

## **Hospital Safety Workshop at IGMC & H, Shimla**

From 23<sup>rd</sup> of November, 2011

At the Conference Hall, Indira Gandhi Medical College and Hospital, Shimla

---

According to the Hyogo Framework for Action 2005-2015 (HFA), the integration of disaster risk reduction planning into the health sector and the promotion of the goal of “hospitals safe from disaster” is very important. This could only be done by ensuring that all hospitals have a level of resilience that they remain functional in disaster situations. The focus is also on better planning and implementation of mitigation measures to reinforce existing health facilities, particularly those providing primary health care.

Keeping the need of promoting a culture of Hospital Safety, the GeoHazards Society, in collaboration with the Himachal Pradesh State Disaster Management Authority (HP SDMA), organized a half-day long workshop on ‘Hospital Safety, Preparedness and Planning’ at the Indira Gandhi Medical College and Hospital, Shimla on 23<sup>rd</sup> of November, 2011. During the workshop, State Project Officer- HP, GoI-UNDP DRR Programme (2009-2012) Shri D. C. Rana encouraged the Administrative officers and Doctors of the IGMC & H to undertake measures for effective Hospital Safety Planning. During the workshop, the key Resource Person for this workshop Shri Hari Kumar from GeoHazards Society, India delivered a presentation covering comprehensive hospital safety planning process.

### **During his presentation, Shri Hari Kumar explained the following points:**

#### **1. What is a Safe Hospital?**

- A safe hospital provides health services efficiently during both normal and critical times after a disaster or an emergency.
- A safe hospital is structurally strong and will not collapse due to hazards, injuring patients and staff.
- A safe hospital is resilient and organized with contingency plans in place and a health workforce trained to keep the network operational in times of crisis.
- A safe hospital can continue to function and provide its services to the community as a critical

#### **2. Hospital Earthquake Risk Mitigation**

- Increase Capacity
  - a) Awareness generation

- b) Training of Administrators, Doctors, Nurses, Paramedics, Engineers, Builders, Contractors, etc.
- Decrease Vulnerability
  - a) Make Future Buildings earthquake-resistant
- Enforce Building standards
  - a) Critical Structures remain functional
  - b) Existing Buildings
  - c) Retrofitting
- Non-structural risk Mitigation

### **3. Objectives of Mainstreaming Hospital Safety**

- Protect the lives of patients and health workers by ensuring the structural resilience of health facilities
- Improve the risk reduction capacity of health workers and institutions
- Ensure health facilities and services continue to function in the aftermath of emergencies

### **4. Structural Risk mitigation in Health Facilities**

- New Constructions
  - a) Planning
  - b) Site Selection
  - c) Design (Codal provisions)
  - d) Construction
- Existing Health facilities
  - a) Inventory
  - b) Prioritisation
  - c) Assessment
  - d) Development of retrofit options

### **5. Health Facilities in Disasters**

- When it comes to disaster mitigation, hospitals need special attention due to the vital functions they perform, their high level of occupancy, and the role they play during a disaster situation.
- But time and again, these facilities fail the communities they were to serve-in the most critical 'golden' hours.

### **6. Demand & Capacity After an Earthquake**

## **7. Examples of Some facilities that failed**

## **8. Structural risk mitigation is important**

- Are earthquake resistant Hospital buildings enough for the facility to remain functional?

## **9. Preventing Collapse is NOT Enough**

- Ensure the safety of the health-supporting systems
- Can lives be saved in this Hospital?

## **10. Non-structural Mitigation**

- The non-structural elements—all those other elements that, without forming part of the structure, but enable the facility to function.
- They include architectural elements, equipment and contents, and services or lifelines.
- In the case of hospitals, 60 to 80 percent of the total cost of the facility may be of non-structural components.

## **11. Different types of potential losses:**

- Loss of Life
- Loss of Function
- Loss of property or money
- Loss of Community Confidence

## **12. Non-structural damage**

- Examples of damage – Contents
- Examples of damage - Utilities

## **13. What can be a hazard?**

- In each department of the hospital, leaders need to ask themselves:
  - a) What can happen here?
  - b) Will it hurt someone?
  - c) Interrupt life support?
  - d) Harm patients' health?
  - e) Cause economic losses?

## **14. Can anything interrupt life support?**

## **15. Ingredients for a Functional Hospital**

- Hospital Functional
- Staff Safe and Prepared
- Medical Equipment Functional
- Utility Systems Functional
- Communications Functional
- Supplies Available
- Buildings Safe
- Staff Safe and Prepared

#### **16. Options for Reducing Non-Structural Risk**

- Relocate
- Protect
  - a) Anchor, brace or restrain against shaking
  - b) Accommodate movement
- Plan for cleanup or breakage

#### **17. Plan for Cleanup or Breakage**

- Relocation or restraint may not be practical or possible for items such as
  - a) Medical records
  - b) Some mobile equipment
  - c) Some items on trolleys
  - d) Pharmacy
- Objects Belong to Systems
  - a) Electrical Cabinet
  - b) Emergency Generator
  - c) Diesel Tank and Fuel Lines
  - d) Conduit for Wires
  - e) Batteries

#### **18. Best Long term strategy**

- New construction:
  - Do it right the first time
- Remodel:
  - Take care of problems when you have the chance

#### **19. Questions to be asked by Health Facility administrators**

- Is there an Earthquake Hazard where we are?

