



Hospitals in Emergencies

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CONTENT

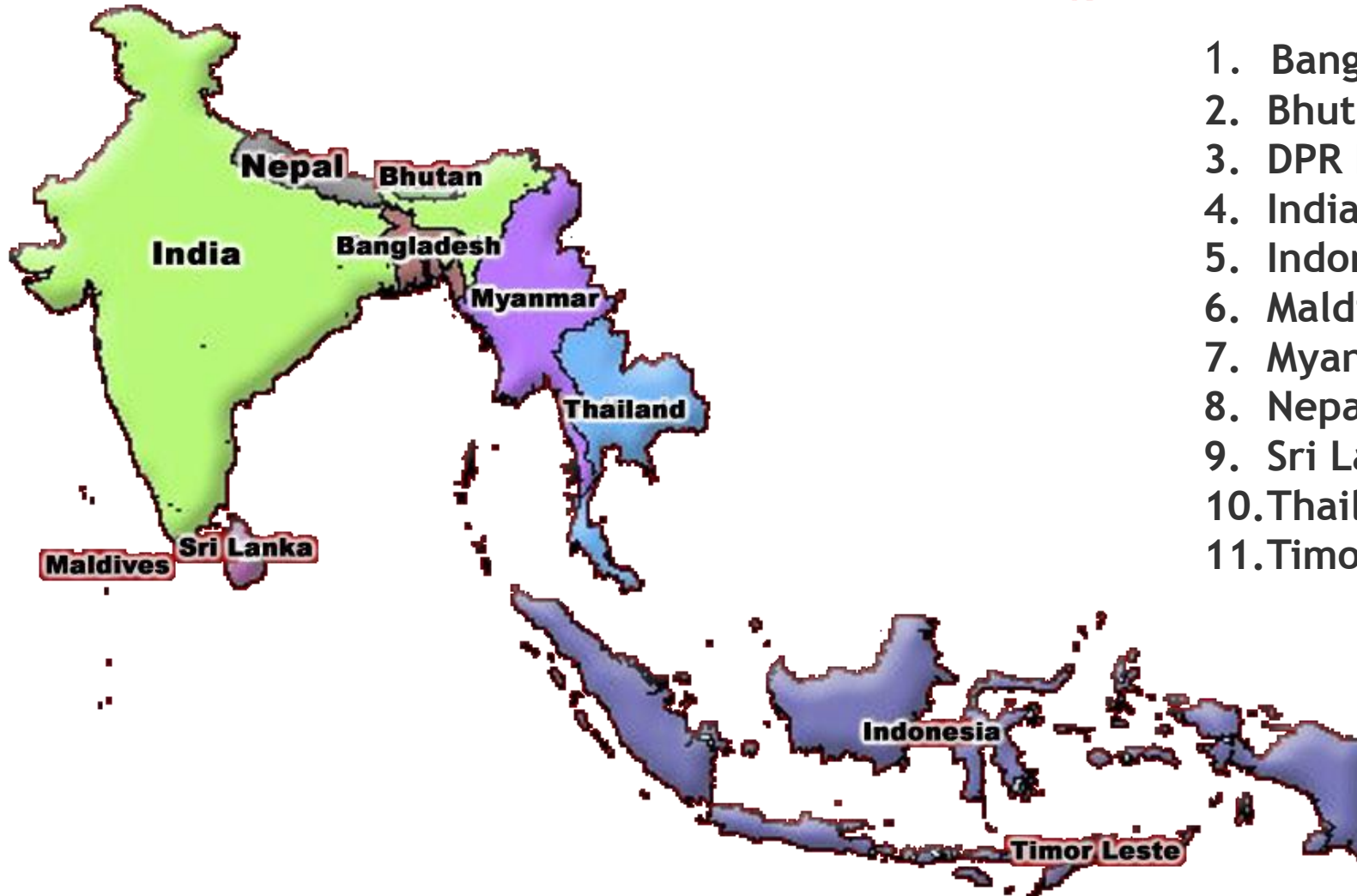
- The Regional Context
- What is the issue about ?
- Why focus on keeping health facilities safe from disasters?
- Hospital Emergency Preparedness Plan
- What can we do?





