Training manual on climate informed hospital emergency preparedness and response plan

July 2023

World Health Organization
Bangladesh

Preface

In 2011, the Directorate General of Health Services (DGHS) developed a Hospital Emergency Preparedness and Response Plan to provide guidance to hospital managers and staff on how to respond to crises effectively. However, a decade later, the Institute of Epidemiology Disease Control and Research (IEDCR) updated the plan in 2022 to address contemporary challenges and needs, including the impact of climate change. The updated plan aims to ensure the continuity of essential services, coordinated hospital operations, clear communication, adaptation to increased demands, efficient use of scarce resources, and a safe environment for healthcare workers. However, during the updating of the plan, it was discovered that hospital managers were not aware of the plan, and most hospitals did not have their emergency management plans. Furthermore, the 2011 plan was not well-communicated and disseminated to hospital managers.

The lack of awareness among hospital managers and the absence of emergency management plans hinders the successful implementation of the plan. In the coming years, the climate condition will worsen and thus pressure will be increased on the public health system. To reduce the pressure, increased knowledge is needed along with improved management capacity. For that reason, the understanding, knowledge, and competency of Bangladeshi health professionals and workers need to be increased. Therefore, there is a need to orient and disseminate the newly updated Climate Informed Hospital Emergency Preparedness and Response Plan to hospital managers and staff.

Taking into consideration Bangladesh Center for Communication Programs (BCCP) has been awarded a project by the World Health Organization (WHO) for development of training manual and conduction of training courses on climate informed hospital emergency preparedness and response plan for the health care staff from eight divisions.

Accordingly training manuals have been developed through a workshop with WHO, IEDCR and concern professional of DGHS and others stakeholder. Objective of the manual is to enhance the knowledge and awareness of the updated climate informed hospital emergency preparedness and response plan among healthcare officials, hospital managers, and staff, enable the implementation of the plan, and promote a more coordinated and effective response to crises in the healthcare sector.

The manual has been developed using various participatory training methodologies including Review Discussion and Sharing (RDS). In this training manual emphasis is also given to reduce the barriers caused due to discrimination and gender bias. Throughout the manual gender-neutral terminology has been used to make the manual gender sensitive.

We hope that this training manual will help to enhance the capacity of health professionals of DGHS on climate informed hospital emergency preparedness and response plan so that they enable the implementation of the plan and promote a more coordinated and effective response to crises in the healthcare sector.

Sessions of Training Manual on Climate Informed Hospital Emergency Preparedness and Response Plan

Session- 01: Introduction to climate informed hospital emergency preparedness and response plan

Topic 01: Importance of hospital emergency preparedness and response plan
Topic 02: Goals, objectives, and principles of hospital emergency response plan

Session- 02: Vulnerability Analysis of Local Health Care Facilities

Topic 01: Risk and Hazards
Topic 02: Scoring criteria of probability and impact of hazards
Topic 03: Vulnerability analysis tools

Session- 03: Practice session on Vulnerability Analysis of Local Health Care Facilities

Session- 04: Command and Control of the hospital and emergency response plan

Topic 01: Nine component of hospital and emergency response plan
Topic 02: Actions of the command
Topic 02: Tools of the command
Topic 03: Practice session

Session- 05: Communication of the hospital and emergency response plan

Topic 01: Actions of the communication
Topic 02: Tools of the communication
Topic 03: Practice session

Session- 06: Safety and Security of the hospital and emergency response plan

Topic 01: Actions of the safety and security
Topic 02: Tools of the safety and security
Topic 03: Practice session

Session- 07: Triage of the hospital and emergency response plan

Topic 01: Actions of triage
Topic 02: Tools of triage
Topic 03: Practice session

Session- 08: Surge capacity of the hospital and emergency response plan

        Topic 01: Actions of Surge Capacity
        Topic 02: Tools of Surge Capacity
        Topic 03: Practice session

Session- 09: Continuity of essential services of the hospital and emergency response plan

        Topic 01: Actions of continuity of essential services
        Topic 02: Tools of continuity of essential services
        Topic 03: Practice session

Session- 10: Human resources of the hospital and emergency response plan

        Topic 01: Actions of human resources
        Topic 02: Tools of human resources
        Topic 03: Practice session

Session- 11: Logistics and supply management of the hospital and emergency response plan

        Topic 01: Actions of logistics and supply management
        Topic 02: Tools of logistics and supply management
        Topic 03: Practice session

Session- 12: Post disaster recovery of the hospital and emergency response plan

        Topic 01: Actions of post disaster recovery
        Topic 02: Tools of post disaster recovery
        Topic 03: Practice session

Acronyms & abbreviations

BCCP	Bangladesh Center for Communication Programs
BMD	Bangladesh Meteorological Department
BBS	Bangladesh Bureau of Statistics
CC	Climate Change
CCHPU	Climate Change and Health Promotion Unit
CSD	Climate Sensitive Disease
DGHS	Directorate General of Health Services
DGFP	Directorate General of Family Planning
FGD	Focus Group Discussion
FFWC	Flood Forecasting and Warning Centre
GED	General Economics Division
GoB	Government of Bangladesh
GBM	Ganges Brahmaputra Meghna
GEF	Global Environmental Facility
H-NAP	Health National Adaptation Plan
HPSNSP	Health Nutrition and Population Sector Program
icddr,b	International Centre for Diarrheal disease Research, Bangladesh
IPCC	Intergovernmental Panel on Climate Change
IUCN	The International Union for Conservation of Nature
LGIs	Local Government Institutes
MS	Microsoft
MSW	Multi Stakeholder Workshop
MOEF	Ministry of Environment and Forest
MoHFW	Ministry of Health and Family Welfare
NAP	National Adaptation Plan
NAPA	National Adaptation Plan for Action

NDC	Nationally Determined Contribution
NGOs	Non-governmental organizations
PRA	Participatory Rural Appraisal
PIP	Project Implementation Plan
PHE	Public Health and Environment
SDG	Sustainable Development Goal
SLR	Sea Level Rise
SIP	Strategic Implementation Plan
SWL	Specific Warming Level
SWAp	Sector-Wide Approach
UNISDR	United Nations International Strategy for Disaster Reduction
UNDP	United Nations Development Programme
V&A	Vulnerability and Adaptation
VAA	Vulnerability and Adaptation Assessment
WASH	Water, sanitation and hygiene
WHO	World Health Organization

