

Hospital Emergency Preparedness: Philippines



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Outline of Presentation

I Introduction

II Philippine's Initiative – 10 P's

I. INTRODUCTION

- Philippines is an archipelago of 7,107 islands
- Lies along the path of turbulent typhoons
- Within the Circum Pacific Ring of Fire
- 300 volcanoes, 22 are active
- On top of two tectonic plates (Eurasian and Pacific
- Country with the most number of natural disasters in the last decade (1990–1999) CRED
- Human generated disasters increasing

- 1972 – **Presidential Decree 1566** – organizational structure for disaster management from national to local
- In 1992 the Local Government Code was passed
- In 1994 - program **STOP DEATH** and **DMU**
- In 2000 – institutionalization – **HEMS**
- **Health Emergency Management Staff** – 15 staff
- Main function is to coordinate health sector's response to emergencies and disasters; covers preparedness, response and rehabilitation

Philippine Hazards and Vulnerabilities

Volcanic Eruption



300 volcanoes, 22 of which are active
Philippines within the Pacific Ring of Fire

Typhoon



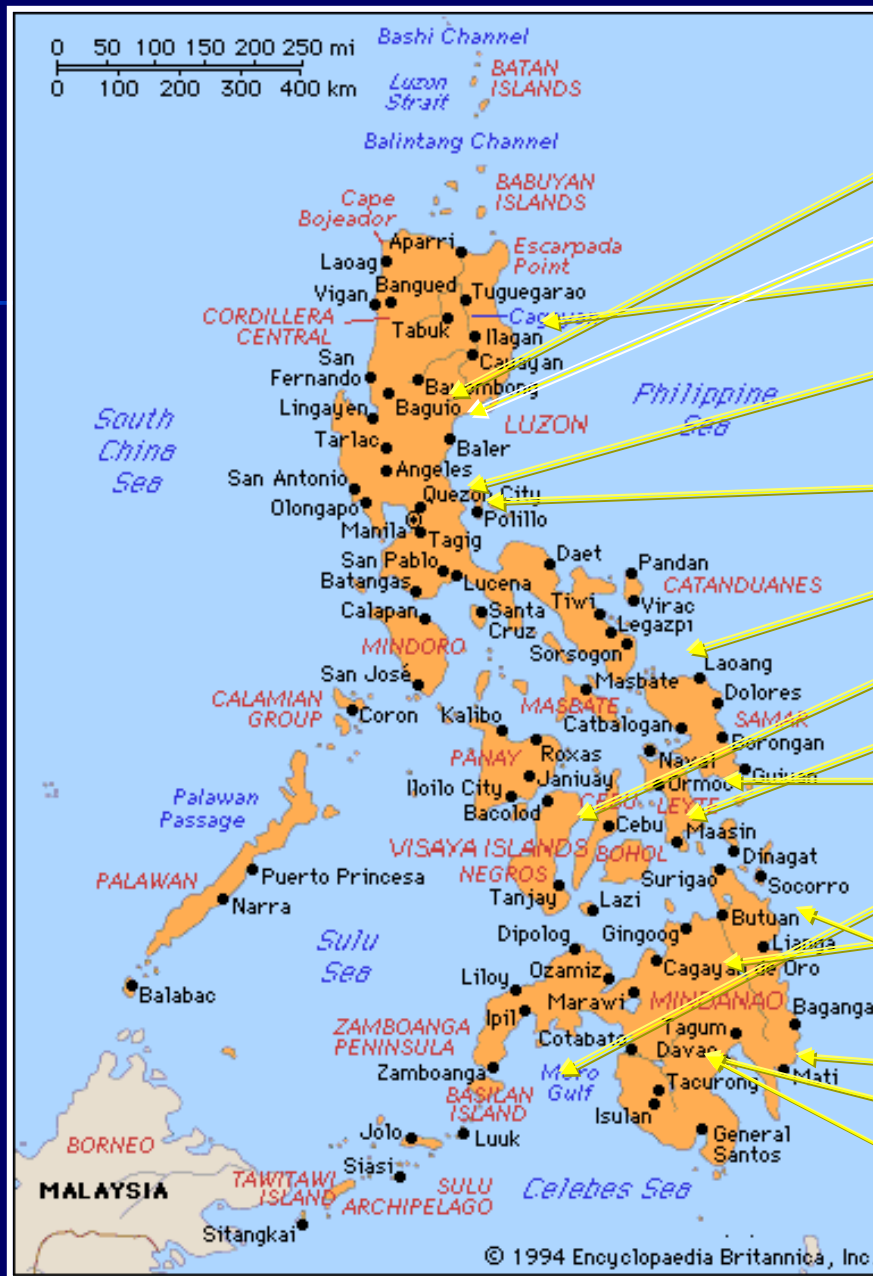
Philippines is located along typhoon belt
Light structured houses in the provinces
Average of 22 typhoons occur in a year

Earthquake



Encarta Encyclopedia, George Chan/Photo Researchers, Inc.