Regional Context

Save lives: make hospitals safe in emergencies



1. Bangladesh
2. Bhutan
3. DPR Korea
4. India
5. Indonesia
6. Maldives
7. Myanmar
8. Nepal
9. Sri Lanka
10. Thailand
11. Timor-leste



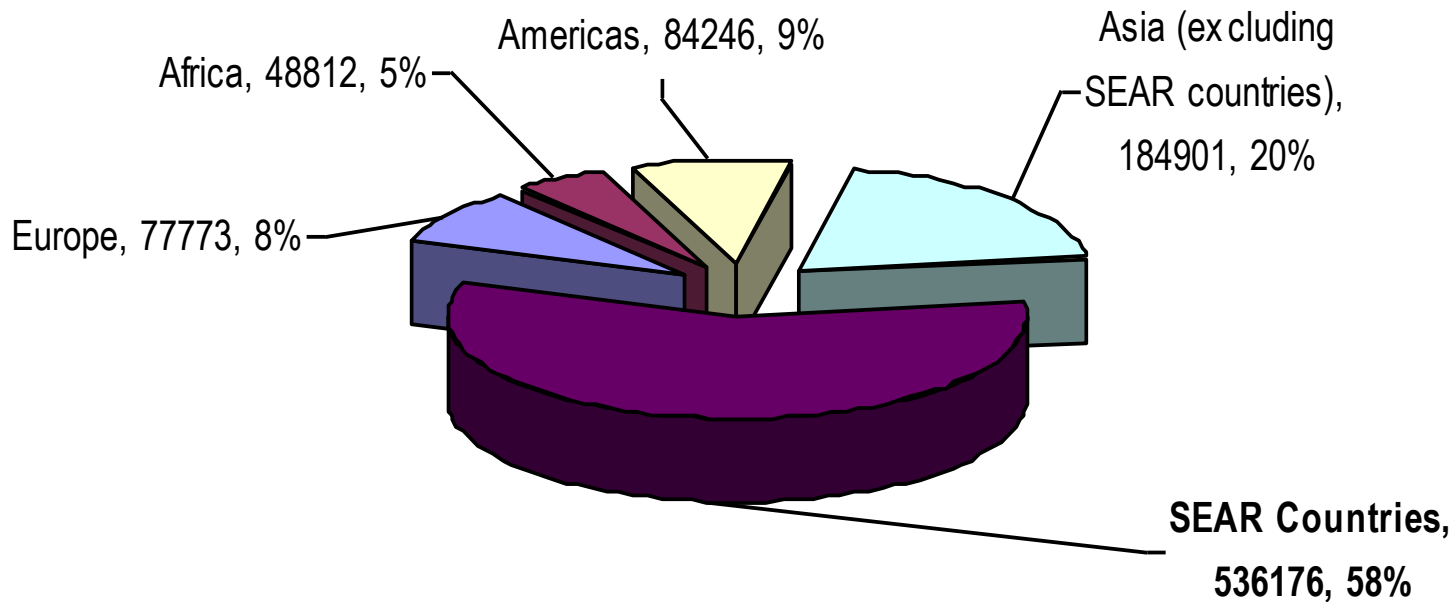
The Regional Context

- The 11 member countries of WHO's South-East Asia Region are highly vulnerable to disasters.
- Regional health facilities have sustained considerable damage in the wake of these events.





Total number of people killed in natural disasters (1996 to 2005) Numbers



Legend: Europe (blue), Africa (maroon), Americas (yellow), Asia (excluding SEAR countries) (cyan), SEAR Countries (purple)



Disasters destroy health facilities

The 26 December 2004 Tsunami



In Aceh province, Indonesia,
Destroyed 30 of the 240 health clinics were completely destroyed. Seventy-seven (77) others were damaged seriously. Forty (40) suffered minor damages. As many as 700 health workers (of an estimated 9800 in the province) died or were reported missing.

Sri Lanka

Ninety-two (92) health facilities were destroyed. This included 35 hospitals.



Disasters destroy health facilities

The 26 December 2004 Tsunami

Maldives

One regular hospital, 2 atoll hospitals and 20 health centers were destroyed.

India

Seven (7) district hospitals, 13 primary health centers and 80 sub-centers were damaged in the southern Indian States of Tamil Nadu, Andhra Pradesh, Kerala, the Union Territory of Pondicherry and the Andaman and Nicobar Islands.





Disasters destroy health facilities



- ***Cyclone SIDR - Bangladesh***
 - Health facilities were damaged by surrounding trees and objects that fell
 - Function of services were curtailed due to blocked roads and power outages
 - ***Cyclone Nargis – Myanmar***
 - 57% of public health facilities in the affected areas, largely confined to Ayeyarwady and Yangon divisions, were destroyed or damaged.
 - It is estimated that 10% - 15% of these facilities were totally
- Gujarat, India***
- A magnitude 7.7 earthquake destroyed and damaged all health facilities at various levels to varying degrees.



