

WHO/EHA

EMERGENCY HEALTH TRAINING PROGRAMME FOR AFRICA

1. Overview

1.11. Hazard Classification

Panafrican Emergency Training Centre, Addis Ababa, July 1998

1.11. Hazard Classification Overhead Transparencies

1.11.1. Disaster, Definition

1.11.2. Classification o hazards

1.11.3. Phases of Disasters

1.11.4., 1.11.5. Origins of Disasters, Natural

1.11.6. Origins of Disasters, Technological and Man-made

1.11.7. Relationship between Onset of disaster and its Effects on Health

1.11.8. Disaster Interface, Hazards and Vulnerability

1.11. Hazard Classification Trainers' Guide

Objective:

Short presentation to illustrate the classification of disasters. (Knowledge)

Key-message:

The 'Classification of Disasters' is in fact a classification of hazards.

1.11.1. Disaster, Definition

Present and discuss. *This is one of the many definitions. Stress OCCURRENCE, DISRUPTION, and the NEED FOR EXTERNAL ASSISTANCE.*

1.11.2. Classification of hazards

Present and discuss. *Classification of Natural (or physical) and Man-made (or technological) Disasters.*

1.11.3. Phases of Disasters

Present and discuss. *Simple view by 'Before', 'During' and 'After'. It is now quite outmoded. It reflects a focus on the impact view rather than on prevention and emergency management. Ask the audience to compare this model with the Disaster-Development Continuum; ask which model is better to be used for emergency managers and health workers.*

1.11.4., 1.11.5. Origins of Disasters, Natural

Present and discuss. *List of natural (or 'physical') hazards.*

1.11.6. Origins of Disasters, Technological and Man-made

Present and discuss. *List of man-made or technological hazards.*

1.11.7. Relationship between Onset of disaster and its Effects on Health

Present and discuss. *Earthquakes have a sudden direct impact and health response has to be immediate; after one or two weeks the emergency has passed although indirect health effects may need to be addressed. On the contrary, Drought is an event that builds up slowly, with clear early warning signs: prevention and preparedness are easier, but the health effects of the impact take long to recover.*

1.11.8. Disaster Interface, Hazards and Vulnerability

Present and discuss. *This is another way to present the causes of a disaster.*

Disasters can be seen as occurring at the interface between hazards and vulnerable conditions. 'Pressures' add to the vulnerable conditions. The underlying causes or 'root causes' of vulnerability are shown in the last column.

Complementary to Disaster and Emergency Definitions (1.1.) and Risk Assessment (2.3.)

Essential Reading:

- UN-DMTP Training Modules, UN-DMTP, 1990
- African Disaster Handbook, WHO/PTC, 1990
- EPR Handbook for Africa, WHO/PTC 1992

DISASTER

ANY OCCURRENCE THAT CAUSES
DAMAGE, ECOLOGICAL DISRUPTION,
LOSS OF HUMAN LIFE,
DETERIORATION
OF HEALTH AND HEALTH SERVICES
ON A SCALE SUFFICIENT TO
WARRANT AN EXTRAORDINARY
RESPONSE FROM OUTSIDE THE
AFFECTED COMMUNITY

Classification of hazards

Sudden or slow onset

Natural (physical)

Weather related (meteorological

Earth movement

1. External (topographical)
2. Internal (tectonics & tellurics)

Natural (biological)

1. Epidemics
2. Infestations

Manmade/Technological

- Industrial disasters
- Nuclear accidents
- Chemical accidents
- Fires
- Wars, civil strife
- Structural failures

PHASES OF DISASTERS

- 1. THE PRE-DISASTER PHASE**
- 2. THE DISASTER / IMPACT PHASE**
- 3. THE POST-DISASTER AND
RECONSTRUCTION PHASE**

Origins of Disasters

Natural (1)

1. Meteorological

- Hurricanes, cyclones, tornadoes, typhoons
- Heavy rains, thunderstorms, floods, snow-storms
- Drought and famine
- Heat waves, cold waves

2. Topographical

- Landslides and avalanches

Origins of Disasters

(2)

