

# SSOP II

## SSOP Manual Module 4

### Multi-Hazard SSOPs

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# 4.1 Coastal Hazards

- ▶ Tsunami (both locally and distantly generated)
- ▶ Tropical Cyclones (heavy rain, strong winds, and storm surge all of which vary based upon the distance and intensity of the system)
- ▶ Thunderstorms (varying levels and occurrences of heavy rain, strong winds, hail, waterspout, and tornado)
- ▶ Very Heavy Rain (associated with monsoons and other phenomena)
- ▶ Strong Winds and Associated High Waves (produced by near and distant low pressure systems)

## 4.2 Acknowledgement of Hazards Differences

- ▶ Hazards behave differently and may occur on very different time scales and affect different geographical areas
- ▶ Core elements of many EWS for coastal hazards are similar
- ▶ Great care must be taken in developing a coastal multi-hazards EWS
  - ▶ For example, tsunami and storm surges have both similarities and differences
  - ▶ Emphasize similarities with careful consideration of differences
  - ▶ Differences in the warnings need to be clearly understood at the operational level
  - ▶ Good communications need to be maintained between different warning providers
- ▶ SSOPs need to be well developed for the warning providers as well as media and disaster managers to ensure that the correct actions are taken for different hazard types and that the general public can take appropriate actions during the warning

## 4.3 Multi-Hazard Aspects of SSOPs

- ▶ In the development of multi-hazard EWSs, a country can conduct a systematic analysis of similarities and differences of their coastal threats and hazards
- ▶ Consideration should be given to incorporating these similarities into multi-hazard SSOPs
  - ▶ Tropical cyclones and tsunamis differ in time scales and in magnitude of inundation
  - ▶ Certain similarities exist such as expected inundation areas, planning inundation charts, monitoring, and inundation measurements
  - ▶ Use of color or number scales can help with:
    - ▶ Better communication and understanding
    - ▶ Increasing effectiveness of training

# 4.3 Multi-Hazard Aspects of SSOPs

Continued

- ▶ For tropical cyclones, tsunamis, and other coastal hazards, similarities can be identified in disseminating warnings and then incorporated into the SSOPs for different hazards
  - ▶ If similar dissemination systems and processes are used, then they are tested on a more frequent basis
  - ▶ People and agencies become knowledgeable and experienced
  - ▶ Decreased chance of miscommunication or misunderstanding
  - ▶ People at risk will receive and understand warnings in a timely manner to save their lives

## 4.3 Multi-Hazard Aspects of SSOPs

Continued

- ▶ Similar coordination processes can be used among agencies and organizations at the same levels of government and also vertically from national to local communities
  - ▶ Similar communications processes can be executed on a more frequent basis
  - ▶ Helps to ensure the communication process will work as planned

# 4.3 Multi-Hazard Aspects of SSOPs

Continued

- ▶ If these similarities can be identified and incorporated into the EWS, a multi-hazard approach can:
  - ▶ Produce more frequent activation of EWS plans and procedures throughout the year
  - ▶ Result in greater efficiency of limited human and financial resources
  - ▶ Minimize system maintenance and number of required staff/volunteers
  - ▶ Assist in training

# Thank You

## Any Questions???