What is the issue about?



- Promoting the goal of “hospital safe from disasters” is one among the priorities of Hyogo Framework for Action 2005-2015 (HFA)
- The aim of the Hospitals Safe from Disasters strategy is to ensure that hospitals will not only remain standing in case of a disaster, but that they will function effectively and without interruption.
- World Health Day 2009 was commemorated with the theme ‘Save lives. Make hospitals safe in emergencies’



Implications of natural disasters for the health sector

- Damaged health facilities
- Damaged local infrastructure, interrupting the basic services
- An unexpected number of deaths, injuries and illnesses, overwhelming the health network's response capacity



Factors put hospitals and health facilities at risk:

Buildings

The location, design specifications and resilience of the material used, all contribute to a hospital's ability to withstand natural hazards

Patients

Damage to hospitals multiplies patient vulnerability, and increase in numbers

Hospital beds

Increase in demands for emergency care



Factors put hospitals and health facilities at risk:

Health Workforce

The loss or unavailability at the time of disaster, hiring outside personnel to sustain response capacity – add to the overall economic burden

Equipments

Damage to non-structural elements can cost 80% of the total costs

Basic lifelines and services

Electrical power, water and sanitation, waste management and disposal – can affect the entire health facility.



A social/political issue

- Safe hospitals have symbolic social value; losing a health facility leads to a sense of insecurity and social/political instability.
- Health facilities are occupied around-the-clock with the most vulnerable population.
- Disaster-resilient hospitals must be able to protect the lives of patients and staff and continue to function.



Immediately after the Gujarat earthquake the displaced people set up an informal camp beside the hospital grounds as it made them feel safer



A health issue

- Disasters create an intensive demand for health services. In addition to treating disaster victims, hospitals must quickly resume treatment of everyday emergencies and routine care.
- The hospital network (laboratories, blood banks, etc.) are integral components of a nation's public health system.
- The long-term impact of losing these services is difficult to quantify and therefore may be overlooked.

The loss of public health services is a real setback to achievement of the Millennium Development Goals (MDGs).



An economic issue

- Hospitals represent an enormous investment for any country.
- Destruction or loss of functionality poses a major economic burden.
- Direct economic losses involve more than the structure: the value of non-structural elements can be higher than the structure itself.



An economic issue

- USD 350 million estimated amount for projects and programmes to rebuild health facilities in Aceh post tsunami*
- USD 57 million to rebuild health facilities after the Gujarat earthquake of 2001

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* From Rebuilding a Better Aceh and Nias-Bureau of Rehabilitation and Reconstruction, Indonesia 2005

**Case Studies on Safe Hospitals WHO SEARO 2008





What protection is needed?

- **Life protection** is the minimum level of protection that every structure must comply with.
- **Investment protection** involves safeguarding infrastructure and equipment.
- **Operational protection** is meant to ensure that health facilities can function in the aftermath of a disaster.



Why keep hospitals safe from disasters?



- Indirect costs—such as a decline in health and wellbeing of the population, the impact on overall recovery and a disincentive for future external investments—are difficult to measure.

The direct and indirect costs of disasters far exceed what it would have cost to mitigate the damage to hospitals in the first place.



This is a problem that *can* be solved...



- The technical knowledge already exists.
- It costs little more to build a safe hospital than to build a hospital vulnerable to disasters.

A hospital that withstood a 6.5 earthquake in Bengkulu Indonesia September 2007



Investment in Risk Reduction Measures

- A mitigation investment to increase the structural integrity of a hospital will increase total construction costs by no more than **1 or 2 percent**
- incorporating mitigation elements to the construction of a new hospital accounts for **less than 4 percent** of the total initial investment
- retrofitting existing facilities to withstand a disaster can cost an average of **8-15%** of the total cost



HOSPITAL EMERGENCY PREPAREDNESS PLAN



What constitutes a disaster for a hospital?

- disaster for a hospital is “a temporary lack of resources which is caused due to sudden influx of unexpected patient load”.



Why do we need a plan?