TRAINING OF TAINER'S (TOT) ON CLIIMATE RESPONSE HOSPITAL EMERGENCY PREPAREDNESS AND RESPONSE PLAN

Tentative Schedule

DAY		DAY-1	DAY-2	DAY-3
08:30 AM - 09:00 AM			R E F L E C T I O N S	
09:00 AM - 09:30 AM 09:30 AM- 10:30 AM		OPENING OF THE TOT PRE-TEST EXPECTATION OBJECTIVE OF THE WORKSHOP	CASE STUDY/WORKSHEET	CONTINUITY OF ESSTIONAL SERVICES OF THE HOSPITAL AND RESPONSE PLAN PRACTICE SESSION
10:30 AM - 11:00 AM			T E A B R E A K	
11:00 AM - 12:00 AM		INTRODUCTION TO CLIMATE INFORMED EMERGENCY HOSPITAL PEPEAREDNESS AND RESONSE PLAN	COMMUNICATION OF THE HOSPITAL AND RESPONSE PLAN PRACTICE SESSION	CONTINUITY OF ESSTIONAL SERVICES OF THE HOSPITAL AND RESPONSE PLAN PRACTICE SESSION
12:00 PM- 01:15 PM-		VULNERABILITY ANALYSIS OF LOCAL HEALTH CARE FACILITIES	SAFTEY AND SECURITY OF THE HOSPITAL AND RESPONSE PLAN PRACTICE SESSION	HUMAN RESOURSES OF THE HOSPITAL AND RESPONSE PLAN PRACTICE SESSION
01:15 PM - 02:15 PM		L U N C H A N D P R A Y E R B R E A K		
02:15 PM 03:30 PM		PRACTICE SESSION ON VULNERABILITY ANALYSIS OF LOCAL HEALTH CARE FACILITIES	TRIAGE OF THE HOSPITAL AND RESPONSE PLAN PRACTICE SESSION	LOGISTIC AND SUPPLY MANAGEMNT/ POST DISEASTER OF THE HOSPITAL AND RESPONSE PLAN PRACTICE SESSION
03:30 PM – 03:45 PM		T E A B R E A K		
03:45 PM – 04:30 PM		COMMAND AND COTROL OF THE HOSPITAL AND RESPONSE PLAN	SURGE CAPACITY OF THE HOSPITAL AND RESPONSE PLAN PRACTICE SESSION	POST TEST CLOSING OF THE TOT

Session- 01: Introduction to climate informed hospital emergency preparedness and response plan

Time: 1 hour

Objectives:

After completion of the session participants will be able to:

- Explain the concept of climate informed hospital emergency preparedness and response plan , advantages of climate informed hospital emergency preparedness and response plan
- Goals, objectives, and principles of hospital emergency response plan

Steps, Contents, Time, Methods and Materials:

Steps	contents	Time	Methods/techniques	Materials
1.	Concept of climate informed hospital emergency preparedness and response plan	5 m	Brain storming, discussion and Visualized presentation	Flip sheet, marker, VIPP board, multimedia
2.	Advantages of climate informed hospital emergency preparedness and response plan	10 m	Brain storming, discussion and Visualized presentation	Flip sheet, marker, VIPP board, multimedia
3.	Goals, objectives, and principles of hospital emergency response plan	25 m	Brain storming, discussion and Visualized presentation	Flip sheet, marker, VIPP board, multimedia
3.	Sum up	5m	Q & A and discussion	Interaction with the participants

Process:

Welcome
- Greet the participants and invite them to the session to participate.
- Ask the participants to share their ideas/thoughts about climate informed hospital emergency preparedness and response plan.

- Discuss with the participants by sharing the power point presentation on concept of climate informed hospital emergency preparedness and response plan.
- Divide participants into four groups and tell them to sit in four tables and marked the marked the groups like A, B, C and D etc. Distribute VIPP cards to four tables.
- Ask the participants to write down at least 6-8 ideas in VIPP cards about the advantages of climate informed hospital emergency preparedness and response plan give them 5-6 minutes to complete the group work.
- Tell participants to present their group in the plenary session.
- After their presentation discuss with the participants by sharing the power point presentation on advantages of climate informed hospital emergency preparedness and response plan.
- Tell participants to share their ideas/thoughts about goals, objectives, and principles of hospital emergency response plan
- Discuss with the participants by sharing the power point presentation on Goals, objectives, and principles of hospital emergency response plan
- Ask if any question they have and give answer.
- Summarize and conclude the session by giving thanks to the participants for active partcipants.

Note for Facilitator

Concept of climate response hospital emergency preparedness and response plan:

Hospitals play a critical role in health care infrastructure. Hospitals have a primary responsibility of providing treatment to preventing disease, saving lives; they also provide 24x7 emergency healthcare service and hence it is perceived as a vital resource for diagnosis, treatment, and follow-up for both physical and psychological healthcare. Hospitals have to provide emergency health care even during the disaster.

Concept of climate response hospital emergency preparedness and response plan:

Disaster for a hospital is "a temporary lack of resources which is caused due to sudden influx of unexpected patient load". To find out the constituents of a disaster or potential incident, the hospital needs to identify its normal capacity to understand its strength and could look for the additional resources which need to be included in disaster plan.

Advantages of climate response hospital emergency preparedness and response plan:

Hospital's emergency preparedness and response plan provides the opportunity to plan, prepare and enable a rational response during disasters/ mass casualty incidents (MCI). Disasters and mass casualties can overwhelm the hospitals resources, staff, space and or supplies. Lack of any tangible plan can cause a situation of no command, many leaders, and no coordinated effort to solve the problem.

Advantages of climate response hospital emergency preparedness and response plan:

Hospital planning in Bangladesh has not focused on preparedness in case of disasters and MCI till now. There is an urgent need to increase the preparedness of hospitals in mass casualties. The hospitals must expand their focus to include both internal hospitals planning as well as regional plan for disasters and mass casualties. WHO Bangladesh 1st introduced climate informed hospital emergency preparedness and response plan in 2011 which updated in 2022.

Goal

The aim of a climate informed hospital emergency preparedness and response plan is to provide prompt and effective medical care to the maximum possible, to minimize morbidity and mortality resulting from disaster.

Goal

In case of MCI away from the hospital, which is not affecting the hospital, the further goal of the plan is to control a large number of patients and manage the resulting problems in an organized manner by:
- enhancing the capacities of admission and treatment.
- treating the patients based on the rules of individual management, despite there being a greater number of patients.

- ensuring proper ongoing treatment for all patients who were already present in the hospital.
- smooth handling of all additional tasks caused by such an incident.

providing medications, medical consultation, infusions, dressing material and any other necessary medical equipment.

Goal:

In case of incidents affecting the hospital itself the further goals of the plan would be: To protect life, environment, and property inside the hospital from any further damage by
- putting into effect, the preparedness measures.
- appropriate actions of the staff who must know their tasks in such a situation.
- soliciting help from outside in an optimal way.
- re-establishing as quickly as possible an orderly situation in the hospital, enabling a return to normal working conditions.

Objectives:

The main objective of a climate informed hospital emergency preparedness and response plan is to prepare institutional staff and resources for effective performance in different emergency situations. The climate informed hospital emergency preparedness and response plans not only address the mass casualties which may result from MCI that has occurred away from the hospital but also addresses the situation where the hospital itself has been affected by a disaster – fire, explosion, flooding or earthquake.

