

DISASTER MANAGEMENT

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Introduction

- Objective: To provide an overview of disaster management with special emphasis on the role of hospitals, nurses and midwives.
- Disaster management essentially deals with the management of resources and information as far as a disastrous event is concerned and also how effectively and seamlessly these resources are coordinated. Disaster management, at the individual and organizational level, deals with issues of planning, coordinating, communication and risk management.

Contributing factors to natural or man-made disasters in Cameroon

- Geological factors combined with social, economic, demographic, health and environmental factors.
- It is part of the complex history of plate tectonics that caused the rifting of the South Atlantic continental plates. This created extensive strike-slip faults and shear zones that extend into Cameroon. These fault and shear zones are responsible for the active volcanic and seismic activity in the country. Other hazards include landslide, flash floods and others due to climate changes

Contributing factors to natural or man-made disasters in Cameroon

- Cameroon exhibits all the major climates and vegetation of the continent, mountains, rainforest, Savanna grassland and ocean coastland, making it to be referred as “ Africa in Miniature”.
- Terrain: Very diverse from tropical on the coast to semiarid and hot in the North.
- Thermal springs in its highland regions indicating prior volcanic activity so it referred to also as “ the hinge of Africa”.

Eruptions Mt Cameroon

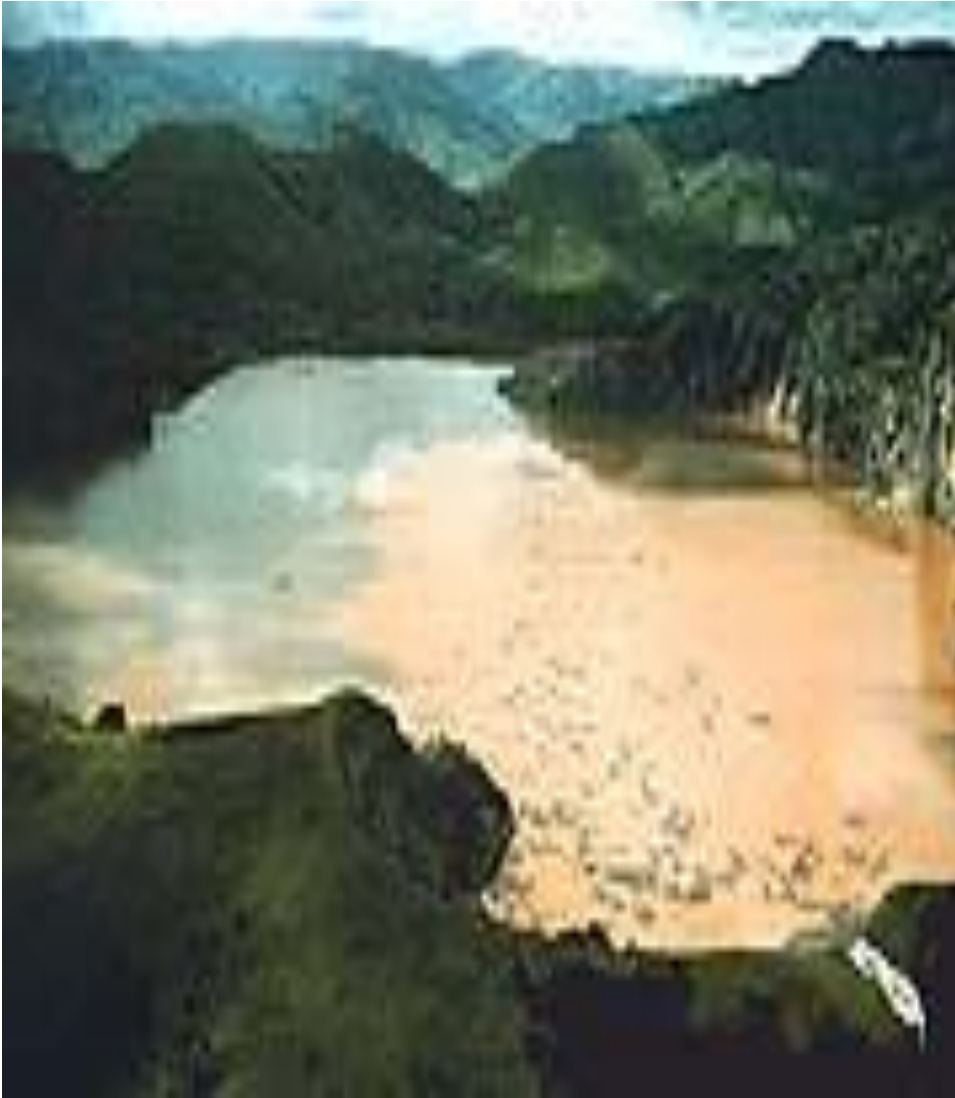


- Lava flow which destroyed hectares of a plantation and block a road.



