Module: Public Health Disaster Planning for Districts

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Resource Title: Session 1.1: Introduction to Disasters

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Introduction to Disasters

Compiled by the Eastern Africa Disaster Management Training Core Team
Narrated by Dr. Roy William Mayega
WHAT DOES THE TERM ‘DISASTER’ MEAN TO YOU????
Definition of Disasters

“A serious disruption of the functioning of a community or a society causing widespread human, material, economic or environmental losses which exceed the ability of the affected community or society to cope using its own resources.”

WHO, 1998
Definitions

• What is an emergency?
  – A state in which normal procedures are suspended and extraordinary measures are taken in order to avert a disaster
Let’s define other related terms…

- Hazard
- Risk
- Vulnerability
- Capacity
Definitions

• What is hazard?
  – A threatening event or potentially damaging incident (*CDC*)

• What is risk?
  – The probability of suffering damage (to life, property, economic disruptions and environment) from a hazard for a given area and reference period. Risk is the product of hazard and vulnerability
Definitions

• What is vulnerability?
  – Susceptibility to physical or emotional injury following a disaster
  – The degree to which an area, people, physical structures or economic assets are exposed to loss, injury or damage caused by the impact of a hazard
  (Source: Red Cross)

• What is capacity?
  – The resources available to cope with a threat or resist the impact of a hazard
What is the relationship between these terms?

Disaster Risk = \[
\frac{\text{Hazard} \times \text{Vulnerability}}{\text{Capacity}}
\]
Disaster Classification

Disasters may be:

- Natural
- Technological (human generated)
- Those in between or ‘hybrid’

Another way to classify disasters is based on speed of onset:

- Rapid onset
- Slow onset
Classification of Natural Disasters: Slow onset

- Drought and desertification
- Famine
- Deforestation
- Pests and plant diseases
Classification of Natural Disasters: Rapid onset

Climatic
- Floods
- Windstorms
- Wildfires
- Hail storms

Geological
- Earthquakes
- Tsunamis
- Volcanic
- Landslides
Technological Disasters

- Conflict and Wars leading to refugees and internal displacement (Complex Emergencies)
- Structure failure and building collapse
- Transportation crashes and accidents
Technological Disasters

- Military accidents
- Fire disasters
- Terrorism
- Industrial incidents
Name Recent Technological Disasters in your Region

Public Health Disaster Planning for Districts
Hybrid Disasters

In some situations, it is difficult to classify a disaster on the basis of whether it is natural or technological.

WHERE DO EPIDEMICS FALL?
Before we discuss the consequences of disasters, let us do Group Activity 1.1 in your manual.
Public Health Consequences of Disasters

- Death
- Injuries
- Loss of clean water
- Loss of shelter
- Loss of personal household goods
- Major population movements
- Loss of sanitation
- Loss of routine hygiene
- Disruption of solid waste management

- Public concern for safety
- Panic
- Increased pests & vectors
- Damage to health care system
- Worsening of chronic illnesses
- Loss of electricity
- Toxic/ hazardous exposure
- Loss of food supply
- Standing surface water
Illustration: Consequences of Drought and Famine

Public Health Disaster Planning for Districts
Illustration: Effects of Flash Floods
Illustration: Effects of Slow Onset Floods

The Humanitarian Coalition, flickr

Peter Casier, flickr
Illustration: Effects of Land Slides
The Hyogo Framework for Disaster Management

- This international framework emphasizes the following at all levels (Including districts)
  - Early warning systems
  - Capacity building
  - Emphasizing safety and resilience of communities
  - Reducing risk factors
  - Strengthening disaster preparedness
Pre Disaster Definitions

- **Preparedness**
  - Actions that result in persons knowing what to do and how to respond after disaster has occurred

- **Prevention**
  - Activities designed to provide permanent protection from disaster which include engineering and physical protective measures and legislation to control land use and urban planning

- **Mitigation**
  - Measures taken in advance of an event aimed at decreasing or eliminating its impact on society and environment
Post Disaster Definitions

- **Response**
  - Decisions and actions taken during and after disaster. This includes immediate relief, rehabilitation and reconstruction

- **Recovery**
  - Activities that restore vital life support systems to normalize operating standards and long term activities that return life to normal
Other Definitions

• Relief and Rescue
  – Time period immediately following the disaster period
  – Exceptional measures to save lives and care for survivors (meet basic needs)
  – Distinction between rescue and relief
    • rescue -> secure life
    • relief -> sustain life
Other definitions

• Rehabilitation
  – After closure of the relief phase (no more dependency for basic need satisfaction)
  – Restoring mental and physical health and stability of a community
  – Instilling principles of sustainable livelihoods
  – Empowering victims/survivors
  – Should lead to BETTER developments
Rehabilitation: Examples

• Early Recovery Plans for IDPs
• Re-afforestation programmes
• Post Recovery Plans
• Emphasis: Restoration of Original status
Recovery: Examples

- Physical infrastructure repair
- Enhancement of the pre-disaster state
- Build resilience
- Provide new structures/housing that will be able to withstand a similar disaster in future
  - Are we creating more/new vulnerability through reconstruction actions?
  - Involves systematic integration of disasters and Long-term Development
The Disaster Management Cycle

**Risk reduction measures are**
- Delivered pre-impact
- Most cost-effective
- Community based
- Sustainable

**Crisis management measures are**
- Delivered post-impact
- Least cost-effective
- Nationally and internationally based
- Non-sustainable

Legend:
- Mitigation
- Preparedness
- Prevention
- Response
- Recovery
An evolution in approach

- From Response and Relief

- To Risk Reduction

Church Mission Society (CMS), flickr

Sanofi Pasteur, flickr

Public Health Disaster Planning for Districts
What mechanisms have you put in place……..

• To prevent disasters in your district?
• To reduce vulnerability to disasters
• To prepare for disasters in case they occurred?
All disasters are local….

• All disasters occur locally in a particular community

• The earliest response to disasters often comes from the community itself

• The capacity of the community to respond to disasters should therefore be built
End!
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