Module 3

HEALTH EMERGENCY MANAGEMENT CAPACITY

Learning Objectives

By the end of this module, the participant should be able to:

- Describe the elements of capacity to manage health risks of emergencies
- Identify key elements of capacity for specific health service delivery functions
- Discuss the use of benchmarks to describe capacity for health emergency management
- Describe the role of a health emergency manager in health emergency management systems and in developing health emergency management capacity

INTERREGIONAL TRAINING COURSE ON PUBLIC HEALTH AND EMERGENCY MANAGEMENT IN ASIA AND THE PACIFIC

PHEMAP 8
Q&A

*What do you understand by the term “capacity” in the context of health emergency management?*
Defining Capacity

Sum of:
- capability
- resources
- relationships

Within
- community
- organization
- country
- region
- world

Aims
- Reducing illness, disability and death from risks
- Promoting health, safety and security

Elements of Capacity to Manage Health Risks

- Systems
- Organizations
- People

These elements are interdependent and interoperating
Systems to Manage Health Risks of Emergencies

Systems

• systems operating at each administrative level

• systems in specific sectors

• systems to manage specific types of risks (hazards and vulnerabilities)

• systems for specific functions or services

People

People contribute to organizations and systems by providing:

• skills, knowledge and attitudes
• Competency

People may be:

• Career (or paid), volunteer and community
• Managers, coordinators, operators
**Organizations**

Organizations contribute to systems by providing:

- coordination (e.g. health emergency management);
- the capacity to perform functions (e.g. health service delivery functions)

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**Risk Management Capacity**

*What are the functions which are required for management of health risks?*
General or Cross-cutting Functions

- Risk communication
- Occupational health and safety
- Facility design
- Organization-based disaster planning
- Managing critical supplies and protecting infrastructure

General or Cross-cutting Functions

- Communication and transport
- Information management
- Health surveillance
- Mental health
- Reproductive health
- Environmental health
- Food safety, emergency feeding and nutrition
- Water supply management
- Waste management
Hazard Reduction, Vulnerability Reduction and Preparedness Functions

• Biosafety in laboratories and health facilities

• Biosecurity for laboratories and health facilities

• Infection control

• Quarantine

• Early warning

• Environmental detection and monitoring

Hazard Reduction, Vulnerability Reduction and Preparedness Functions

• Sampling and analysis

• Vaccination and prophylaxis
Specific Emergency Response and Emergency Recovery Functions

- First aid, self-aid and first-responder health assistance
- Incident site management
- Assessing needs
- Mass-casualty management
- Decontamination
- Epidemiological investigation

Specific Emergency Response and Emergency Recovery Functions

- Forensic investigation
- Management of the dead and the missing/ fatality management
- Shelter and temporary accommodation (including evacuation shelters)
- Community support
- Longer-term issues (health effects, recovery, rehabilitation, reconstruction)
Capacity for Managing Health Risks

- policy development
- risk assessment
- risk management functions:
  - coordination of emergency response and emergency recovery planning and operations;
  - general and cross-cutting functions;
  - prevention, mitigation and preparedness;
  - specific emergency response and emergency recovery functions.
- capacity development and training
- monitoring and evaluation

Evacuation Site: “Typhoon Reming”

- Damaged lifelines
- Overcrowding
- Poor environmental sanitation
- No access to safe water
- Inadequate sanitary toilets
- Health workers are direct victims
- Disrupted basic health services
Group Activity

As Health Emergency Manager, what could be the priority service that you could deliver to reduce the possible secondary health risks in the evacuation site? Name just one.

What capacities must you have to be able to deliver such health services to manage the risk?

- People
- Organization
- System

Risk Assessment

Based on the discussion on risk assessment, what are the key elements of capacity for risk assessment?
Risk Assessment

These elements are interdependent and interoperating

Elements of Capacity for Risk Assessment

ORGANIZATION - PEOPLE

- Health organizations are represented on intersectoral risk assessment activities (who represents the health sector)

- A unit in the Ministry of Health has overall responsibility for coordinating health risk assessment from all sources of risk

- Organizations are responsible for coordinating risk assessment for health risks from natural hazards, technological, biological and societal hazards
Elements of Capacity for Risk Assessment

ORGANIZATION – SYSTEM

- Health organizations participate in health risk assessment, such as health surveillance, hospitals, laboratories, mental health and environmental health

- Organizations outside the health sector participate in health risk assessment

- Mechanisms and representative bodies exist for coordinating and integrating health risk assessment

- identifies its role in contributing to system-wide and sectoral risk assessment

- identifies lead agencies responsible for coordinating system-wide and sectoral risk assessments

- organization has internal arrangements for conducting risk assessments

- assesses risks in terms of hazards and the vulnerability and resilience of elements
Elements of Capacity for Risk Assessment