Located along the earthquake belt
Active faults and trenches
Most houses are not seismically prepared



Region 1

Region CAR

Region 2

Region 3

Region NCR

Region 4 A & B

Region 5

Region 6

Region 7

Region 8

Region 9

Region 10

Region Caraga

Region 11

Region 12

Region ARMM

SITUATIONER – PHILIPPINE HOSPITALS

Sector

Category

Number

Government

DOH

72

LGU Owned

592

Military

30

Others

1

Private

Level 4

55

Level 3

113

Level 2

397

Level 1

465

TOTAL

1,725

SITUATIONER – PHILIPPINE HOSPITALS

Government

695 hospitals

43,670 beds

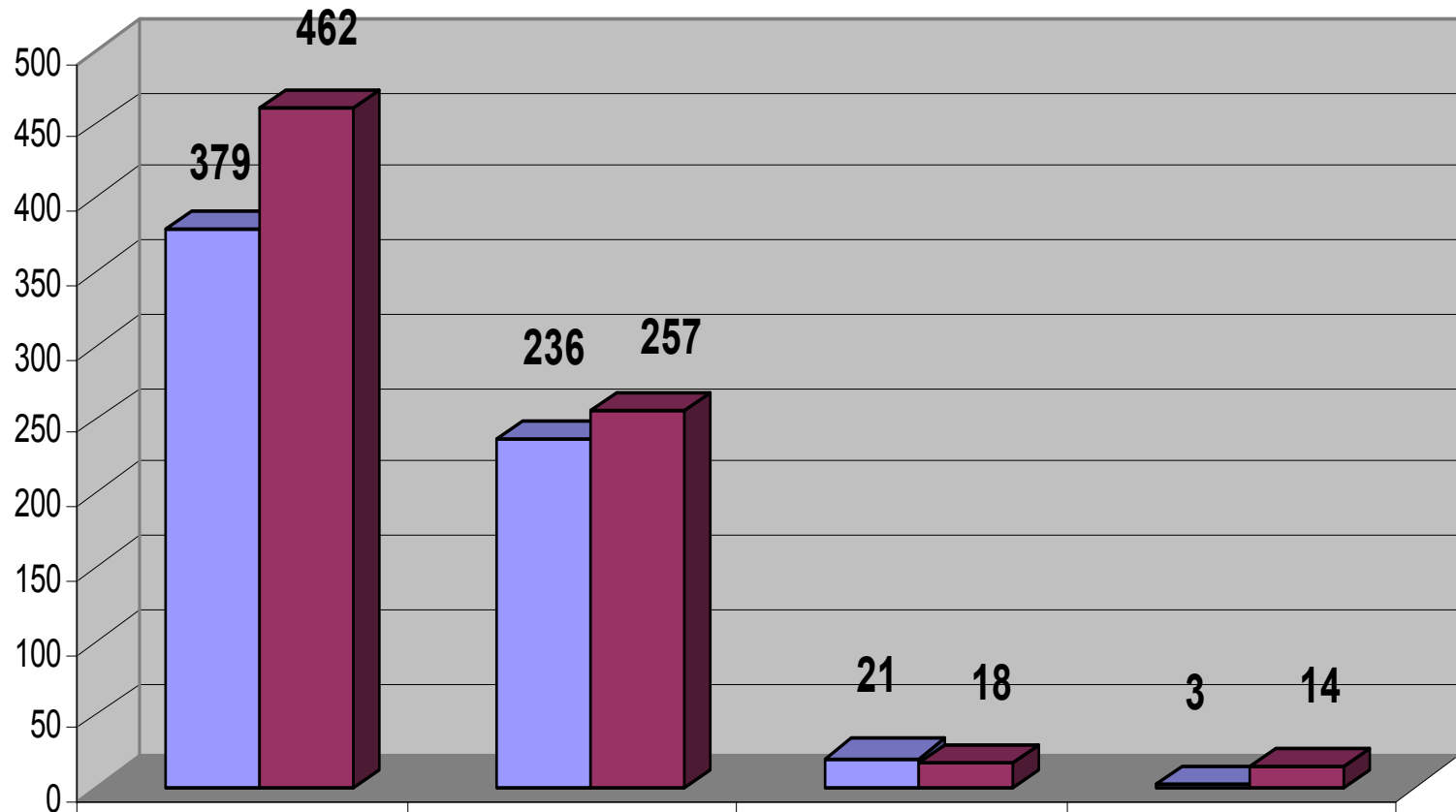
(24,362) BEDS - DOH

Private

1,030 hospitals

42,860 beds

HEMS - OPERATION CENTER MONITORING REPORT CY 2005 (Jan-Dec) to 2006 (Jan.- Dec.)



