SAFE HOSPITALS INITIATIVE

COMPREHENSIVE
SAFE
HOSPITAL
FRAMEWORK

World Health Organization

I   SAFE HOSPITALS – BACKGROUND AND JUSTIFICATION

■ WHY SAFE HOSPITALS SHOULD BE A PRIORITY

Health facilities, especially hospitals, are critical assets for communities both routinely and especially in response to emergencies, disasters and other crises. Yet hospitals and health workers are often among the major casualties of emergencies, with the result that health services cannot be provided to affected communities when they are most needed.[1] The vast investment in health infrastructure - hospitals can absorb up to 70% of ministry of health budgets - can be lost when poorly constructed hospitals are destroyed or damaged. Hospitals are also important symbols of social well-being. Destruction of or damage to a hospital may result in a loss of trust in local authorities as well as exposing patients and health workers to further vulnerabilities. Acts of violence, including direct attacks, have increased the threats to the security of hospitals, health workers, patients and health services.

Measures to ensure the safety, security and functionality of health infrastructure are needed at both national and community levels. Countries and communities need to prioritize the protection of new and existing hospitals and other health facilities from identified hazards and should ensure the physical integrity of buildings, equipment and critical hospital systems. In addition, they should provide for the security and well-being of health workers and patients, and should ensure that hospitals are able to continue to function and provide life-saving services in the immediate response to emergencies and in their aftermath. Hospitals can be made more resilient and functional through action to improve the environmental sustainability of health infrastructure, including measures to increase the reliability of power and water supply systems and to reduce harmful waste. A Safe Hospital programme is an essential component of a country's strategy for disaster risk reduction and, in particular, emergency and disaster risk management for health.

In the context of this framework, "safe hospital" refers to all types of health facilities and their functionalities. "Safe hospital" is a widely used term, but this framework takes into account the critical roles that different types of health facilities play in ensuring a safer health system – including health centres, laboratories, clinics (including those that provide prevention services and health promotion), small and medium-sized hospitals, and referral hospitals.

70%

of ministry of health budgets are absorbed by hospitals. Investments in hospitals must be protected from damage and destruction.

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[1] The scale of damage to health facilities ranges from a single critical hospital to many health facilities. In September 2009, floods caused the evacuation of patients and shut-down of critical services in Burkina Faso's main hospital in the capital Ouagadougou. National and local health systems that provide health services for millions of people have been affected by damage to and destruction of thousands of health facilities in Gujarat, India (2001), in Indonesia's northern Aceh province (2004), in Pakistan (2005) and in Myanmar (2008). More than 11 000 health facilities were damaged or destroyed by the earthquake that struck China on 12 May 2008. Some 432 health facilities were damaged by Typhoon Haiyan in the Philippines in 2013, including 296 barangay health stations, 97 rural health units, 38 hospitals and the Eastern Visayas regional office of the Department of Health. The total cost of damage to health facilities was estimated at approximately US$ 26 million (http://typhoonyolanda.doh.gov.ph/index.php/10-press-releases/81-doh-goes-full-throttle-for-typhoon-yolanda-victims, accessed 30 December 2014). During the three-week Gaza Strip emergency in 2008-2009, 16 health staff were killed and 25 injured while on duty, and 15 hospitals, 41 primary health centres and 29 ambulances were damaged.

■ PROGRESS TO DATE

Government agencies (including ministries of health and national disaster management authorities), public and private hospitals and their partners have taken action to ensure the safety and preparedness of hospitals so that they can continue to deliver essential services in emergencies and disasters. Seventy-seven countries across the world have reported that they are implementing safe hospital activities. WHO and partners have been promoting safe hospital programmes for over 20 years through global, regional and national policy commitments, technical guidance and support to countries and partner organizations in WHO's six regions.[2] The safety and preparedness of over 3500 health facilities have been assessed and action has been taken to implement recommendations to make hospitals safer and better prepared for emergencies. Many training programmes have been conducted to increase the capacity of hospital staff to prepare for and respond to internal and external emergencies.