Mount Cameroon volcano is one of Africa's largest and most active volcanoes. And also one of the few volcanoes with dated historic eruptions from BC.

Lake Nyos



- Covers an area of about 1.5 square Km and is over 200 meters deep.
- The rainy season causes excess lake water escapes over a low spillway cut into the northern rim of the maar crater, and down a valley toward Nyos village. The water in Lake Nyos is normally a beautiful, deep-blue color.

Lake Nyos



Lake Nyos is an active crater lake that formed by an eruption about 5 centuries ago. Nyos and Lake Monoun, located 95km to the southeast of Nyos, are the only two volcanic lakes in the world other than Lake Kivu (Rwanda) that contain large amounts of CO₂. Nyos and Monoun both released their gases in the month of August only two years apart from one another.

Lake Kivu is an analogue of Lake Nyos



- Lake Monoun, Cameroon-37 people
- Lake Nyos, Cameroon - 1,746 people
- Lake Kivu at boundary Congo and Rwanda, has a lot of methane gas, it is being tapped and controlled. The energy could secure the future of the entire region.

Floods

June 2015-07-22 More than 2000 people lost their houses due to flooding in Douala Cameroon.

Following heavy rains and flooding in late August and September 2012, flood emergencies were declared in the North and Far North regions of Cameroon. The estimated number of flood-displaced people reached 88,640 (50,824 people in the North and 37,816 in the Far North region).



Disaster management

- Mitigation
- Preparedness
- Response and recovery

Mitigation

- Eliminate or reduce the vulnerability or effects of a disaster.
- This phase begins with conducting a hazards identification and vulnerability analysis. These are a two step process;
- Hazards are identified which has the potential of affecting the population- hazard map is drawn.
- How people, property and structures will be affected by the disastrous event- vulnerability.

Preparedness

- State of being ready to react promptly and effectively in the event of an emergency.
- Being ready means that a plan of action exist for an emergency.
- Depends on the analysis of the hazard severity and vulnerability.
- Preparedness plan- to provide a systematic way of responding to an emergency situation.

Preparedness plan

- Identification of possible emergency situations which might occur in an area.
- Deployment of officer in charge in case of emergency.
- Developing a strategy for activities likely to be undertaken and resources which could be used.
- Identifying government bodies responsible to respond in case emergencies.
- Establishing an emergency operation center or control room

Preparedness components

- ❖ Public awareness of hazards
- ❖ Communication of early warnings
- ❖ Emergency plans at community level
- ❖ Mapping of hazards, vulnerabilities

Potential Challenges

- ❖ Remote locations
- ❖ Cultural and linguistic diversity
- ❖ Damaged infrastructure
- ❖ Lack of baseline data
- ❖ Response capacity overwhelmed
- ❖ Poor linkages between government structures
- ❖ Influx of international assistance

Increased Vulnerability

- Climate change - increase in extreme weather events
- Uncontrolled urban development
- Growing environmental degradation
- Loss of traditional adaptation practices
- Vulnerability is the predisposition to suffer damage due to external events. It is influenced by demographic, socio-political, economic, cultural, health and developmental factors.

Response

- These activities occur during and immediately following an emergency.
- Designed to provide emergency assistance to victims of the event and reduce the likelihood of secondary damage.
- The basic stages of responding to an emergency are- notification/warning; immediate public safety; property security; public welfare; restoration