3. Tectonics and tellurics

- Earthquakes
- Volcanic eruptions

4. Epidemics

- Yellow fever
- Cholera
- Meningitis

5. Infestations

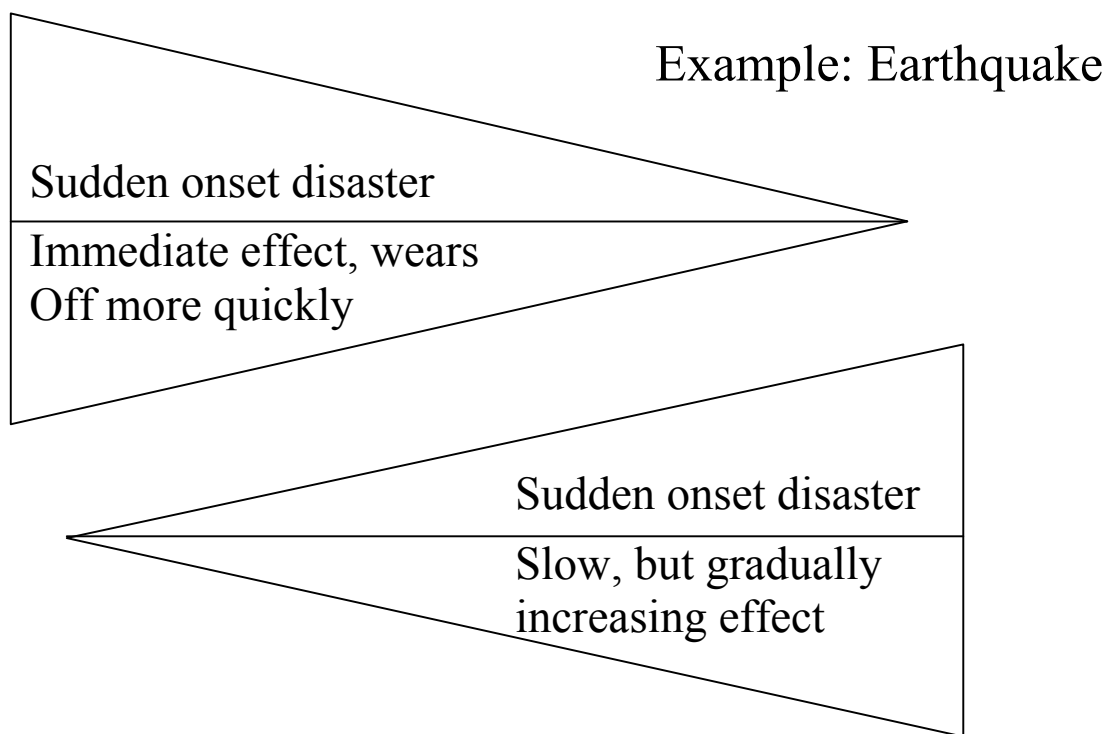
- Locust invasions
- Mealy bug infestation

Origins of disasters

Technical and man-made (3)

- Wars and Civil Strife
- Industrial disasters
- Large scale accidents, fires, explosions
- Environmental contamination
- Structural failures (dams, mines)

Relationship between onset of disaster and its effects on health



Example: Drought & famine

The effects may be: Actual or potential

1.11.8. Disaster Interface, Hazards and Vulnerability

DISASTER INTERFACE, HAZARDS AND VULNERABILITY

Disaster may be seen as the interface between (whether natural or man-made), and the

HAZARDS>	VULNERABLE CONDITIONS ——>>>	R E S U L T	<<<PRESSURES	ROOT CAUSES
<p>NATURAL</p> <p>METEOROLOGICAL</p> <p>– DROUGHT/FAMINE></p> <p>STORMS/FLOODS></p> <p>HEAT/COLD WAVES></p> <p>TOPOGRAPHICAL/ EARTH MOVEMENTS</p> <p>EARTHQUAKES/ ERUPTION></p> <p>– LANDSLIDES></p> <p>BIOLOGICAL</p> <p>– EPIDEMICS></p> <p>– INFESTATIONS></p> <p>MAN-MADE</p> <p>– WARS/CIVIL STRIFE></p> <p>– LARGE ACCIDENTS></p> <p>– ENVIRONMENT</p>	<p>MACRO- AND MICRO-FORCES CAUSE</p> <p>POOR BASIC INDICATORS ——>>></p> <p>POVERTY ——>>></p> <p>POPULATION PRESSURE ——>>></p> <p>UNSAFE SETTLEMENTS ——>>></p> <p>LACK OF OR INADEQUATE BASIC SERVICES ——>>></p> <p>LACK OF DISASTER PLANS AND AWARENESS ——>>></p>	<p>I N T E R F A C E .</p>	<p><<<—RAPID URBANISATION</p> <p><<<—DEFORESTATION</p> <p><<<—LANDLESS</p> <p><<<—WARS</p> <p><<<—ILLITERACY</p> <p><<<— NO LAW ENFORCEMENT/ MIS-ADMINISTRATION/ MIS-DIRECTED RESOURCES/UNPOPULAR POLICIES.</p> <p><<<—LITTLE OR UNWISE INVESTMENT</p> <p><<<—UNWISE EXPENDITURES</p>	<p><<—</p> <p>U N D E R D E V E L O P M E N T & B A D G O V E R N A N C E .</p>

Adapted from reference: Ian Davis, safe shelter within unsafe cities; Disaster Vulnerability and Rapid Urbanisation Open House International, 1997:12(5); p