Recent developments that are aligned with Safe Hospitals have included a greater focus on security measures to protect health workers and facilities in areas of conflict, violence and criminality, and initiatives to improve the energy efficiency and waste management practices of "green" or "smart" hospitals.

The Hyogo Framework for Action 2005 2015 makes specific reference to "promot[ing] the goal of 'hospitals safe from disaster' by ensuring that all new hospitals are built with a level of resilience that strengthens their capacity to remain functional in disaster situations and implement mitigation measures to reinforce existing health facilities, particularly those providing primary health care". The World Health Assembly and WHO Regional Committees have passed resolutions[3] with member states pledging to make their hospitals safer.

A continued focus on safe hospitals was recognized in the Communiqué of the High Level Dialogue of the Global Platform for Disaster Risk Reduction in May 2013 which proposed to all stakeholders to rally behind: "… a global safe schools and safe health structures campaign in disaster-prone areas with voluntary funding and commitments to be announced at the World Conference for Disaster Risk Reduction for 2015." This comprehensive Safe Hospital framework is intended to guide global and national actions for implementing safe hospitals as a major priority in the post-2015 framework on disaster risk reduction (DRR) and in country and community strategies for DRR.

■ CHALLENGES

Many countries vulnerable to disasters have implemented actions that include assessment of hospitals and health facilities, retrofitting of key hospitals to strengthen their levels of resilience, implementing hospital safety systems through plans, capacity-building and exercises, and planning for more resilient health infrastructure. The actions have been driven primarily by the risk factors in the different countries, with national priorities focusing variously on physical safety of hospital buildings, improved preparedness of hospitals and health systems, and post-disaster reconstruction of hospitals to build back better.

However, these efforts have been sporadic and insufficiently integrated into government plans for development and emergency response. Many challenges remain, especially for countries with limited resources and facing high risks of emergencies. Making hospitals safer requires countries to construct facilities to withstand future hazards (including the risks of climate change), provide security for staff and patients, and ensure they are prepared to respond to and recover from the effects of emergencies, disasters and other crises. While assessments of the safety of existing facilities have been conducted, there is a need to ensure that the human and financial resources are available to implement the recommendations of the assessments, including retrofitting of

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[2] For example: World Health Day 2009; Hospitals Safe from Disasters (UNISDR/World Bank/WHO World Disaster Reduction campaign 2008-2009); One Million Safe Schools and Hospitals campaign (http://www.safe-schools-hospitals.net/en/Home.aspx, accessed 30 December 2014).

[3] Resolution WHA64.10. Strengthening national health emergency and disaster management capacities and resilience of health systems. World Health Assembly, Geneva, 16-24 May 2011. Resolutions and decisions, annexes. Geneva: World Health Organization; 2011 (WHA64/2011/REC/1; http://apps.who.int/gb/ebwha/pdf_files/WHA64-REC1/A64_REC1-en.pdf#page=21, accessed 30 December 2014). Also: WHO Regional Committee for South-East Asia: Kathmandu Declaration on Protecting Health Facilities from Disasters, Kathmandu 7–8 September 2009; WHO Regional Committee for the Americas resolution CD50.R15. Plan of action on safe hospitals, Washington (DC) 27 September-1 October 2010; WHO Regional Committee for Africa: African Strategy for Disaster Risk Management, Luanda 19-23 October 2012.

facilities, maintenance of critical systems, securing equipment, and planning, training and exercises to improve emergency and disaster risk management of hospitals, health systems, communities and countries.

This document aims to develop a common framework of action that can guide the work on making hospitals more resilient and safer. Successful implementation will depend on the active engagement of other sectors that are critical to ensuring the functioning of hospitals before, during and after disasters (e.g. construction, water and sanitation, telecommunications, security, etc.). Increased investment and continued political and technical support is needed to build on the current momentum and to ensure the safety, security and preparedness of new and existing hospitals across the world.