Recovery

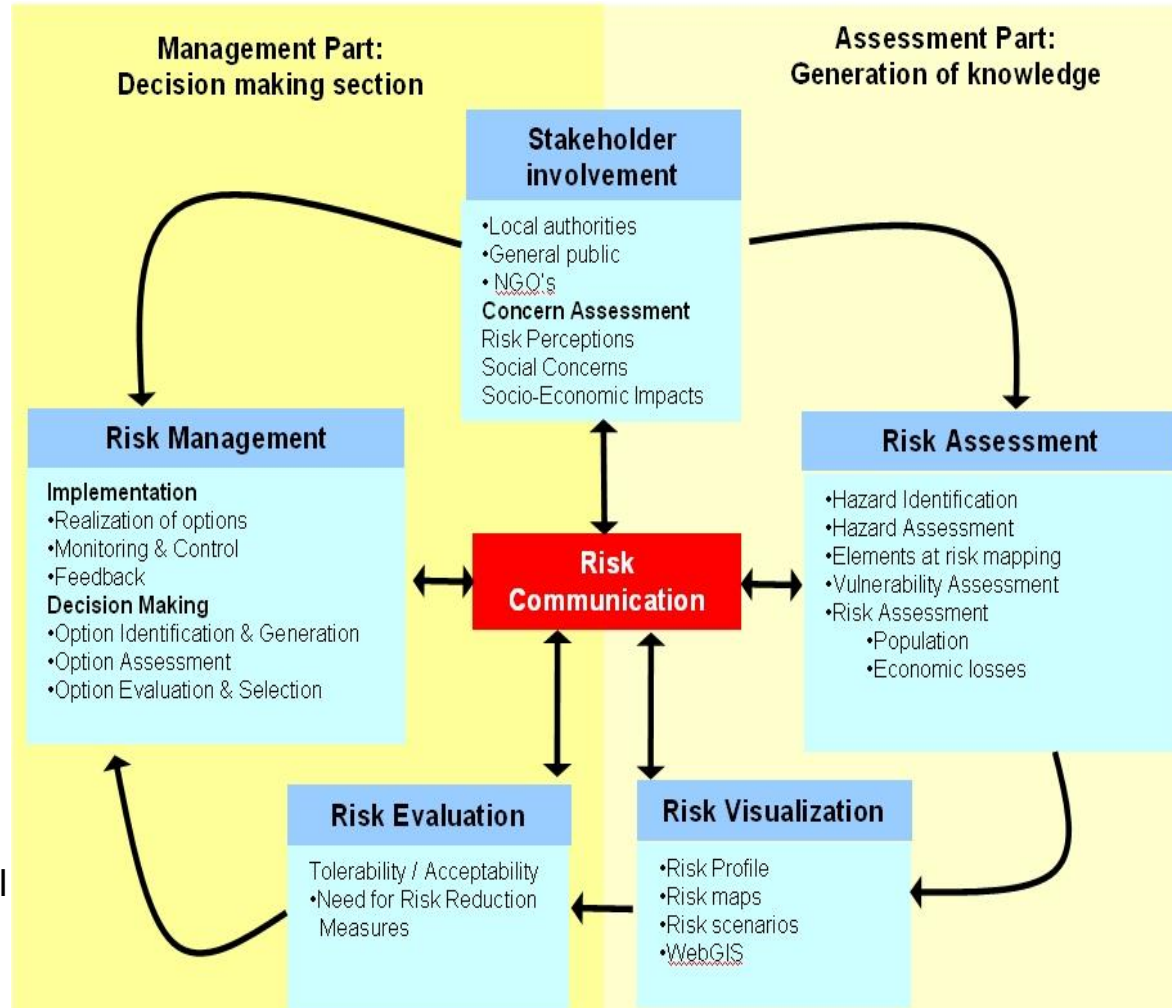
- Final phase of emergency management.
- Continue until all systems return to normal or near normal.
- Short term recovery is the restoration of vital services and facilities to minimum standards of operation.
- Long term recovery may include the complete redevelopment of damaged areas.

Risk management

- The systematic process of using administrative directives, organizations and operational skills and capacities to implement strategies , policies and improved coping capacities to lessen the adverse impacts of hazards and the possibility of disasters.

Risk Governance Framework

- The aim of Risk governance is to involve the various stakeholders within all aspects of risk management.
- Risk communication is central.



The International Risk Governance Council
 Risk Governance Framework
 (Source: IRGC, 2006)

Information and communication



Emergency

- A state in which normal procedures are suspended ; and extra-ordinary measures are taken to avert a disaster

Foundations of Emergency Management program



Sample Emergency management Program

- A. Emergency Management Planning
- B. Linkages and Collaboration
- C. Communications and Information Sharing
- D. Maintaining Financial and Operational Stability

Expectations

- Based on Hazard Vulnerability Assessment (HVA)
- All hazards approach.

