centroid Moment Tensor (Earthquake Mechanism) calculated (TSP, USGS, NTWC, other)
- _____ Expected Tsunami Wave Height forecast using actual earthquake mechanism (TSP)
- _____ National Press Conference
- _____ Initial Magnitude calculated (M_{wp} , M_{JMA} , M_L , M_b)
- _____ TSP issues initial threat message
- _____ Search and rescue operations begin
- _____ National Tsunami Warning Center (NTWC) cancels Tsunami Warning
- _____ Deep-ocean instrument pressure sensor (DART or other) shows 2 cm signal
- _____ Coastal sea level sensor(s) show 5 m zero to peak
- _____ Expected Tsunami Arrival Times calculated (TSP, NTWC)
- _____ Strong earthquake is felt
- _____ DMO or Authority issues Evacuation order
- _____ TSP issues final message
- _____ Telephones at National TWFP/NTWC/DMO start ringing
- _____ All-Clear issued allowing Public to return to tsunami evacuation zone
- _____ Evacuation of coastal areas
- _____ NTWC/DMO issues Tsunami Warning
- _____ NTWC, TSP post-event evaluation
- _____ Public moves quickly to higher ground (self-evacuates)
- _____ Media disseminate Tsunami Warning Broadcast
- _____ Sirens sounded
- _____ TSP issues Enhanced Graphical Products
- _____ Road clearing/debris removal begins
- _____ Other – Please Specify _____