II SAFE HOSPITAL FRAMEWORK

■ INTRODUCTION TO THE FRAMEWORK

The Safe Hospital Framework[4] presents a structured approach for actions to strengthen the safety and preparedness of hospitals and health facilities for all types of hazards. It describes the framework's vision and the scope of the work, with medium to long-term goals and achievable outcomes, and proposes four main components of Safe Hospital programmes. An implementation mechanism follows, with guiding principles that support implementation of key actions of the framework in a country setting.

■ TARGET AUDIENCE

The main target audiences are the governments, health authorities, financial institutions and disaster management organizations that will use the framework as a guide for the development and implementation of Safe Hospital programmes at national, subnational and facility levels. The wider audience includes all stakeholders in safe hospitals across many sectors, as well as hospital managers and staff, who can use the framework to guide projects and activities for making hospitals more resilient and better prepared for emergencies and disasters.
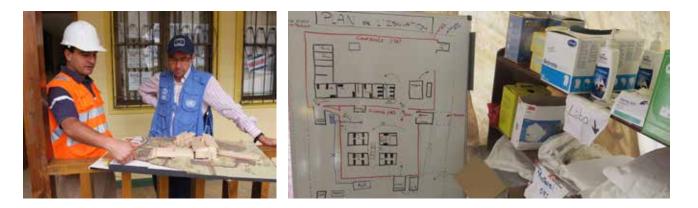
■ SCOPE

Given their vital role in health care at community and national levels, hospitals must continue to function before, during and following an emergency or disaster. The Safe Hospital Framework promotes an all-hazards approach in order to take account of the wide range of hazards that affect the safety of hospitals, staff and patients and that may lead to emergencies and disasters requiring a health response. Hospitals need a wide support system to be able to fulfil their roles in health service delivery. The Safe Hospital[5] Framework is intended to ensure the functionality of hospitals as a core element of a broader health and societal system for managing the risks of emergencies and disasters.

The role of a hospital can be seen from three perspectives:

1
The hospital and its immediate catchment area.

2
Hospitals within the overall health system.

3
Hospitals in the wider social system.

Hospitals have direct responsibility to provide health services to their surrounding communities and catchment populations.

Hospitals also have a broader role within the overall health system, acting as referral centres for other health-care providers, providing specialist, subspecialist and community services, acting as teaching and research institutions, and contributing to surveillance and public health data-gathering.

Hospitals have a central role within broader society, including as critical assets in disaster risk management. Hospitals exist within and across the public, private and nongovernmental sectors. Hospitals are not only providers of clinical services for treatment, but are also integral to promoting health and preventive actions in the community in which they function.

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[4] A framework outlines the "basic structure underlying a system, concept, or text". It is a schematic representation or map that illustrates the links between all elements being considered in defining a concept (http://www.oxforddictionaries.com/definition/english/framework, accessed 20 December 2014).

[5] In this document the term "hospital" refers to all health facilities and their functionalities. "Safe hospital" is a widely-used term, but the Safe Hospital Framework takes into account the critical role the different types of health facilities play in ensuring a safer health system, and therefore the scope of the term goes beyond the traditional definition of a hospital.

The Safe Hospital Framework addresses the role of hospitals at all three levels.

■ VISION

The vision of the Safe Hospital Framework is to *"protect the lives and health of people from emergencies and disasters"*.

■ GOAL AND OBJECTIVES

- **Goal:** Safe hospitals continue to provide health-care services in times of emergencies and disasters.

- **Objectives:** The objectives are:
  - to enable hospitals to continue to function and provide appropriate and sustained levels of health-care during and following emergencies and disasters;
  - to protect health workers, patients and families;
  - to protect the physical integrity of hospital buildings, equipment and critical hospital systems;
  - to make hospitals safe and resilient to future risks, including climate change.

■ EXPECTED RESULTS

1. Safer, more resilient and better-prepared health facilities that are constructed more safely and protected from violence so that they remain functional and provide health services in emergencies, disasters and other crises.

2. A health-care system that employs hospitals to deliver the right level of health care to those in need in emergency and disaster situations.

3. Hospitals recognized as critical and high-priority assets for communities, and as main stakeholders in and contributors to building societies that are safer and more resilient to emergencies and disasters.