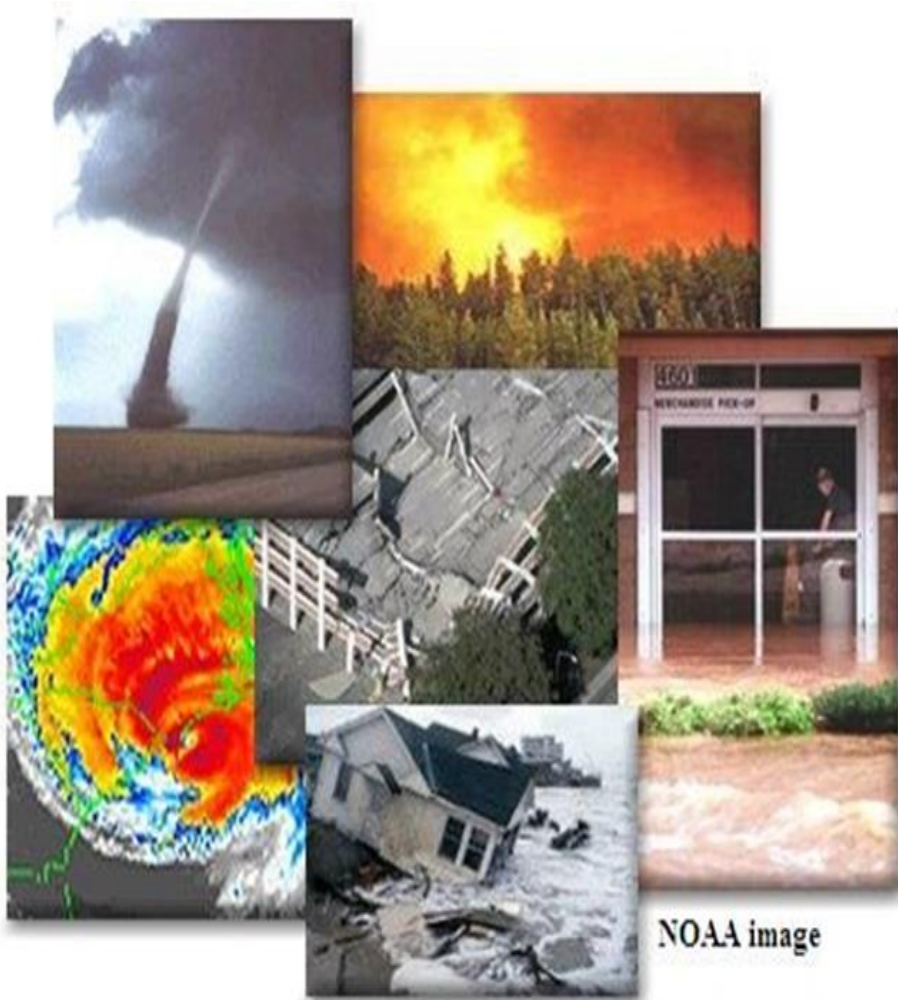


- Board, Senior Mgt, and clinical staff should have lead role in developing plan
- Include process for staff training
- Annual exercises, at a minimum

The all hazard approach

- A unified approach and incident command for all hazards e.g.

- Influx of patients into the hospital
- Pandemic/Epidemic
- Utility Failure
- Fire
- Flood



Incident command

- System for managing emergent and non-emergent situations
- Provides hospitals with required tools to address the event.
- The hospital initiates action which is flexible in scale and activates only those positions needed.
- Administrative position assumes role as Incident Commander

