



International Strategy for Disaster Reduction



World Health Organization



THE WORLD BANK



2008-2009 World Disaster Reduction Campaign

# Hospitals Safe from Disasters

*Reduce Risk, Protect Health Facilities, Save Lives*



United Nations



The price we pay for the failure of hospitals or health facilities due to disasters is too high. In comparison, the cost of making hospitals safe from disasters is tiny. Disaster damage to health systems is a human tragedy, results in huge economic losses, deals devastating blows to development goals, and shakes social confidence. Making hospitals and health facilities safe from disasters is an economic requirement, and also a social, moral and ethical necessity.

Special attention must be given to ensuring the physical and functional integrity of health hospitals and facilities in emergency conditions. This is about more than just protecting buildings. Health facilities are only truly safe from disasters when they are accessible and functioning, at maximum capacity, immediately after a hazard strikes.

## Objectives

The World Disaster Reduction Campaign on Hospitals Safe from Disasters aims to raise awareness and effect change that will:

- Protect the lives of patients and health workers by ensuring the structural resilience of health facilities;
- Make sure health facilities and health services are able to function in the aftermath of emergencies and disasters, when they are most needed; and
- Improve the risk reduction capacity of health workers and institutions, including emergency management.

## Key messages

### **The most expensive hospital is the one that fails:**

Hospitals and health facilities represent an enormous investment for any country. Their destruction imposes major economic burdens.

### **Disasters are a health and a social issue:**

Not only is health treatment critical in the aftermath of a disaster, damage to health facilities and systems affects development long into the future.

### **Protecting critical health facilities from disasters is possible and cost effective:**

Including risk reduction in the design and construction of all new health facilities, and reducing vulnerability in existing health facilities through selecting and retrofitting the most critical facilities, costs less than you might expect.

### **The health workforce must be agents of disaster risk reduction:**

Health workers are central to identifying potential health risks from natural hazards and promoting personal and community risk reduction measures.

## Safe health facilities are vital for health and development goals

Health services are not only critical emergency centers; they play a vital role in recovery, social cohesion and economic development. The long-term impact of the loss of public health services on the Millennium Development Goals exceeds the impact of delayed treatment of trauma injuries. Hospitals, primary health centres, and other health facilities are central to sustainable recovery from disaster, and to health-driven development goals, taking key roles in:

- Ongoing health surveillance to prevent outbreaks
- public health and sanitation campaigns, particularly preventive medicine
- attracting health research and hosting reference laboratories, driving innovation
- acting as focal points for community organization.

Disasters can wipe out huge swathes of the health systems in developing countries or vulnerable regions, seriously compromising developing countries' potential to achieve the Millennium Development Goals of reducing child mortality, improving maternal health, and combating HIV/AIDS, tuberculosis, malaria, and other diseases.

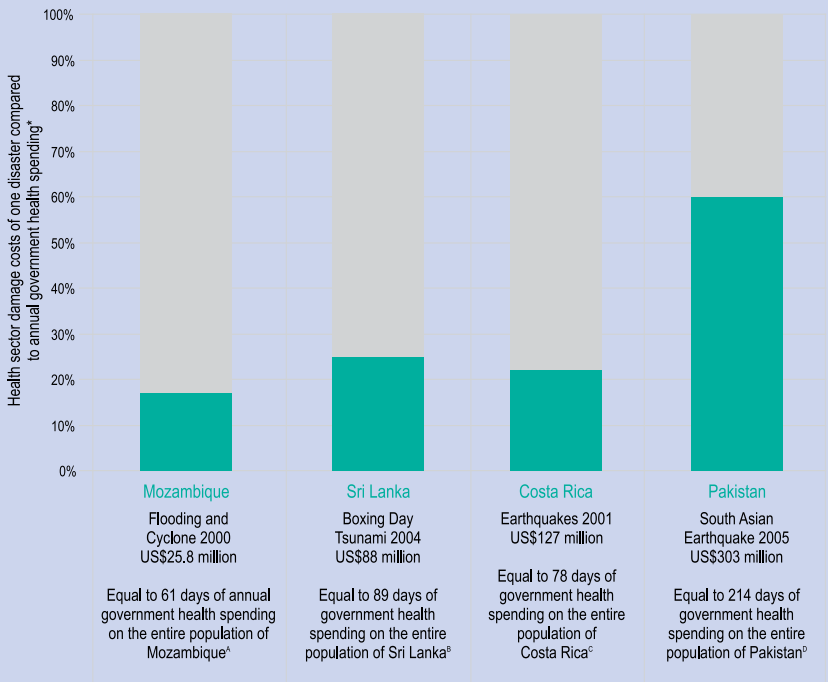
# Making the case for hospitals safe from disasters