**ORGANIZATION – SYSTEM**

- considers the range of sources of risk, including: natural hazards, technological hazards, biological and societal hazards
- identifies populations most at risk due to higher levels of vulnerability
- analyses risks in terms of likelihood and consequences (quantitatively and qualitatively)
- determines priorities across hazards and vulnerability

**SYSTEM**

- policies, emergency response and recovery plans, and capability development plans are developed based on risk assessment
- risk assessment is monitored and reviewed regularly
- risk assessments are shared among government, private sector and non-government organizations and individuals involved in managing risks
  - within and between levels of administration
  - within and between sectors (such as health, emergency management and security)
Capacity for Risk Management

HAZARD + Vulnerable Community

Low Capacity

Benchmark Indicators

CAPACITY to manage

SEARO Benchmarking

Member States made presentations on recent emergencies:
- what went well
- what could be done better
- recommendations

Multi-country groups identified best practices and suggested benchmarks for each of three key themes:
- Community preparedness
- Multisectoral coordination
- Country capacity strengthening
SEARO Benchmarking

AIM:
Develop benchmarks that need to be achieved and a corresponding framework for action to strengthen health sector capacities in emergencies.

PROCESS:
Workshop in Bangkok in November 2005 with representatives from Member States, including government health sector and other sectors, various UN agencies and representatives of civil society.

From country input and plenary discussion, 12 priority benchmarks were identified.

Country teams then analyzed the status of their country for 12 benchmarks and actions to achieve the benchmarks.

Review meeting in Bali in June 2006 to monitor progress.

Follow up meeting in New Delhi in February 2007.
**Definitions**

**Benchmark**

- A strategic process for organizations to evaluate and measure performance in relation to best practices of their sector.
- Facilitates the development of plans of how to increase various aspects of performance to adopt the best practices.

*N.B. The 12 benchmarks are broad in nature as they reflect the consensus of all 11 countries of the SEA region on the desired performance for improving emergency preparedness and response.*

**Standard**

- A technical reference level of quality or attainment;
- Qualitative and universal in nature and applicable in any operating environment as they specify the minimum level to be attained.

Example: “Water supply standard in Sphere = “Access and water quantity”

*N.B. Standards related to each benchmark are derived from the benchmark itself and further define the technical quality of all components of the benchmark.*
Definitions

Indicator

- Tools of measurements to the standards
- Provides a way to measure and determine progress in achieving the standards
- Qualitative and quantitative
- Universal in nature to reflect the fact they are regional indicators

Example: 15 litters per person per day (Ave, water qty.)
500 meter/household (Maximum distance)

NB A corresponding set of specific indicators should be developed at the country level to monitor the country-level progress towards the standards and benchmarks.

SEARO Benchmarks (12)

1. Legal framework, functioning coordination mechanisms and organisational structure in place for health emergency preparedness and response (involving all levels + stakeholders)

2. Regularly updated disaster preparedness and emergency management plans for health sector

3. Emergency financial, physical and human resource allocation and accountability procedures

4. Rules of engagement for external humanitarian agencies based on needs
SEARO Benchmarks

5. Community plan for mitigation, preparedness and response, based on risk and vulnerability assessment

6. Community-based response and preparedness capacity (supported by training and drills)

7. Local capacity for emergency provision of essential services and supplies

8. Advocacy and awareness through education, information management and communication

SEARO Benchmarks

9. Capacity to assess risk and vulnerability at all levels

10. Human resources capabilities continuously updated and maintained

11. Health facilities built or modified to withstand the forces of expected events

12. Early warning and surveillance systems for identifying health concerns
Evacuation Site Scenario “Typhoon Reming”

- Poor environmental sanitation
- No access to safe water
- Inadequate sanitary toilets
- No community surveillance system
- Disrupted basic health services
- Foul smell of decomposing bodies
- Health Workers are direct victims

Group Activity

In your groups, address one of the following health service delivery functions:

1. Environmental health
2. Communicable disease surveillance
3. Management of the dead and the missing
4. Mental health and psychosocial support

Please develop benchmark(s) and identify at least six qualitative indicators of capacity.

Write your answers on a flip chart for presentation.

(20 minutes)
Environmental Health in Evacuation Center

Benchmark 1: Capacity to assess risk and vulnerability at all levels

- Environmental health risks are assessed, including:
  - Water supply services
  - Waste handling and disposal
  - Food safety

Benchmark 2: Local capacity for emergency provision of essential services and supplies

- Emergency actions & procedures are developed, including:
  - rapid response teams with protective equipment
  - risk communication
  - warnings to communities, health service providers
  - sampling and analysis
  - management and control of environmental hazards

- Sources of environmental hazards (eg. waste disposal areas, hazardous materials) located away from the community
Environmental Health in Evacuation Center

- Communication channels established for notification of emergencies (to emergency services, public health authorities, local health services and quarantine)