	# of Events Monitored	# of Minor Emergencies	# of Major Emergencies	# of Disasters
■ CY2005 (Jan-Dec)	379	236	21	3
■ CY 2006 (Jan-Dec.)	462	257	18	14

II - Hospital Emergency Preparedness Initiatives of DOH

10 P's

- 1. Policies**
- 2. Plans**
- 3. Protocols, Guidelines and Procedures**
- 4. People**
- 5. Promotion and Advocacy**
- 6. Partnership Building**
- 7. Physical (Facility Enhancement)**
- 8. Program Development**
- 9. Practices**
- 10. Peso and Logistics**

1. Policies:

- AO168 - "National Policy on Emergencies and Disasters"
- AO 155 – "Implementing Guidelines for Managing MCI during Emergencies and Disasters"
- AO 182 – "Code Alert System for DOH Hospitals during Emergencies and Disasters"
- Dept. Circular FAE – 64-A - "HEARS Reporting "

Organizational Policies

- Institutionalized Hospital HEMS unit directly under the hospital director
- Designated Hospital HEMS coordinators and response teams
- Organizational shift during emergencies
- HEICS practiced in all hospitals

2. PLANS

- Hospital Emergency Preparedness, Response and Rehabilitation Plan (HEPRRP) a requirement in licensing of all hospitals (Multi hazard)
- Developed “Easy Guide for HEPRRP Development”
- Included in all strategic planning

3. Procedures, Protocols, Guidelines

- Manual of Operation for Hospitals (2nd edition) includes: dispatching, alerting, reporting, communication, MCI etc.)
- Pocket Emergency Tool (2nd edition)
- Manual of Treatment Protocols for common diseases during emergencies and disasters

4. People

- Health Sector training agenda to include management and skills
- Training
 1. BLS, ACLS, EMT, MCI-ICS
 2. National PHEMAP
 3. National HOPE
 4. EMERGENCY ESSENTIAL SURGICAL SKILLS FOR DISTRICT LEVEL
 5. HOSPITAL BASED WMD
 6. POWER AND RISK COMMUNICATION

5. Promotion and Advocacy

- July – National Disaster Consciousness Month
- December- Health Emergency Week
- Compendium of Health Messages
- Health Sector Drills and Exercises
- Skills Benchmarking
- Recognition Awards

6. Partnership Building

- Organization of the Health Sector - 2001
- Establishment of the Health Cluster- 2006
- Establishment of Hospital Network to include referral systems
- TWG composition from members of the Health Sector (policy, training & advocacy)
- Networking activities especially during special national events (APEC, ASEAN)

7. Physical -Facilities **Enhancement**

- Establishment and upgrading of especial service units (Trauma ward, Burn Unit, etc.)
- Upgrading of blood banks and laboratories
- Provision of decontamination areas for the BCRN hospitals including necessary PPE's
- Provision of negative pressure rooms for selected hospitals

7. Physical- Facilities Enhancement

- Creation of Hospital Operation Center (OPCEN) with communication system in certain regions
- Upgrading of ER, OR
- Upgrading of Ambulance Service
- Provision of triage areas
- Identifying and upgrading alternate areas in case of surge of victims during emergency

8. Program Development

- Strengthen Toxicology Centers
- Strengthen response to environmental emergencies especially chemical events
- WPRO Book on Assessment of Health Facilities – role of DOH - HEMS
- Embarking on a **nationwide assessment** of capability of hospitals on their structural, non-structural and functional capacity
- Proactive in using **licensing** as a strategy for hospital compliance

9. Practices

- 10 P's as evaluation tools for all hospitals
- Postmortem evaluation of major events and disasters
- Documentation of good practices compiled into a book
- Documentation of all health sector proceedings
- Clustering approach in disaster management
- Providing leadership in all emergencies

9. Practices

MCM Survey of WPRO 2005 (VTN, PHIL, SING and FIJI)

- Framework of MCM covering the pre-hospital and hospital role in MCI
- Influenced our training agenda
- Need to have a coordinated training with all members of the Health Sector (Police, military, fire and LGU)

9. Practices

WHO Project 2006 – evaluation for the physical recovery and rehab of typhoon-damaged essential health facilities: 18 facilities

- Focused on architectural and engineering evaluation, building safety assessment – hazards (geotechnical, flood, structural, architectural, electrical)
- Policy manual on the Design and Construction of Health Facilities in Typhoon-Prone Areas
- Retrofitting of Existing Health Facilities to mitigate hazards of earthquake, fire, flooding and typhoons in compliant of existing Codes