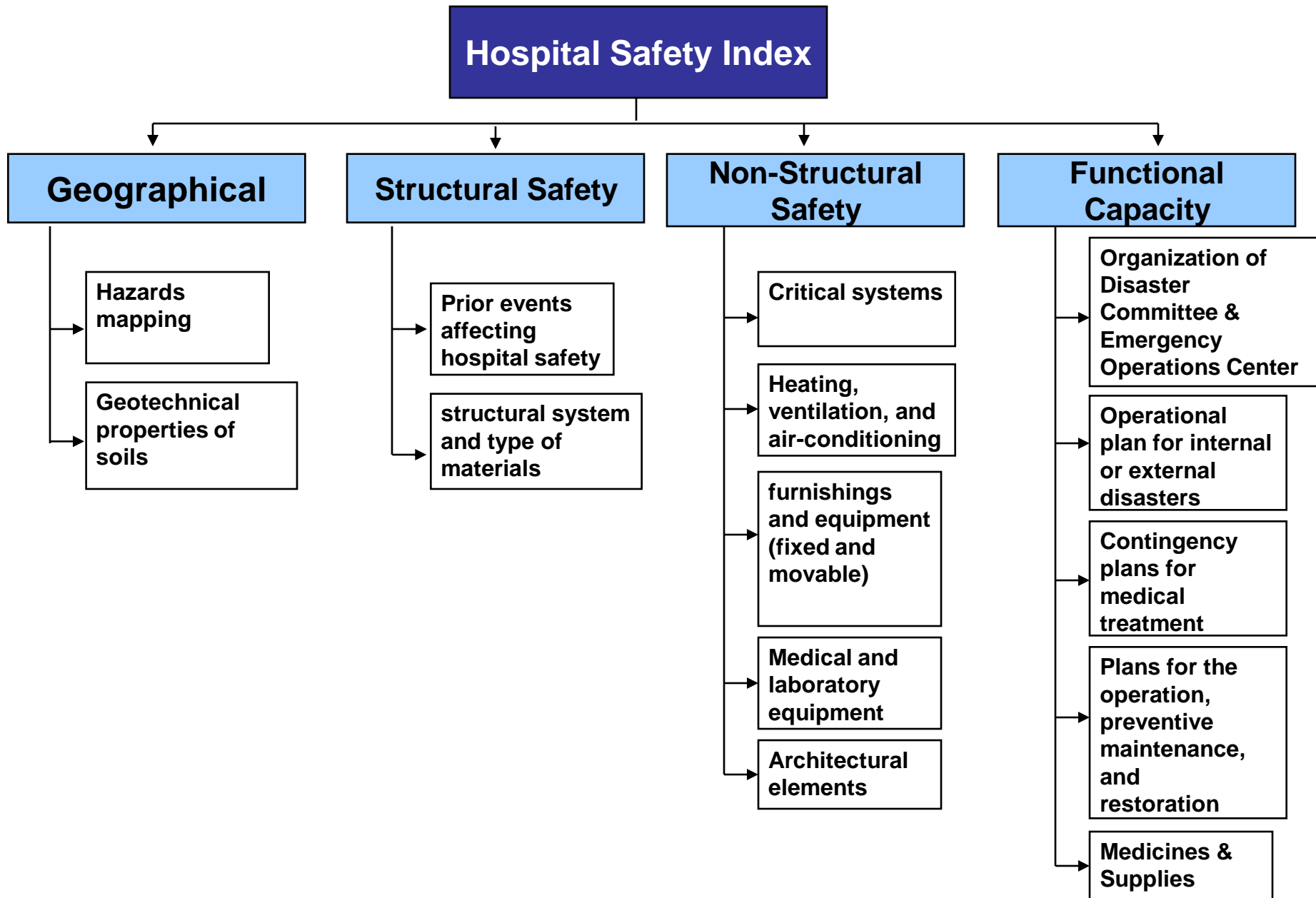
- Hospital disaster management provides the opportunity to plan, prepare and when needed enables a rational response in case of disasters/ mass casualty incidents
- Disasters and mass casualties can cause great confusion, inefficiency and overwhelm the hospitals resources, staffs, space and or supplies.
- Everyone does his/her own work without effectively contributing to solving the larger problem of the hospital.



Principles of Hospital Emergency Plan

- Predictable
- Simple
- Flexible
- Concise: (Clear definition of authority)
- Comprehensive
- Adaptable
- Anticipatory: All hospital plans should be made considering the worst case scenarios.
- Part of a Regional Health Plan in Disasters

Hospital Components contributing functionality after disaster





Key points in developing an emergency plan

- **Pre disaster phase**
 - a) Planning
 - b) The disaster manual
 - c) Staff education and training
- **Disaster Phase**
 - a) Phase of activation
 - b) Activation of the chain of command in the hospital.
 - c) Operational phase
 - d) Phase of deactivation
- **Post Disaster Phase:** activities are discussed and the inadequacies are noted for future improvements.