Staff Roles & Responsibilities

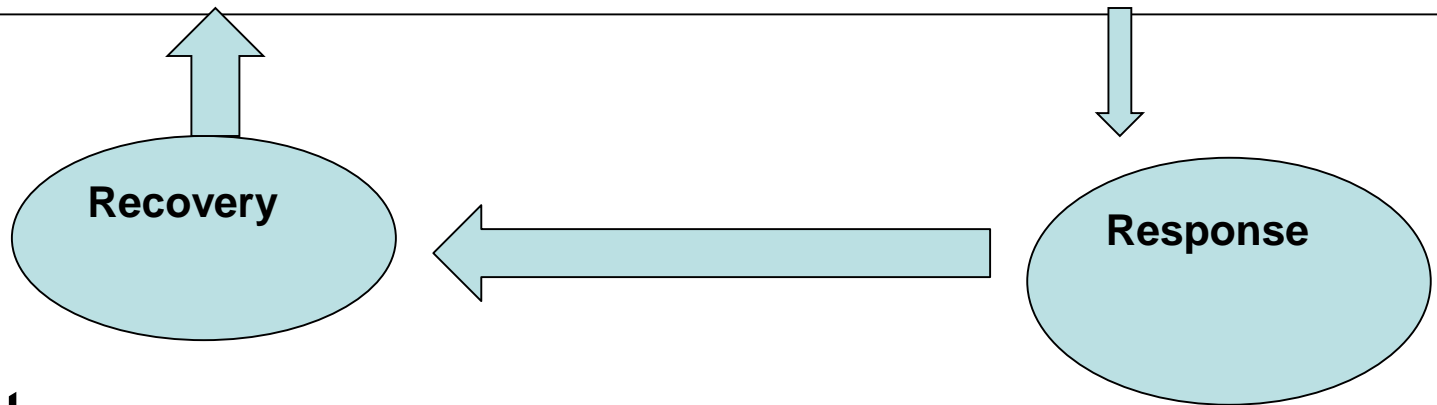
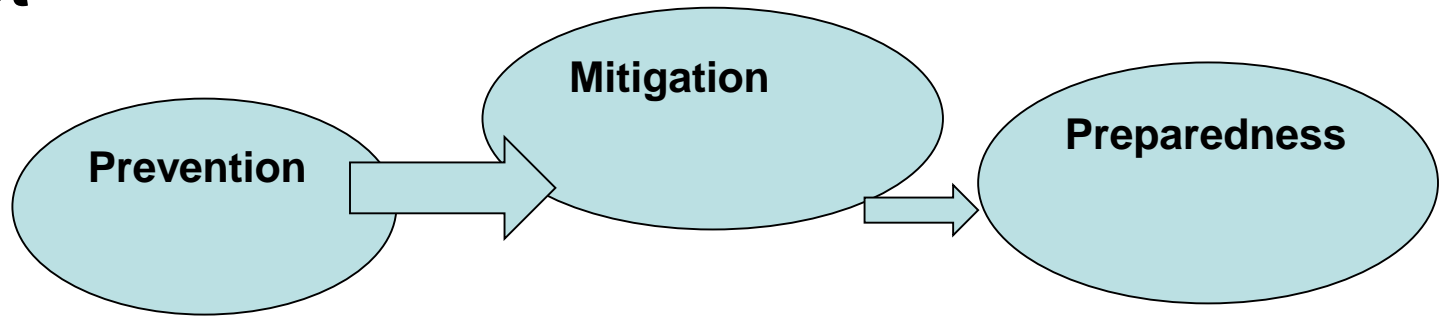
- Know Staging and Evacuation Plans for patients.
 - Evacuation Maps posted in all clinical areas
 - Horizontal and vertical routes
- Be familiar with Evacuation Equipment.
 - Location
 - Use
- Be familiar with Emergency Codes & Designations.
- Check with Supervisor for updates if role is not pre-assigned.

Emergency codes and designations

Emergency Code	Meaning
Code Red	Fire
Code Blue	Adult Medical Emergency
Code White	Pediatric Medical Emergency
Code Amber	Infant/Child Abduction
Code Yellow	Explosive device or Bomb Threat
Code Gray	Patient Elopement
Code Silver	Person with Weapon; Hostage Situation
Code Orange	Hazmat Incident; Decontamination Needed
Code Black	Severe Weather Warning
Code Clear	Situation has been resolved

Risk management and emergency management cycle

Pre-impact



Post impact

Risk management and emergency management cycle

PRE-IMPACT

Risk reduction measures- pre-
impact; cost effective, community
based and sustainable

POST IMPACT

Risk retention measures-
least cost effective,
nationally and
internationally based

The 11 Es of Emergency preparedness

- Evaluation and monitoring of the hazard.
- Early warning
- Evacuation
- Emergency operations planning.
- Education and training.
- Exercises and drills
- Engagement of the public.
- Electronic media and communication.
- Epidemiology
- Equipment and supplies.
- Economic and political incentive

How can we make sure we are prepared for disasters

- Drills
- Exercises
- Tracers
- Live events

Final Thought

NOTHING REPLACES WELL TRAINED,
COMPETENT AND MOTIVATED
PEOPLE! **NOTHING!**

PEOPLE ARE **THE** MOST IMPORTANT
ASSET