Principles:

The major principles (characteristics) of a hospital emergency preparedness Plan are presented as follows:
- Predictable: The plan should have a predictable chain of management.
- Simple: The plan should be simple and operationally feasible.
- Flexible: The plan should be executable for various forms and dimensions of different disasters (Plan should have organizational charts).

- Concise: The plan should specify various roles, responsibilities, work relationships of administrative and technical groups (Clear definition of authority) .
- Comprehensive: It must be comprehensive enough to look at the network of various other health care facilities along with formulation of an inter-hospital transfer policy in the event of a disaster (Compatible with various hospitals) .

Principles:
- Adaptable: Although the disaster plan is intended to provide standard procedures which may be followed with little thought, it is not complete if there is no space for adaptability.
- Anticipatory: All hospital plans need to be made considering the worst-case scenarios.
- Part of a Regional Health Plan in Disasters: A hospital cannot be a lone entity making its plans in isolation. The hospital plans must be integrated with the regional plan for proper implementation.

Session- 02: Vulnerability Analysis of Loal Health Care facilities

Time: 1 hour

Objectives:

After completion of the session participants will be able to:

- Explain the risks and hazards. Different types of hazards.
- Explain scoring criteria of probability and impact of hazards
- Explain and practice vulnerability analysis tools

Steps, Contents, Time, Methods and Materials:

Steps	contents	Time	Methods/techniques	Materials
1.	What is Risks and Hazards	10 m	Brain storming, discussion and Visualized presentation	Flip sheet, marker, VIPP board, multimedia
2.	Different types of hazards	5 m	Brain storming, discussion and Visualized presentation	Flip sheet, marker, VIPP board, multimedia
3.	Scoring criteria of probability and impact of hazards	15 m	Brain storming, discussion and Visualized presentation	Flip sheet, marker, VIPP board, multimedia
4.	Explain and practice vulnerability analysis tools	10 m	Brain storming, discussion and Visualized presentation	vulnerability analysis tools flip sheet, marker,
5.	Sum up	5m	Q & A and discussion	Interaction with the participants

Process:

- Greet the participants and invite them to the session to participate.
- Ask the participants to share their ideas/thoughts about risk and hazards.
- Discuss with the participants by sharing the power point presentation on risk and hazards
- Discuss with participants about different types of hazards
- Discuss with the participants about scoring criteria of probability and impact of hazards by showing PowerPoint presentation
- Explain vulnerability analysis tools with the participants
- Ask if any question they have and give answer.
- Summarize and conclude the session by giving thanks to the participants for active participants.

Note for Facilitator

Risk and a Hazards

There is a difference between a risk and a hazard. A hazard is anything that has the potential to do harm to property, the environment, and/or people. Risk is the probability of that hazard occurring. The hospitals must be aware of and consider both as they develop the plan.

Some examples of different types of hazards are:

- Natural, man-made, or technological disasters (e.g., snowstorms, drought, cyclone, flood, riverbank erosion, fire, terrorism, a blackout etc.)
- Accidental and intentional events (e.g., a burst pipe, an active shooter)
- Internal and external events (e.g., a fire or flood)
- Controllable events and those beyond an organization's control (e.g., undiagnosed persons, a flu pandemic)
- Events with warning and those without (e.g., hurricanes vs. most earthquakes).

Considerable points for hazard assessment or vulnerability analysis.

The local health department will consider these risks and will conduct a local hazard assessment or vulnerability analysis. Although each hospital may need to make small adjustments to its assessment based on the geographic, social and natural characteristics of the area and experience.

The following table will help the hospital authorities local hazard assessment.

A simple tool is presented (Table 1) for the calculation of a healthcare center's vulnerability, where one needs to enter the probability score and the overall impact score to get the total score for any hazard. A list of hazards in each category that are of concern is provided; one may want to add one or more hazards, or describe one of the hazards in more detail, because of the local concerns. The higher the total point, the greater the overall impact of the event on the community.

Probability is the frequency at which the hazardous event occurs. The scoring criteria for probability is as below:

- 5 points: Happens annually.
- 4 points: Has happened within the past 2–5 years.
- 3 points: Has happened within the past 5–10 years.
- 2 points: Has happened over 10 years ago.
- 1 point: Has never happened before.

Overall Impact on Hospital is the impact that the hazard has caused (or could cause) in the way of physical damage to the center, staffing shortages, interruption of patient services, and/or supply disruption. The scoring criteria are:

- 5 points: Severe impact on center (has caused center to close)
- 4 points: Significant impact on center
- 3 points: Moderate impact on center
- 2 points: Minimal impact on center
- 1 point: No impact on center

Maximum & minimum total score

The maximum total score will be 25 and the minimum score will be 1. After putting a score for both probability and overall impact, the total score can be found by multiplying those.

Comparing the total score of all the identified hazards, the highest risk for a hospital in an area could be known. An example is shown in Table 1.

Table 1: Risk analysis for hazards

Hazards	Probability	Overall Impact	Total Score (Probability x Overall Impact)
Natural Hazards			
Flood	5	3	15
Earthquake	1	1	1
Cyclone	3	5	15
Industrial Hazards			
Fire	2	5	10
Blackout	3	3	9

Tables shows the likelihood of a flood occurring is greater than a tornado. Although the impact of the tornado on the health care center would be high, it is advisable to spend more time or energy preparing for an event that happens annually, as compared to one that happens less frequently. The authority should be certain to include in the plan contingencies for any hazard that scores higher. This is not to say that those hazards that have low points should not be planned for but rather that greater emphasis should be placed on the more frequently occurring, higher impact hazards.

Session- 03 : Practice session on vulnerability analysis of Loal Health Care facilities

Time: 30 m

Objectives:

After completion of the session participants will be able to:

- Analyzed respective local health care facilities using the vulnerability analysis tools

Process:

- Greet the participants and invite them to the practice session on vulnerability analysis of their local health care facilities.
- Distribute to all participants the vulnerability analysis tools and tell them to filled in the vulnerability. Keep in mind partcipants respective workplace Upazila, district and geographical location and hazards usually occur in there arears.
- Compare the total score of all the identified hazards, the highest risk for a hospital in an area could be known.
- Tell participants to present their filled in vulnerability tools.
- Ask if any question they have and give answer.
- Summarize and conclude the session by giving thanks to the participants for active participants.

Vulnerability Analysis Tools

Hazards	Probability	Overall Impact	Total Score (Probability x Overall Impact)
Natural Hazards			
Industrial Hazards			
Human-made-hazards			
Others			

Session- 04: Command and Control of the hospital and emergency response plan

Time: 1 hour

Objectives:

After completion of the session participants will be able to:

- Explain the nine components of hospital and emergency response plan
- Importance of command and control of hospital and emergency response plan
- Explain actions of the command and control of hospital and emergency response plan
- Explain and practice on tools of the command and control of hospital and emergency response plan.