## Low cost design safety: New hospitals

For the vast majority of new health facilities, incorporating comprehensive disaster protection from earthquake and weather events into designs from the beginning will only add 4% to the cost. Planning processes for new hospitals can be easily targeted by advocacy, and should be a priority.

## Low cost retrofitting: Targeted protection

Prioritizing the protection of critical care and hospital functionality reduces potential costs. For example, non-structural elements – the contents, rather than the building – represent most of the value of hospitals. Damage to non-structural elements is also what most often renders a hospital inoperable during a natural disaster. Retrofitting non-structural elements costs only about 1% while protecting up to 90% of the value of a hospital.



<sup>a</sup> Based on 2007 population, and per capita US dollar government expenditure on health in World Health Statistics, World Health Organization, 2007.

Sources:

<sup>a</sup> Republic of Mozambique: A Preliminary Assessment of Damage from the Flood and Cyclone Emergency of February-March 2000, World Bank, 2000.

<sup>b</sup> Sri Lanka 2005 Post-Tsunami Recovery Program: Preliminary Damage and Needs Assessment, ADB, JIBC and World Bank, Colombo, Sri Lanka, 2005.

<sup>c</sup> Loan for emergency reconstruction of hospitals only, Earthquake Reconstruction and Health Services Extension Project, World Bank, 2007.

<sup>d</sup> Pakistan 2005 Earthquake, Preliminary Damage and Needs Assessment, Asia Development Bank and World Bank, Islamabad, Pakistan, 2005.



## What the Campaign will do

From 2008-2009, the secretariat of the International Strategy for Disaster Reduction (UN/ISDR) and the World Health Organization (WHO) will partner with governments, international and regional organizations, non-governmental organisations and individuals worldwide to raise awareness about why and how to redouble efforts to protect health facilities and ensure they can function during and in the aftermath of disasters.

A wide range of activities will be carried out together by the UN/ISDR secretariat, WHO and their respective regional offices within the framework of the Campaign. Other ISDR system partners will be involved, in particular the World Bank, UNDP, WMO, UNEP, UNESCO, UNICEF, FAO, ILO, WFP, IFRC and the various ISDR networks of NGOs, private sector, academic institutions, parliamentarians and local authorities. At the national level, the main responsibilities belong to the National Platforms for disaster risk reduction, which are focal points for the Hyogo Framework for Action and the Ministries of Health.

**Call for good practices in making hospitals and health facilities safe from disasters.**  
If you already have experiences to share, please contact Ms Tze Ming Mok ([mokt@un.org](mailto:mokt@un.org)) for a submission template.

# 10 Basic Facts to Know

1. Many factors put hospitals, health facilities, their workers, and the people they care for at risk, from the design of the building, to the ability of people to manage an emergency
2. Components of a hospital or health facility are typically divided into: structural elements, ie the building, and non-structural elements, ie the contents, which can comprise around 80% or more of the total cost of the facility in the case of hospitals
3. Functional collapse, not structural damage, is the usual reason for hospitals being put out of service during emergencies
4. Hospitals and health facilities can be built to different levels of protection: in increasing order of cost and protection, life safety, investment protection, and operations protection
5. Making new hospitals and health facilities safe from disasters is not costly: it has been estimated the incorporating mitigation measures into the design and construction of a new hospital will account for less than 4% of the total initial investment
6. Field hospitals are not necessarily the best solution to compensate for the loss of a hospital or health facility during a natural disaster
7. Using a check consultant is the best way to ensure that facilities are built according to the disaster-resilient designs that have been approved
8. Building codes are of utmost importance
9. Creating safe hospitals is as much about having vision and commitment as it is about actual resources
10. ***The most expensive hospital is the one that fails!***

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