



Pan American Health Organization



Regional Office of the
World Health Organization

<http://www.paho.org>

Health Disaster Management

Dr. Ciro Ugarte

Regional Advisor

Emergency Preparedness and Disaster
Relief





Disasters are not natural

Risk f **Hazard . Vulnerability**



The Disaster Risk Management Cycle



Goals of Disaster Risk Management

Prevention: Risk = 0

Mitigation: Risk = low

Preparedness: Improve response capacity

Response: Provide humanitarian assistance

Rehabilitation: Provisional - temporary Recovery

Reconstruction: Complete - final recovery



Preparedness

Activities oriented for planning, organizing and improving the capacity to effectively anticipate, respond to and recover from the impact of likely, imminent or current hazard events or conditions.



Preparedness

PLAN

TRAINING

RESOURCES



Emergency Response Plan

- Situation analysis
- Hypotheses
- Objectives and goals
- Organization
- Roles and responsibilities
- Coordination instructions
- Annexes



Effects of disasters on health

General Considerations

- There is a relationship between the type of disaster and its effect on health
- Some effects are a potential, rather than an inevitable, threat to health.
- The actual and potential health risks after a disaster change with time and place
- Disaster-created needs for food, shelter, and primary health care are not total.
- Civil wars and conflicts generate a distinct set of public health problems.



Health Problems in disaster

Effect	Earthquake	High Winds (without flooding)	Tidal waves flash floods	Slow- onset floods	Volcanoes
Deaths	Many	Few	Many	Few	Many
Severe injuries	Many	Moderate	Few	Few	Few
Risk of communicable diseases	Potential risk following all major disasters (probability rising with deteriorating sanitation)				
Damages Health Facilities	Severe (structure and equipment)	Severe	Severe but localized	Severe equipmen t	Severe
Food Shortage	Rare due to economic or logistic		Common	Rare	
Population Movements	Rare due to heavily damaged areas		Common generally limited		

Emergency Response Plan

- Situation analysis
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Emergency Plan

Situation analysis

- ✓ Hazard Analysis
 - Natural hazards
 - Artificial (man-made?)
- ✓ Vulnerability Analysis
- ✓ Operative Capacity
 - Human Resources
 - Infrastructure and equipment
 - Critical supplies



Emergency Plan

Hypothesis (the most probable scenario)

- ✓ Type of adverse phenomenon
Magnitude, intensity, moment
- ✓ List of possible damages
- ✓ Maximum needs calculation



Emergency Plan

Objectives and goals

- **Viability**
- **Priorities**
- **Coverage**
- **Expected Result**



Emergency Plan

Organization

- Emergency Operative Committee
- Plan activation
- Levels of authority
- Grouping by areas of responsibility



Emergency Plan

Role allocation

- Who does what?
- When?
- How?
- With what?



Emergency Plan

Characteristics

CLEAR

COMPLETE

CONCISE



TRAINING

- ✓ Hypothesis of the most probable scenario
- ✓ Roles and responsibilities
- ✓ Organization of the response
- ✓ Exercises (simulations and drills)



RESOURCES

- Needs Assessment
- Inventory of available resources
- Request or procurement of missing resources



Test of the Plan

- Simulation exercise
- Drill
- Emergency / disaster

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Fish rain

2010



Zelaya, Honduras



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