- Are our Hospital Buildings Safe?
- What can be done to reduce earthquake Risk in existing Hospital buildings?
- Do we need retrofitting? What performance?
- How do we increase our capacity for effectively responding to emergencies involving mass casualties?
- How safe are our equipments?

## 20. What do hospital administrators have to lose?

- Death and Injury
- Destruction of the building and all contents
- Disruption of all key services
- Community confidence
- Sleep

### Photographs taken during the workshop



## List of Participants

Sr No	Name	Designation	Address	Contact No.	email address
1	Dr. Ramesh Kumar	Associate Prof.	Psychotherapy	94181-89949	<a href="mailto:t2ramesh@yahoo.com">t2ramesh@yahoo.com</a>
2	Dr. Rajiv Raina	Associate Prof.	Medicine	94184-52815	<a href="mailto:rajibranaigmc@gmail.com">rajibranaigmc@gmail.com</a>
3	Dr. Rajeev	Prof. Head	Radiotherapy	94184-86567	<a href="mailto:rajeevsesm@yahoo.com">rajeevsesm@yahoo.com</a>
4	Dr. Surinder Singh	Prof. Head	Anesthesia	94180-77565	<a href="mailto:ss.igmc@yahoo.com">ss.igmc@yahoo.com</a>
5	Dr. Ajay Sood	Professor	Anesthesia	9180-28130	<a href="mailto:ajay_5644@yahoo.com">ajay_5644@yahoo.com</a>
6	Dr. Anil Ohri	Professor	Anesthesia	92185-99919	<a href="mailto:anilohri2025@yahoo.com">anilohri2025@yahoo.com</a>
7	DC Rana	State Project Officer	SDMA Shimla	94181-84700	<a href="mailto:dcrana04@yahoo.co.in">dcrana04@yahoo.co.in</a>
8	Dr. Anil Malhotra	Prof. of Surgery	Surgery IGMC	94180-23184	<a href="mailto:anilmalhotra_igmc@rediffmail.com">anilmalhotra_igmc@rediffmail.com</a>
9	Dr. KS Rana	Sr. Medical Spdt.	IGMC Shimla	94181-58984	<a href="mailto:ksigmc@gamil.com">ksigmc@gamil.com</a>
10	Dr. K.S Kaushal	Principal, IGMC		94180-25148	<a href="mailto:dvsskaushal@rediffmail.com">dvsskaushal@rediffmail.com</a>
11	Roop Kaushal	Adm. Officer	IGMC Shimla	98166-03026	
12	B.R Vyas	Asstt. Controller	IGMC Shimla	94184-80962	
13	Devinder Pal	Section Officer	IGMC Shimla	94181-10647	
14	Er Deepak Raj Chauhan	Assistant Engineer	HPPWD	94180-50100	
15	Surinder Bramta	Physical Instructor	IGMC Shimla	94180-76647	
16	Ambika Sharma	Add. Assistant	PWD(Elec)	94180-36026	<a href="mailto:ambika.sharma13100@gmail.com">ambika.sharma13100@gmail.com</a>
17	Surjeet S. Mehta	Junior Engineer	HPPWD	94184-56499	<a href="mailto:surjeet.mehta@yahoo.com">surjeet.mehta@yahoo.com</a>
18	Er Kulbushan Singh	A.E(Elec)	HPPWD	94184-24250	<a href="mailto:kul_aries@yahoo.com">kul_aries@yahoo.com</a>
19	S.L Gupta	Assitant Maloria Officer	IGMC Shimla	93188-09307	
20	Dr. Reena Thakur	Hospital Adminstrator	IGMC Shimla	94184-61976	<a href="mailto:reenathakur76@yahoo.co.in">reenathakur76@yahoo.co.in</a>

21	Dr. Sanjeev Asotra	Asstt. Prof	Cardiology	94180-80804	<a href="mailto:dr.sanjeev00@gmail.com">dr.sanjeev00@gmail.com</a>
22	Dr. Lalit Chandrakant	DYMC	IGMC Shimla	94180-04300	<a href="mailto:lalit_kant@hotmail.com">lalit_kant@hotmail.com</a>
23	Dr. R.S Negi	Asstt. Prof		94180-90548	<a href="mailto:drrsnegi13@gmail.com">drrsnegi13@gmail.com</a>
24	Bhawani Negi	Correspondent	Hindustan Times	94181-41114	<a href="mailto:bhawaninegi@gmail.com">bhawaninegi@gmail.com</a>
25	Dr. R.S Minhas	Asstt. Prof	IGMC Shimla	94182-33512	<a href="mailto:drraviminhas@yahoo.com">drraviminhas@yahoo.com</a>