

Disaster Risk Management for Health

SAFE HOSPITALS: PREPARED FOR EMERGENCIES AND DISASTERS

Key Points

- Hospitals and other health facilities are vital assets to communities on a day-to-day basis and when disaster strikes.
- Safe hospitals protect patients, visitors staff and the investment in health infrastructure from hazards.
- Safe hospitals continue to function and provide life-saving medical care in disasters.
- Assessment of the safety and preparedness of hospitals identifies priorities for remedial action, including cost-effective retrofitting.
- New hospitals are safeguarded by risk-sensitive siting, design and building in compliance with building codes.
- Emergency planning, staff training and exercises build hospital capacity to manage risks and respond effectively.

Why is this important?

Health systems rely on a range of public, private and nongovernmental health facilities to work together to serve the community. In times of emergency, this is even more important.

Hospitals, primary health care centres, laboratories, pharmacies and blood banks work with non-health sectors, including energy and water supplies, transport, and emergency services to ensure the continuity of health services.

During emergencies, hospitals play a vital role in:

- Providing emergency care to the injured (e.g. trauma care, surgery and blood transfusions) and to the critically ill, as in outbreaks of communicable disease.
- Collecting and analysing data on illness to detect and prevent potential outbreaks.
- Delivering health care before and after an emergency (for the management of chronic disease, maternal and child health services, and psychosocial support).
- Providing immunisation services to prevent outbreaks of diseases, such as measles, that lead to needless deaths of susceptible populations (commonly children).
- Providing critical services, including laboratories, blood banks, ambulances, rehabilitation, aged care and pharmacies.

Hospitals also represent enormous investments for any country. Destruction of such facilities results in significant economic burdens. Failure of hospitals and emergency services during a disaster can greatly affect public morale and a community's social and health capital.⁴

What are the health risks?

Traumatic injury and death

- Associated with structural collapse and non-structural failures, patients and health workers at an unsafe facility may be killed or injured by trauma associated with the disaster.⁵



Disruption of health services

- Destruction of hospitals interrupts acute and chronic health care, community disease surveillance, laboratory analysis, blood and drug supplies, and support for community health programs, both over the short and long term post-disaster phase.
- Overcrowding can functionally disrupt health services if the hospital lacks arrangements to respond to a surge of patients and visitors.

Impeded emergency response

- Hospitals represent community focal points for mounting and coordinating emergency responses in the midst of disasters.⁶
- Loss of hospitals as a health care facility hinders immediate responses and may divert emergency responders and resources away from the community to focus on rescue of hospital occupants and salvage of critical hospital supplies.

Loss of economic investment

- Destruction of hospitals represents a huge economic loss, particularly since vital health resources are diverted to rebuild the facility in place of funding community programs and healthcare designed to maintain the population's health.

Example: Mojaffarabad, Pakistan

Following a severe earthquake in Mojaffarabad, Pakistan in 2005 which destroyed many health facilities, 307 were selected for reconstruction based on priority of health coverage. 7 large hospitals along with 142 health facilities were reconstructed in compliance with the building codes to withstand a magnitude 7 earthquake. Another 116 health facilities are making good progress towards reconstruction. The advocacy of the Safe Hospital campaign has had a substantial impact on the reconstruction phase in Pakistan.

Earthquake Reconstruction and Rehabilitation Authority, Pakistan

Risk management considerations

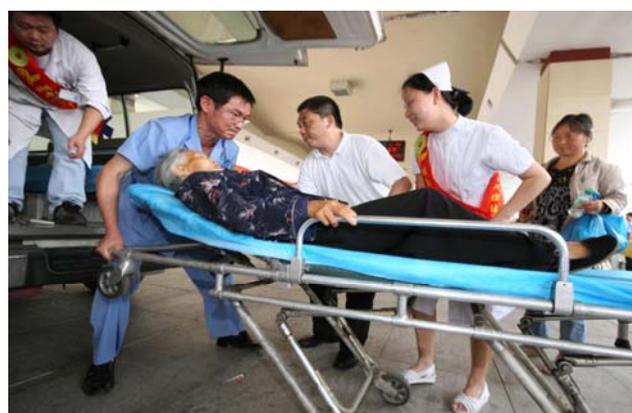
Governments and communities can make health facilities safer and better prepared for emergencies by:

- Developing and implementing national policies and programmes to make health facilities safe in emergencies.
- Selecting a safe site for health facilities.

- Designing and constructing safe health facilities.
- Assessing the safety of existing health facilities, e.g. by applying the Hospital Safety Index.
- Protecting health workers, equipment, medicines and supplies.
- Ensuring that health facilities receive essential services.
- Developing partnerships between health facilities and the community.
- Developing emergency risk management programmes and response plans for facilities.
- Testing and updating response plans with exercises.
- Training health workers to respond to emergencies.
- Evaluating and learning lessons from past emergencies and disasters.

References and further reading

1. WHO. Geneva. Save Lives, Make Hospitals Safe In Emergencies: World Health Day 2009.
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5. Milsten A. Hospital responses to acute-onset disaster: a review. *Prehosp Disaster Med.* 2000 Jan-Mar;15(1):32-45.
6. Farmer JC, et al. Providing critical care during a disaster: the interface between disaster response agencies and hospitals. *Crit Care Med.* 2006 Mar;34(3 Suppl):S56
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Hospital exercise, Sichuan, China (WHO)