10. Peso and Logistics

- Allocation of funding for Health Emergency activities is gradually increasing
- The National Disaster Coordinating Council is recommending 5% of budget of facilities be for preparedness activities
- Availability of Quick Release Funds (QRF) during emergencies
- “Opportunities in times of Adversities”

**CITY OF
METRO MANILA**

Metro Manila

- **17 cities** where all government activities are
- Economic center of the Philippines and where all embassies are located.
- Saturated with 21 big DOH hospitals and other private and military hospitals; all connected through a good communication system
- **Hospital zoning – “receiving hospital and satellite hospital” concept**
- Strong networking camaraderie among hospitals with protocols depending on type of emergency

VGH

SLRWH

SLH, TMC
DJFMH
JRRMMC*
UP-PGH

NCMH

LPDH

JNRMH

EAMC*
PCMC
PHC POC
NKTI LCP
LCP NCH
QMMC

ARMMC

RMC

TPDH

RITM



Legend:

- Trauma hospital
- Poison Centers
- Hosp. for Biological Emergency
- Hosp. for Radio-nuclear Emergency
- Special hospitals

DOH Hospitals in Metro Manila



LRT BOMBING

Dec. 31, 2000

22 deaths

115 injured



Ultra Stampede Incident

(Pasig City) February 4, 2006



**1,059 Injured Victims
and
71 Deaths**



Volcanic Eruption



Mayon Volcano is an active volcano that erupts yearly

Hardest hit DOH Hospital:

- ❖ Bicol Regional and Training Hospital in Albay

Typhoons: "Miolenyo, Paeng, Reming, Senyang"



Bicol is located along typhoon belt
Most houses built of light materials
Commonly/yearly visited by typhoon

Earthquake



Earthquake is very often to occur as it precedes volcanic eruption

Impact in the Community

- RHUs, BHS, hospitals were damaged
- Houses and other infrastructures uprooted
- Lifelines were broken down
- Basic health services disrupted
- Significant number of families were displaced into the evacuation centers or temporary shelters

NO. OF REPORTED TYPHOON-DAMAGED GOVERNMENT HEALTH FACILITIES IN BICOL (TYPHOON REMING)

FACILITY	NO. OF HEALTH FACILITY	NO.OF TYPHOON-DAMAGED
HOSPITAL	52	33
RHU/CHO	133	58
BHS	1026	314

BRTTH



Blown-off roofs



Dilapidated building

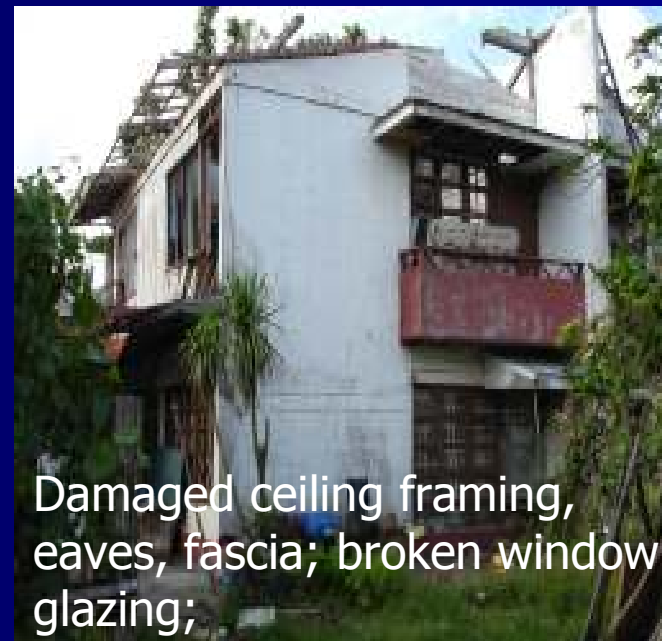


Damaged roof framing,

BICOL REGIONAL TRAINING AND TEACHING HOSPITAL



Damaged roof and ceiling



Damaged ceiling framing, eaves, fascia; broken window glazing;



Damaged electrical wires & wiring devices.

Impact in the Hospital

- Blown off roof making the 2nd floor non-functional
- Hospital personnel were victims (40%)
- Hospital water, communication, and electrical supply were down
- Hospital equipment damaged
- Some hospital areas non functional
- Surge of victims (1008 patients with 450 admissions)
- 14 died mostly due to communicable; 2 trauma

Resiliency of the Hospital is not just the structure but the system developed, the policies, guidelines, procedures and the people that makes the difference. Furthermore, if a hospital ceases to function, the ability of the network to cover the gap is the most important contingency plan.

THANK YOU