What can we do?



Who can do What for safe hospitals ?

- Governments
- Financial institutions
- International Agencies
- Architects and Engineers
- Academe
- Civil Society
- Communities



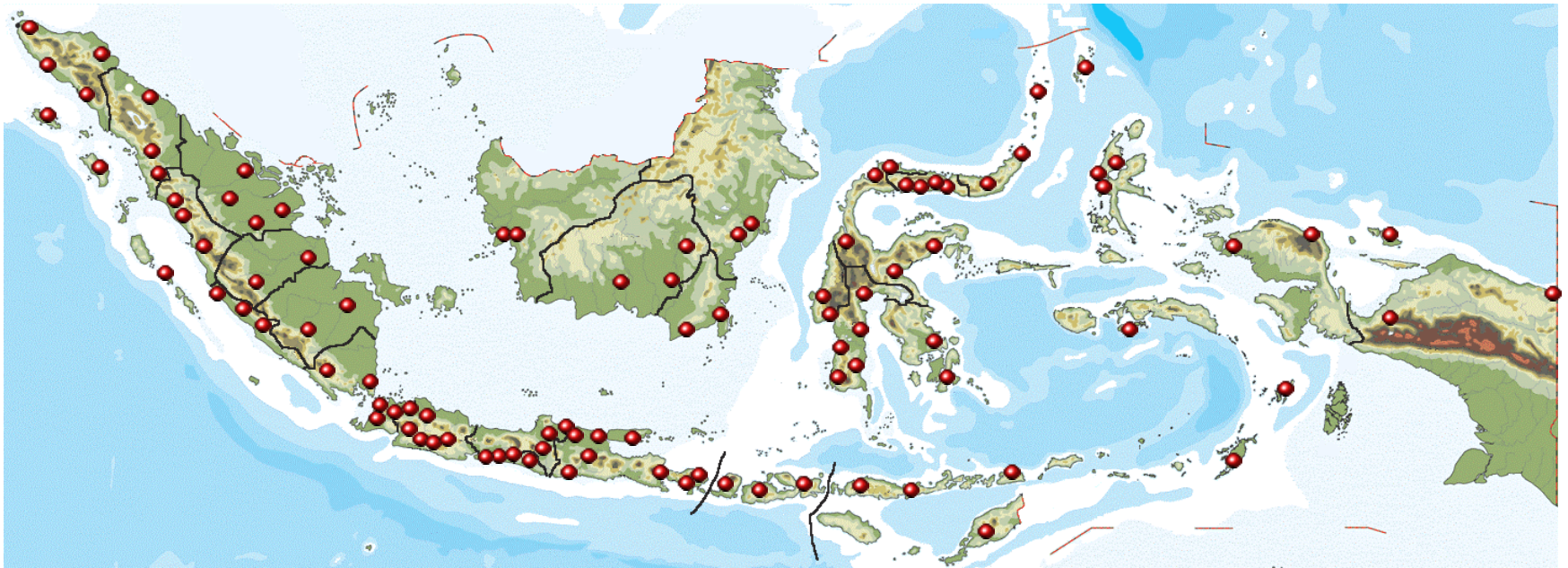


A Collaborative Effort

- Training of Facilitators for Hospital Disaster Plan Development
- In-House trainings in targeted hospitals
- Improving Hospital Accreditation and policy to mainstream safe hospital principles



MAP OF 100 HOSPITALS FOR IN HOUSE TRAINING





Remaining Needs

- Adequate and Flexible fund
- Strengthen the collaboration with universities: Universities became the key institutions in strengthening the capacity of hospitals as they are used as teaching facilities.
- Qualitative and quantitative improvement:
 - Strengthen monitoring and evaluation
 - Improve the training method
 - Training for Hospital located in the trans-borders and private hospitals those are not yet covered
- Continue to involve Hospital Association of Indonesia and other Professional Associations those play a major role in standardizing regulation for both structural and functional parts of hospital performance.
- Engagement with wider partners:
 - Nurse association
 - Private companies



Save lives:
make hospitals safe in emergencies



Thank You

Merci Beaucoup

Terima Kasih