Steps, Contents, Time, Methods and Materials:

Steps	contents	Time	Methods/techniques	Materials
1.	9 components of hospital and	10 m	Brain storming, discussion and visualized presentation	Flip sheet, marker, VIPP board, multimedia

	emergency response plan			
2.	Importance of command and control	5 m	Brain storming, discussion and visualized presentation	Flip sheet, marker, VIPP board, multimedia
3.	Actions of the command and control	20 m	Brain storming, discussion and Visualized presentation	Flip sheet, marker, VIPP board, multimedia
4.	Explain and practice on tools of the command and control	20 m	Brain storming, discussion and Visualized presentation	vulnerability analysis tools flip sheet, marker,
5.	Sum up	5m	Q & A and discussion	Interaction with the participants

Process:

- Greet the participants and invite them to the session to participate.
- Ask the participants to share their ideas/thoughts about risk and hazards.
- Discuss with the participants by sharing the power point presentation on risk and hazards
- Discuss with participants about different types of hazards
- Discuss with the participants about scoring criteria of probability and impact of hazards by showing PowerPoint presentation
- Explain vulnerability analysis tools with the participants
- Ask if any question they have and give answer.
- Summarize and conclude the session by giving thanks to the participants for active participants.

Note for Facilitator

Components of the hospital and emergency response plan

The plan is structured according to nine key components, each with a list of priority actions.

These nine components are:

1. Command and Control
2. Communication
3. Safety and Security
4. Triage
5. Surge Capacity
6. Continuity of Essential Services

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7. Human Resources
8. Logistics and Supply Management
9. Post Disaster Recovery

Hospitals experiencing an excessive demand for healthcare services due to a critical event are strongly encouraged to be prepared to implement each action effectively and as soon as it is required.

Command and Control

Command and control are the 1st component of the hospital and emergency response plan

A well-functioning command and control system is essential for effective hospital emergency management operations. Some actions are recommended to establish a proper command and control system in the place.

Action-1:

Activate as quickly as possible the hospital incident command group (ICG) or establish an ad hoc ICG, i.e., a supervisory body responsible for directing the hospital-based emergency management operations
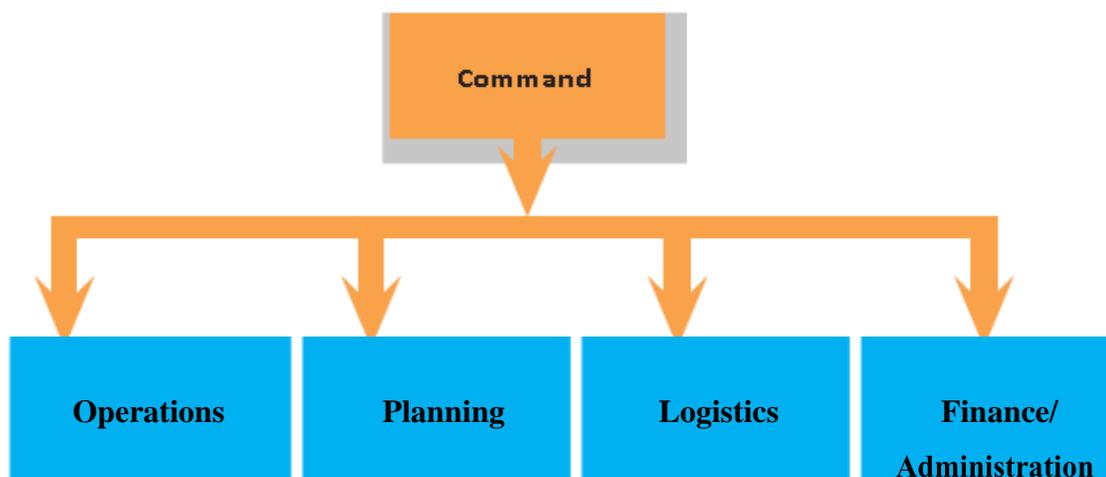
Organizational structure of incident command system (ICS)

An ICG is required for the effective development and management of hospital-based emergency response systems and procedures. The ICS will take overall operational leadership and will deliver response and mitigation plans, coordinate logistic supply, oversight for all aspects of crisis management, coordinate the overall response, approve all actions and serves as the final authority of all activities and decisions made during emergency response operations. To implement the incident command system (ICS), an incident command group (ICG) will have to be formed, with representatives from all hospital services.

Functional roles of Incident Command Group

1. Incident Commander
2. Public Information Officer (PIO)
3. Liaison Officer
4. Safety Officer
5. Medical Technical Specialist
6. General Staff
7. Operations Officer
8. Planning Officer
9. Demobilization Unit In-charge
10. Logistics Officer
11. Service Unit In-Charge:
12. Support Branch In-Charge:
13. Finance and Administration Office

Action-2:

Designate a hospital command Centre, i.e., a specific location prepared to convene and coordinate hospital-wide emergency response activities and equipped with effective means of communication.

Action-3:

For each of the nine key components for hospital emergency response plan designate an individual (focal point) to ensure the appropriate management and coordination of related response activities. The table below shows a format that could be used in this regard and should be disseminated among the ICG members as well as all concerned hospital staff.

Table Heading: Serial No.	Designation	Name of the individual
1	Command and control	Director/UH&FWO/RMO
2	Communication	Media wing
3	Safety and security	Security In charge
4	Triage	In-charge Nurse
5	Surge capacity	Facilities manager
6	Continuity of essential services	Director/UH&FWO/RMO
7	Human resources	Head of admin

8	Logistics and supply management	Supply chain manager
9	Post-disaster recovery	Emergency management team

Action-4:

Designate prospective replacements for directors and focal points to guarantee continuity of the command-and-control structure and function.

ICG position	Hospital position	Remarks
Incident Commander	Director/UH&FWO/RMO	Primary
	Deputy Director/RMO	Alternative
		Weekends, Holidays and Off hours
Public Information Officer		Primary
		Alternative
		Weekends, Holidays and Off hours
Security Officer		Primary
		Alternative
		Weekends, Holidays and Off hours
Liaison Officer		Primary
		Alternative
		Weekends, Holidays and Off hours

Clinical Management Supervisor		Primary
		Alternative
		Weekends, Holidays and Off hours
Logistics Officer		Primary
		Deputy Chief/Alternative
		Weekends, Holidays and Off hours
Finance and Admin Officer		Primary
		Deputy Chief/Alternative

Action-5:

Consult core internal and external documents (e.g., publications of the national health authority and WHO) related to hospital emergency management to ensure application of the basic principles and accepted strategies related to planning and implementing a hospital incident action plan).

Action-6:

Implement or develop job action sheets that briefly list the essential qualifications, duties and resources required of ICG members, hospital managers and staff for emergency-response activities.