4. Hospitals that are designed to cope with future risks, including climate change, and that link improvements in reliability, efficiency and environmental sustainability to enhanced hospital safety and functionality for emergencies and disasters.

FIGURE 1. COMPONENTS OF THE SAFE HOSPITAL PROGRAMME

Policy, norms and legislation

- Safe hospital policies and programmes
- Norms for safe hospital design and construction
- Hospital accreditation for safety and preparedness
- Hospital safety as an integral part of national and community DRM policies
- Hospitals as an integral part of national emergency legislation

Coordination and service delivery

- Hospital emergency risk management systems
- Referral plans and mechanisms for patient movement
- Mass casualty management system
- Coordination of local, national and international health assistance to hospitals
- Hospitals supporting community preparedness

Resources management

- Safe construction of hospitals
- Strengthening the hospital workforce for emergencies
- Capacity-building of medical teams for rapid response
- Safety and security of health workers
- Management of equipment and supplies
- Financial resources management for safe hospitals
- Energy efficiency and reliability

Knowledge and information management

- Hospital safety assessment
- Health information system for DRM
- Hospitals central to information systems and assessments for DRM
- Research agenda and mechanisms on making hospitals safer
- Monitoring and evaluation mechanisms for hospital safety
- Guidelines and tools

■ COMPONENTS OF THE SAFE HOSPITAL PROGRAMME

The Safe Hospital programme is based on four components that encompass activities relating to the three dimensions of a hospital's role (Figure 1). The activities listed under each component are some of the core areas that should be addressed in a Safe Hospital programme. The planned activities will be determined by the country context, risk profile and resources available in the health system and other systems at all levels.

POLICIES, LEGISLATION AND NORMS

It is important to institutionalize the concept of safe hospitals so that elements of the framework are reflected in policies and laws that define the structures and standards for Safe Hospital and the roles and responsibilities of involved parties. Effective enforcement of standards is critical for ensuring that policies and standards are properly adhered to for maximum benefit. Making safe hospitals a part of the relevant strategies and quality control measures, including hospital accreditation – as well as institutionalizing a system of regular monitoring and reporting – will help to increase the level of adherence, accountability and sustainability of action. Building codes, norms and regulations, and mechanisms for their enforcement for safe buildings, infrastructure and hospital functions – provided they are implemented – will also help to establish safe health facilities.

COORDINATION AND SERVICE DELIVERY

Action on safe hospitals requires inputs from multiple sectors and partners. Strong coordination mechanisms are required to bring different partners together, to give direction to the programme, and to ensure a comprehensive approach to planning, implementation and follow-up for new and existing hospitals – including for their preparedness for, response to and recovery from emergencies and disasters. Coordination is needed with various sectors for referral mechanisms and management of mass casualty events, as well as to help expand the role of the hospital in enhancement of disaster risk management mechanisms within the community and beyond.

RESOURCE MANAGEMENT

Hospitals need safe building design and construction, with equipment and supplies that are able to function effectively while withstanding hazards. The safety of the location and the nonstructural elements of the hospital are also critical elements in ensuring functionality in emergencies. The post-disaster recovery period provides opportunities for making hospitals safer and strengthening health services. A competent, trained and qualified workforce in health, construction and other vital sectors is a key requirement of safe hospitals. Capacity-building and effective human resource management are important measures for the management of risk and for continued functionality of hospitals and the entire health system in emergencies. It is also important to allocate adequate financial resources to make hospitals resilient.

KNOWLEDGE AND INFORMATION MANAGEMENT

The Safe Hospital programme must be based on evidence regarding the risks that threaten hospitals and the measures that work to make hospitals safe. The programme must also take into account risk assessments and safety assessments, as well as guidance that enables hospitals to function both as individual entities and as part of the larger response mechanism in emergencies. Continued monitoring and evaluation – including investigation and analysis of causes of damage and disruption to services – that addresses technical, political, human and financial resource issues must be conducted as part of standard procedures after a crisis event. Lessons learned from past emergencies and disasters should be captured to feed into future improvements in safety, preparedness, supporting policies, standards and training.