- Routine and emergency environmental monitoring and detection (such as water, air, food, crops and animals) carried out for potential health risks

- An inventory of emergency teams, equipment and supplies for emergency situations is developed

- Decontamination of buildings, infrastructure and the environment

Benchmark 3: Legal framework, functioning coordination mechanisms and organizational structure in place for health emergency preparedness and response

- An inventory of organizations with environmental health roles and responsibilities
  - health surveillance
  - water supply services
  - waste disposal services
  - poison control centres
  - laboratories
  - Chemical industry
  - fire services
Environmental Health in Evacuation Center

- Medium- and long-term environmental health effects are monitored, assessed, coordinated and managed
- Legislation and investigative mechanisms are established and may include prosecution

Communicable Disease Surveillance

Benchmark 1; Early warning and surveillance systems for identifying health concerns

- Surveillance systems developed for communicable disease events and health effects
- Integrated health surveillance systems across the local, sub-national and national levels, from different types of organizations and from different sectors
- Case definitions of morbidity and mortality
Communicable Disease Surveillance

- Coordinated and standardized surveillance strategies and procedures including:
  - monitoring, detecting and notifying health events,
  - sampling and analysis,
  - epidemiological investigation,
  - communication (including early warning and alerting)
  - public health action

- Continuous monitoring of indicators that may signal a public health emergency or detect unusual health events
- Cases are reported monthly or weekly and, in selected circumstances, notified immediately
- Procedures for detecting, reporting and notifying diseases and unusual, nonspecific health events, such as a 24-hour hotline
- Plans and procedures for expanding surveillance and initiating other emergency response actions
- Health care providers receive lists of notifiable or reportable diseases to trigger reporting of occurrences
Communicable Disease Surveillance

- Public health surveillance personnel (such as nurses, physicians, veterinarians, quarantine, laboratory technicians and surveillance data entry clerks) are trained to recognize the indicators of notifiable diseases
- Plans and procedures are developed for managing cross-border and international health events
- Results of surveillance are reported to health authorities, other stakeholders and clinical personnel for decision and action
- Feedback mechanisms are established for personnel who report suspected cases and for surveillance personnel

Management of the Dead and the Missing

Benchmark 1: Legal framework, functioning coordination mechanisms and organizational structure in place for health emergency preparedness and response

- Organizations designated with responsibility for management of the dead and the missing
- Integrated arrangements with authorities responsible for recovering bodies
- Safe handling procedures to protect people who handle fatalities
- Procedures for preserving evidence where there is the possibility of a crime scene
Management of the Dead and the Missing

Benchmark 2: Health facilities built or modified to withstand the forces of expected events

- Existing mortuary systems are expanded, including facilities, specialists and other resources (such as using cool rooms, refrigerated trucks or rail cars for storage until final disposition)

Management of the Dead and the Missing

Benchmark 3: Local capacity for emergency provision of essential services and supplies

- Bodies are identified and records kept (such as fingerprinting, dental records, DNA and photographing)
- Provisions are made for notification of relatives (next of kin)
- Provisions are made for relatives seeking information on missing or deceased relatives
Management of the Dead and the Missing

- Arrangements address religious and cultural concerns (such as collecting and disposing of human remains)

- Disposing of large numbers of remains such as:
  - Release of remains to families
  - Temporary interment until final disposition (interment site, record-keeping and transfer procedures)

Mental Health and Psychosocial Support

Benchmark 1: Regularly updated disaster preparedness and emergency management plans for health sector

- Disaster mental health and psychosocial support services integrated into broader health-sector, facility and organization plans and social services plans

Benchmark 2: Advocacy and awareness through education, information management and communication

- Risk communication and strategies for educating the public (advice on the mental health effects of communication messages)
Mental Health and Psychosocial Support

Benchmark 2: Advocacy and awareness through education, information management and communication

- Risk communication and strategies for educating the public (advice on the mental health effects of communication messages)
- Communication strategy to notify affected communities of the available mental health and social services

Benchmark 3: Local capacity for emergency provision of essential services and supplies

- Assistance and services available to the community through:
  - general health services (e.g. health personnel & facilities),
  - community organizations,
  - non-governmental and private-sector organizations
  - traditional healers,
  - schools
  - community centers
  - temporary accommodation
**Mental Health and Psychosocial Support**

- Psychological first aid and support for personnel, casualties, families and people with medically unexplained somatic complaints (the worried well)

- Assistance takes account of religious and cultural concerns of affected communities

**Benchmark 4: Rules of engagement for external humanitarian agencies based on needs**

- A contact list of national and international public mental health and psychosocial support experts

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**Mental Health and Psychosocial Support**

**Benchmark 5: Human resources capabilities continuously updated and maintained**

- Surge capacity plans and procedures, including preparing community mental health services for emergency response and recovery, and using trained volunteers

- Strategies to provide mental health services for periods much longer than the duration of the acute crisis
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