Action-7:

Ensure that all ICG members have been adequately trained on the structure and functions of the incident command system (ICS) and that other hospital staff and community networks are aware of their roles within the ICS.
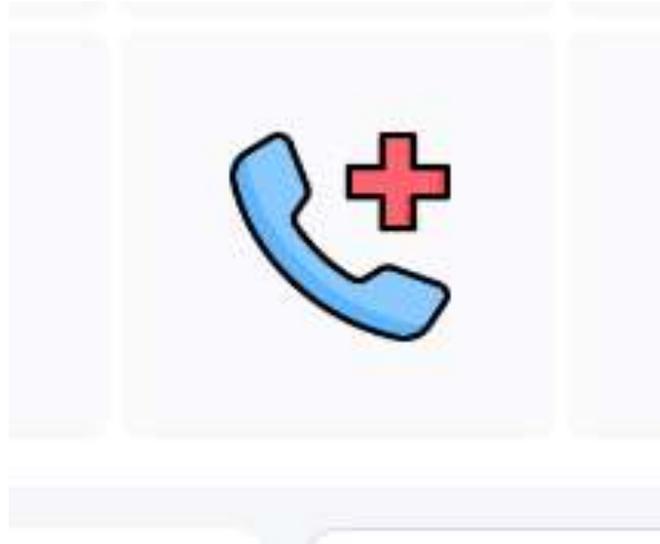
Tool 1: Command and Control

Steps	Actions		Use these cells to write the action's output for practice
Step 1	Designate a hospital command centre, i.e., a specific location prepared to convene and coordinate hospital-wide emergency response activities and equipped with effective means of communication	⇩	

Step 2	Designate an individual (focal point) to ensure the appropriate management and coordination of related response activities.	⇩	

Step 3	Designate prospective replacements for directors and focal points to guarantee continuity of the command-and-control structure and function	⇩	
Step 4	Consult core internal and external documents related to hospital emergency management to ensure application of the basic principles and accepted strategies related to planning and implementing a hospital incident action plan.	⇩	

Step 5	Implement or develop job action sheets	⇩	
Step 6	Ensure that all ICG members have been adequately trained on the structure and functions of the incident command system (ICS) and that other hospital staff and community networks are aware of their roles within the ICS	⇩	

Session- 05: Communications of the hospital and emergency response plan

Time: 1 hour.

Objectives:

After completion of the session participants will be able to:

- Explain the concept and importance of communication of hospital and emergency response plan
- Explain actions of communication of hospital and emergency response plan
- Explain and practice on tools of communication of hospital and emergency response plan.

Steps, Contents, Time, Methods and Materials:

Steps	contents	Time	Methods/techniques	Materials
1.	Concept and importance of communication of hospital and emergency response plan	5 m	Brain storming, discussion and visualized presentation	Flip sheet, marker, VIPP board, multimedia
2.	Actions of communication	15 m	Brain storming, discussion and visualized presentation	Flip sheet, marker, VIPP board, multimedia
3.	Tools of communication	15 m	Brain storming, discussion and Visualized presentation	Flip sheet, marker, VIPP board, multimedia , tools of communication
4.	Practice on tools of communication	20 m	Brain storming, discussion and Visualized presentation	vulnerability analysis tools flip sheet, marker, sheet of tools of communication

5.	Sum up	5m	Q & A and discussion	Interaction with the participants

Process:

- Greet the participants and invite them to the session to participate.
- Ask the participants to share their ideas/thoughts about communication and why it is important
- Discuss with the participants by sharing the power point presentation on communication.
- Discuss and explain with the participants about actions points of communication.
- Discuss and explain with the participants about tools of communication.
- Divide participants into four groups and provide them tools of communication and tell them to write down output against each action's points.
- Invite participants to present their group work in to planery
- Ask if any question they have and give answer.
- Summarize and conclude the session by giving thanks to the participants for active participants.

Note for Facilitator

Communication

Effective communication is another important aspect of emergency management. Shared information should be precise and clear. Multiple means of communication should be planned to communicate with hospital staffs, administrator, patients, and communities. Clear, accurate and timely communication is necessary to ensure informed decision-making, effective collaboration and cooperation, and public awareness and trust.

Communication

Communication with the affected community is especially important during an emergency. Alerts and warnings; directives about evacuation, curfews, and other self-protective measures; and information about response status, family members, available assistance, and other matters affecting response and recovery are all examples of emergency communications.

Communication

Emergency messages that are well-conceived and effectively delivered can help ensure public safety, protect property, facilitate response efforts, elicit cooperation, instill public confidence, and help families reunite.

Communication

Several communication tools are used during emergencies which includes in-person communication, print and broadcast media, the Internet, and social media. Each tool has advantages and disadvantages depending on the communication goal and intended audience.

Communication

The ICS will establish a protocol for providing timely and accurate information to the public during crisis or emergency situations. During an event, the Public Information Officer (PIO) will be assigned to manage:
- Media and public inquiries;
- Emergency public information and warnings;
- Rumor monitoring and response;
- Social Media monitoring;
- Clearing messages with appropriate authorities and disseminating accurate and timely information related to the incident, particularly regarding information on public health, safety and protection, and patient care and management issues.

In the following certain steps are advised to be maintained for effective lines of communication with the public, employees, and the media below.

1. Designate a space for press conferences (outside the immediate proximity of the emergency department, triage/waiting areas, and the command Centre).

2. Draft the brief key messages for target audiences (e.g., patients, staff, public) for the most likely disaster scenarios. For patients whose family members are not at the hospital prior to an emergency, the PIO in conjunction with Social Services will communicate family members as needed.

In the following certain steps are advised to be maintained for effective lines of communication with the public, employees, and the media below.

3. If a hospital can no longer sustain, operations and relocation of patients becomes necessary. The PIO will establish processes to communicate pertinent information to patients and their families – including when patients are relocated to an alternative care site. Consistent with laws and regulations surrounding confidentiality of patient information, families may be apprised of the following:
   1. Verification that the patient is at the organization.
   2. The general condition of the patient
   3. If the patient is going to be moved to an alternate care site, then his/her name, address, and specific care area of that site, as well as the anticipated timeframe for relocation must be recorded.

In the following certain steps are advised to be maintained for effective lines of communication with the public, employees, and the media below.

4. Ensure that all communications to the public, media, staff (in general) and health authorities are approved by the incident commander or ICG. The main responsibility in talking to the media and conducting press briefing / interview will be with the IC unless this responsibility is delegated to the Public Information Officer (PIO).
5. Establish streamlined mechanisms of information exchange between hospital administration, department/unit heads and facility staff Modern communication methods (e.g., WhatsApp, messenger) can be used for this purpose.

In the following certain steps are advised to be maintained for effective lines of communication with the public, employees, and the media below.