III MECHANISMS FOR IMPLEMENTATION

GUIDING PRINCIPLES FOR IMPLEMENTATION OF THE SAFE HOSPITAL FRAMEWORK IN COUNTRIES

The comprehensive Safe Hospital Framework outlines the suggested areas of focus for countries in implementing a Safe Hospital programme. Countries are recommended to adapt the suggested framework to better suit the context of the country, and to prioritize key activities to make hospitals safer and better prepared for emergencies and disasters.

Some guiding principles when applying the framework are as follows:

- *Strengthen coordination mechanisms to build and move forward with a national Safe Hospital programme.* A national Safe Hospital programme needs inputs from various sectors, including those beyond the health sector. A comprehensive approach would be best guided by a coordination mechanism that brings together all relevant sectors to address all aspects of the Safe Hospitals programme.

- *Build evidence and apply good practices and risk-informed approaches to safe hospitals.* The Safe Hospitals programme should be implemented on the basis of lessons learned from past experience and good practices founded on strong evidence of what works. Lessons, evidence and good practices will be gathered through documentation and research which is an integral part of the programme. Specific approaches will also be shaped by the risks and resources available in the location of implementation.

- *Position safe hospitals as a key component of policies and programmes for disaster risk management at national and local levels.* The role of a hospital goes beyond that of a traditional provider of health-care services. The framework builds on the role of hospitals within the disaster risk management system and positions them as key players with the ability either to lead or to strongly support actions taken to build the overall resilience of a country or locality to emergencies and disasters.

- *Engage key stakeholders, including communities, in Safe Hospital programmes and activities.* Building a safe hospital requires inputs from different sectors and participants – including architects, structural engineers, water and sanitation experts, health professionals and others. Partnerships between different sectors are vital to ensure that hospitals are constructed safely and can function effectively when an emergency occurs – for instance, by ensuring water and power supplies or securing access to hospitals. It is suggested that a dedicated group of stakeholders from relevant sectors (i.e. health officials, public- and private-sector hospital managers, engineers, architects and national disaster risk management entities) build, implement and manage the programme together to ensure an integrated and comprehensive approach

- *Ensure continuous monitoring and evaluation of the Safe Hospital programme based on a set of agreed indicators.* A mechanism for regular monitoring and evaluation of the impact of the programme should be built into the overall approach. Suggested indicators for monitoring are listed in Annex 1.

SUPPORT FROM GLOBAL PARTNERS FOR COUNTRY IMPLEMENTATION

At global level, a working group of key stakeholders will develop and implement activities to support the roll-out of the Safe Hospitals Framework at country level. A workplan will be developed to address key actions to be taken by international partners to support the implementation of the framework in countries. Technical task teams of relevant experts and stakeholders will be responsible for implementing specific elements of the workplan, such as developing technical guidelines, conducting training and providing support to implementation in countries. Support to national activities will be provided through both new and existing partnerships with key stakeholders from national, regional and global levels, with the involvement of all relevant sectors. The overall management of the workplan will lie with the working group. Regular face-to-face meetings or virtual consultations will be held for monitoring, evaluating and reporting on progress made.

Annex 1. Suggested indicators for monitoring a Safe Hospitals programme

PROPOSED TARGETS related to safe hospitals

a. By 2030, all new hospitals and 80% of other new health facilities are built to withstand hazards, in accordance with the safety and building codes of the country.

b. By 2030, 50% of existing hospitals and health-care facilities requiring improved safety are retrofitted, in accordance with the safety and building codes of the country.

c. By 2030, all hospitals and health facilities have emergency response plans for continuing health care in disasters.

INDICATORS

1. Safe hospitals included in national health sector emergency and disaster management programmes.

2. National safer hospitals programme in place.

3. Number of critical hospitals that have been assessed and recommendations made for enhancing safety and emergency preparedness.

4. Number of existing health facilities which have implemented activities to improve:
   - safety of buildings and equipment;
   - emergency and disaster management.

5. Number of new hospitals and other health facilities which have been built to withstand local hazards and have taken measures to improve safety, functionality and emergency preparedness.