6. Brief hospital staff on their roles and responsibilities within the incident action plan. The IC or PIO will be responsible for briefing all hospital staff on their roles in accordance with the Incident Command Group and job action sheet provided in the annex section.
7. Establish mechanisms for the appropriate and timely collection, processing and reporting of information to supervisory stakeholders (e.g., the government, health authorities), and through them to neighboring hospitals, private practitioners and prehospital networks (). A representative from the hospital should be appointed to act as an in-person Liaison of ICS. This person would be responsible for facilitating timely communication between the respective Command Centers.

In the following certain steps are advised to be maintained for effective lines of communication with the public, employees, and the media below.

8. Ensure that all decisions related to patient prioritization (e.g., adapted admission and discharge criteria, triage methods, infection prevention and control measures) are communicated to all relevant staff and stakeholders.
9. Ensure the availability of reliable and sustainable primary and back-up communication systems (e.g., satellite phones, mobile devices, landlines, Internet connections, pagers, two-way radios, unlisted numbers), as well as access to an updated contact list.

10. Incident Commander has to ensure that the hospital has several methods of internal and external communication. It is the responsibility of the Incident Commander to confirm that multiple means of communication are utilized appropriately and when needed.

In the following certain steps are advised to be maintained for effective lines of communication with the public, employees, and the media below.

Through various activities, the facility participates in advance preparation to support communications during an emergency. These include:

- Maintenance of communication equipment
- Practice with alternate communications during drill exercises
- Receiving communications 24/7

Tool 2: Communication:

Clear, accurate and timely communication is necessary to ensure informed decision-making, effective collaboration and cooperation, and public awareness and trust. Steps are as bellow:

Steps	Actions		Use these cells to write the action's output for practice
Step 1	Appoint a spokesperson to coordinate hospital communication with the public, the media and health authorities.	⇩	
Step 2	Designate a space for press conferences (better if it is near to the immediate proximity of the emergency department, triage/waiting areas and the command centre).	⇩	
Step 3	Brief and simple key massages for target audiences (e.g., patients, staff, public) in preparation for the most likely disaster scenarios	⇩	

Step 4	Ensure that all communications to the public, media, staff (in general) and health authorities are approved by the incident commander or ICG.	⇩	
Step 5	Establish streamlined mechanisms of information exchange between hospital administration, department/unit heads and facility staff	⇩	

Step 6	Brief hospital staff on their roles and responsibilities within the incident action plan	⇩	
Step 7	Ensure that all decisions related to patient prioritization (e.g., adapted admission and discharge criteria, triage methods, infection prevention and control measures) are communicated to all relevant staff and stakeholders	⇩	
Step 8	Ensure the availability of reliable and sustainable primary and back-up communication systems (e.g., satellite phones, mobile devices, landlines, Internet connections, pagers, two-way radios, unlisted numbers).	⇩	

Session- 06: Safety and Security of the hospital and emergency response plan

Time: 1 hr.

Objectives:

After completion of the session participants will be able to:

- Explain the concept and importance of safety and security of hospital and emergency response plan
- Explain actions of safety and security of hospital and emergency response plan
- Explain and practice on tools of safety and security of hospital and emergency response plan.

Steps, Contents, Time, Methods and Materials:

Steps	contents	Time	Methods/techniques	Materials
1.	Concept and importance of safety and security of hospital and emergency response plan	5 m	Brain storming, discussion and visualized presentation	Flip sheet, marker, VIPP board, multimedia
2.	Actions of safety and security	15 m	Brain storming, discussion and visualized presentation	Flip sheet, marker, VIPP board, multimedia
3.	Tools of safety and security	15 m	Brain storming, discussion and Visualized presentation	Flip sheet, marker, VIPP board, multimedia
4.	Practice on tools of safety and security	20 m	Brain storming, discussion and Visualized presentation	vulnerability analysis tools flip sheet, marker,

5.	Sum up	5m	Q & A and discussion	Interaction with the participants

Process:

- Greet the participants and invite them to the session to participate.
- Ask the participants to share their ideas/thoughts about safety and security and why it is important
- Discuss with the participants by sharing the power point presentation on safety and security.
- Discuss and explain with the participants about actions points of safety and security.
- Discuss and explain with the participants about tools of safety and security.
- Divide participants into four groups and provide them tools of safety and security and tell them to write down output against each action's points.
- Invite participants to present their group work in to planery
- Ask if any question they have and give answer.
- Summarize and conclude the session by giving thanks to the participants for active participants.

Note for Facilitator

Safety and security

During the emergency response and recovery phases, safety and security measures, as well as monitoring activities, are critical. The health-care system is dedicated to providing a safe and secure environment for patients, staff, and visitors. The hospital's security measures protect patients, staff, and visitors from inappropriate behavior such as violence and aggression. Well-developed safety and security procedures are essential for operating the hospital functions and incident response during a disaster.

Consider taking the following action as part of safety and security.

1. Appoint a hospital security team responsible for all hospital safety and security activities.
✓ When ICG is activated, safety and security measures, as well as monitoring activities, play a critical role in the emergency response and recovery phases.
✓ Designated Safety and Security Officers keep an eye on different events during emergency drills and when emergency measures are put in place.
2. Prioritize security needs in collaboration with the hospital ICG. Identify areas where increased vulnerability is anticipated (e.g., entry/exits, food/water access points, pharmaceutical stockpiles).

✓ When the ICS is activated, Security Officers on duty will be responsible for locking all exits and entrances except the Emergency Department entrances. All hospital healthcare workers must always wear ID badges.

Consider taking the following action as part of safety and security.

3. Ensure the early control of facility access point(s), triage site(s) and other areas of patient flow, traffic and parking. Limit visitor access as appropriate. During emergency conditions, it becomes necessary to control the movement of visitors to facilitate a safe and controlled environment during emergencies.
4. Movement within the hospital will be controlled by security through security checkpoints, control of elevators, and control of doors. Health care facilities that do not perform essential functions may be redirected.

Consider taking the following action as part of safety and security.

5. Provide a mechanism for escorting emergency medical personnel and their families to patient care areas.
6. Ensure that security measures required for safe and efficient hospital evacuation are clearly defined.
7. Ensure that the rules for engagement in crowd control are clearly defined.
8. Solicit frequent input from the hospital security team with a view to identifying potential safety and security challenges and constraints, including gaps in the management of hazardous materials and the prevention and control of infection.

Consider taking the following action as part of safety and security.

9. Identify information insecurity risks. Implement procedures to ensure the secure collection, storage and reporting of confidential information. During hospital emergency there is a high possibility of spreading wrong information that can mislead people, hospital staff and patients. So, it is essential to secure the information and provide it to the officer who oversees communication and press briefing.

10. Define the threshold and procedures for integrating local law enforcement and military in-hospital security operations.

Consider taking the following action as part of safety and security.

11. Establish an area for radioactive, biological, and chemical decontamination and isolation. The hospital has set aside a space for radioactive or chemical isolation, as well as radioactive, chemical, and biological decontamination. Healthcare workers should be trained to respond to hazardous material contamination. The Disaster Resource Center, Facilities Department, Security, Safety, and Emergency Management Committee maintains and coordinates the decontamination facilities.

Tool 3: Safety and Security

Well-developed safety and security procedures are essential for the maintenance of hospital functions and for incident response operations during a disaster.

Steps	Actions		Use these cells to write the action's output for practice
Step 1	Appoint a hospital security team responsible for all hospital safety and security services	⇩	

Step 2	Prioritize security needs in collaboration with the hospital ICG. Identify areas where increased vulnerability is anticipated (e.g., entry/exits, food/water access points, pharmaceutical stockpiles).	⇩	
Step 3	Ensure the control of facility access point(s), triage site(s) and other areas of patient flow, traffic and parking. Limit visitor access as appropriate	⇩	

Step 4	Establish a well-accepted mode of identifying hospital personnel, patients and visitors	⇩	
Step 5	Provide a mechanism for escorting emergency medical personnel to patient care areas.	⇩	
Step 6	Ensure that security measures for safe and efficient hospital evacuation are clearly defined	⇩	

Step 7	Ensure that the rules for engagement in crowd control are clearly defined	⇩	
Step 8	Identify potential safety and security challenges and constraints, including gaps in the management of hazardous materials and the prevention and control of infection	⇩	
Step 9	Integrate local law enforcement and military in hospital security operations, if needed	⇩	
Step 10	Establish an area for radioactive, biological and chemical decontamination and isolation	⇩	

Session- 07:   Triage of the hospital and emergency response plan

Time: 1 hr.

Objectives:

After completion of the session participants will be able to:

- Explain the concept and importance of triage of hospital and emergency response plan
- Explain actions of triage of hospital and emergency response plan
- Explain and practice on tools of triage of hospital and emergency response plan.

Steps, Contents, Time, Methods and Materials:

Steps	contents	Time	Methods/techniques	Materials
1.	Concept and importance of triage of hospital and emergency response plan	5 m	Brain storming, discussion and visualized presentation	Flip sheet, marker, VIPP board, multimedia
2.	Actions of triage of	15 m	Brain storming, discussion and visualized presentation	Flip sheet, marker, VIPP board, multimedia
3.	Tools of triage	15 m	Brain storming, discussion and Visualized presentation	Flip sheet, marker, VIPP board, multimedia
4.	Practice on tools of triage	20 m	Brain storming, discussion and Visualized presentation	vulnerability analysis tools flip sheet, marker,
5.	Sum up	5m	Q & A and discussion	Interaction with the participants

Process:

- Greet the participants and invite them to the session to participate.

- Ask the participants to share their ideas/thoughts about triage and why it is important
- Discuss with the participants by sharing the power point presentation on triage.
- Discuss and explain with the participants about actions points of triage.
- Discuss and explain with the participants about tools of triage.
- Divide participants into four groups and provide them tools of triage and tell them to write down output against each action's points.
- Invite participants to present their group work in to planery
- Ask if any question they have and give answer.
- Summarize and conclude the session by giving thanks to the participants for active participants.

Note for Facilitator

Triage

Ideally, the first people who require medical treatment should receive it. In less-than-ideal circumstances, someone must decide who receives care first. Even when there is no disaster or health emergency, some health facilities must make these decisions daily. Natural disasters or other events can, on the other hand, result in a large number of injured or sick people at the same time. When this occurs, decisions must be made about how to best allocate care when resources are insufficient to care for everyone who requires it. This is referred to as triage.
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Triage

Triage's goal is to save as many lives as possible. During a severe pandemic, expect the period when the need for healthcare exceeds the available resources to last weeks or months. Using scarce medical resources to healthcare for patients who may be critically ill but will likely die even with intensive care may result in other less ill patients not receiving care, becoming sicker, and dying.
Triage, when done correctly, results in the best outcome for the greatest number of people. Without a triage plan, resources are likely to be wasted, and more people will die. As a result, ICG must include a triage plan and execute it properly.

Consider taking the following action as part of safety and security.

12. Ensure the early control of facility access point(s), triage site(s) and other areas of patient flow, traffic and parking. Limit visitor access as appropriate. During emergency conditions, it becomes necessary to control the movement of visitors to facilitate a safe and controlled environment during emergencies.
13. Movement within the hospital will be controlled by security through security checkpoints, control of elevators, and control of doors. Health care facilities that do not perform essential functions may be redirected.

Triage

Maintaining patient triage operations, based on a well-functioning mass-casualty triage protocol, is essential for the appropriate organization of patient care. Consider taking the following action.

1. Designate an experienced officer to oversee all triage operations (e.g., a trauma or emergency physician or a well-trained emergency nurse in a supervisory position).
2. Ensure that areas for receiving patients, as well as waiting areas, are effectively covered, secure from potential environmental hazards and provided with adequate workspace, lighting, WASH facilities and access to auxiliary power.

Triage

3. Ensure that the triage area is in close proximity to essential personnel, medical supplies and key care services (e.g., the emergency department, operative suites, the intensive care unit).
4. Ensure that entrance and exit routes to/from the triage area are clearly marked.
5. Identify a contingency site for receipt and triage of mass-casualties.
6. Identify an alternative waiting area for wounded patients able to walk.
7. Establish a mass-casualty triage protocol based on severity of illness/injury, survivability and hospital capacity that follows internationally accepted principles and guidelines.

Triage

8. Establish a clear method of patient triage identification; ensure adequate supply of triage tags
9. Identify a mechanism whereby the hospital emergency response plan can be activated from the emergency department or triage site.
10. Ensure that adapted protocols on hospital admission, discharge, referral, and operative suite access are operational when the disaster plan is activated to facilitate efficient patient processing.

Tool 4: Triage

Maintaining patient triage operations, based on a well-functioning mass-casualty triage protocol, is essential for the appropriate organization of patient care.

Steps	Actions		Use these cells to write the action's output for practice
Step 1	Designate an experienced triage officer to oversee all triage operations	⇩	
Step 2	Ensure that areas for receiving patients, as well as waiting areas, are effectively covered, secure from potential environmental hazards and provided with	⇩	

	adequate workspace, lighting and access to auxiliary power		
Step 3	Ensure that the triage area is in close proximity to essential personnel, medical supplies and key care services	⬇	

Step 4	Ensure that entrance and exit routes to/from the triage area are clearly identified.	⬇	
Step 5	Identify a contingency site for receipt and triage of mass-casualties	⬇	
Step 6	Identify an alternative waiting area for wounded patients able to walk	⬇	

Step 7	Establish a mass-casualty triage protocol based on severity of illness/injury, survivability and hospital capacity	⬇	
Step 8	Establish a clear method of patient triage identification; ensure adequate supply of triage tags	⬇	
Step 10	Ensure that hospital admission, discharge, referral and operative suite access are operational when the disaster plan is activated to facilitate efficient patient processing	⬇	

Session- 08: Surge capacity of the hospital and emergency response plan

Time: 1 hr.

Objectives:

After completion of the session participants will be able to:

- Explain the concept and importance of surge capacity of hospital and emergency response plan
- Explain actions of surge capacity of hospital and emergency response plan
- Explain and practice on tools of surge capacity of hospital and emergency response plan.

Steps, Contents, Time, Methods and Materials:

Steps	contents	Time	Methods/techniques	Materials
1.	Concept and importance of surge capacity	5 m	Brain storming, discussion and visualized presentation	Flip sheet, marker, VIPP board, multimedia
2.	Actions of surge capacity	15 m	Brain storming, discussion and visualized presentation	Flip sheet, marker, VIPP board, multimedia
3.	Tools of surge capacity	15 m	Brain storming, discussion and Visualized presentation	Flip sheet, marker, VIPP board, multimedia
4.	Practice on tools of surge capacity	20 m	Brain storming, discussion and Visualized presentation	vulnerability analysis tools flip sheet, marker,
5.	Sum up	5m	Q & A and discussion	Interaction with the participants

Process:

- Greet the participants and invite them to the session to participate.
- Ask the participants to share their ideas/thoughts about surge capacity and why it is important
- Discuss with the participants by sharing the power point presentation on surge capacity.
- Discuss and explain with the participants about actions points of surge capacity
- Discuss and explain with the participants about tools of surge capacity.
- Divide participants into four groups and provide them tools of surge capacity and tell them to write down output against each action's points.
- Invite participants to present their group work in to planery
- Ask if any question they have and give answer.
- Summarize and conclude the session by giving thanks to the participants for active participants.

Note for Facilitator

Surge capacity

Surge capacity is a critical component of hospital readiness for responding to emergencies and disasters. It is the ability of a health service to expand beyond normal capacity to meet increased demand for clinical care which is an important factor of hospital disaster response and should be addressed early in the planning process.

Surge capacity

In a healthcare facility, during emergency the number of incoming patients usually increases, hence the ability to expand services and increase of beds by the healthcare facility becomes critical. Although temporary increases in capacity can result from the cancellation or postponement of routine patient loads, there must eventually be an expansion of overall facility capacity or the addition of new facilities into the system. This can be accomplished by adding portable facilities.

Surge capacity

When new patients arrive, primary level hospitals may need to increase bed capacity for definitive treatment. Discharging elective cases and stable recovering patients, ceasing non-emergency admissions, and converting waiting/non-patient care areas into makeshift wards are among the suggestions. Consider taking the following action.

1. Calculate maximum capacity required for patient admission and care based not only on a total number of beds required but also on the availability of human and essential resources and the adaptability of facility space for critical care.
2. Estimate the increase in demand for hospital services, using available planning assumptions and tools

Surge capacity

3. Identify methods of expanding hospital inpatient capacity (taking physical space, staff, supplies and processes into consideration).
4. Designate additional healthcare areas for patient overflow (e.g., auditorium, lobby).
5. Increase hospital capacity by outsourcing the care of non-critical patients to appropriate alternative treatment sites (e.g., outpatient departments adapted for inpatient use, home care for low-severity illness, and chronic-care facilities for long-term patients)
6. Verify the availability of vehicles and resources required for patient transportation.

Surge capacity

7. Establish a contingency plan for inter facility patient transfer should traditional methods of transportation become unavailable.
8. Identify potential gaps in the provision of medical care, with emphasis on critical and emergent surgical care. Address these gaps in coordination with the authorities and neighboring and network hospitals.
9. In coordination with the local authorities, identify additional sites that may be converted to patient care units (e.g., convalescent homes, hotels, schools, community centers, gyms
10. Prioritize/cancel nonessential services (e.g., elective surgery) when necessary.

Surge capacity

11. Adapt hospital admission and discharge criteria and prioritize clinical interventions according to available treatment capacity and demand.
12. Designate an area for use as a temporary morgue. Ensure the adequate supply of body bags.
13. Formulate a contingency plan for postmortem care with the appropriate partners (e.g., morticians, medical examiners and pathologists).

Tool 5: Surge Capacity

Steps	Actions		Use these cells to write the action's output for practice
Step 1	Calculate maximal capacity required for patient admission and care focusing human and essential resources and the adaptability of facility space for critical care	⇩	
Step 2	Estimate the increase in demand for hospital services, using available planning assumptions and tools	⇩	
Step 3	Identify methods of expanding hospital inpatient capacity, in case of any need	⇩	

Step 4	Designate care areas for patient overflow	⇩	

Step 5	Increase hospital capacity by outsourcing the care of non-critical patients to appropriate alternative treatment sites	⇩	
Step 6	Verify the availability of vehicles and resources required for patient transportation	⇩	
Step 7	Establish a contingency plan for interfacility patient transfer	⇩	
Step 8	Identify potential gaps in the provision of medical care, with emphasis on critical and emergent surgical care. Address these gaps in coordination with the authorities and neighboring and network hospitals	⇩	

Step 10	In coordination with the local authorities, identify additional sites that may be converted to patient care units	⇩	
Step 11	Prioritize/cancel nonessential services	⇩	
Step 12	Adapt hospital admission and discharge criteria and prioritize clinical interventions according to available treatment capacity and demand	⇩	
Step 13	Designate an area for use as a temporary morgue	⇩	
Step 14	Formulate a contingency plan for postmortem care with the appropriate partners	⇩	

Session- 09:   Continuity of essential services of the hospital and emergency response plan

Time: 1 hr.

Objectives:

After completion of the session participants will be able to:

- Explain the concept and importance of continuity of essential services of hospital and emergency response plan
- Explain actions of continuity of essential services of hospital and emergency response plan
- Explain and practice of tools of continuity of essential services of hospital and emergency response plan.

Steps, Contents, Time, Methods and Materials:

Steps	contents	Time	Methods/techniques	Materials
1.	Concept and importance continuity of essential services	5 m	Brain storming, discussion and visualized presentation	Flip sheet, marker, VIPP board, multimedia
2.	Actions of continuity of essential services	15 m	Brain storming, discussion and visualized presentation	Flip sheet, marker, VIPP board, multimedia
3.	Tools of continuity of essential services	15 m	Brain storming, discussion and Visualized presentation	Flip sheet, marker, VIPP board, multimedia

4.	Practice on tools of continuity of essential services	20 m	Brain storming, discussion and Visualized presentation	vulnerability analysis tools flip sheet, marker,
5.	Sum up	5m	Q & A and discussion	Interaction with the participants

Process:

- Greet the participants and invite them to the session to participate.
- Ask the participants to share their ideas/thoughts about continuity of essential services and why it is important
- Discuss with the participants by sharing the power point presentation on continuity of essential services.
- Discuss and explain with the participants about actions points of continuity of essential services
- Discuss and explain with the participants about tools of continuity of essential services.
- Divide participants into four groups and provide them tools of continuity of essential services and tell them to write down output against each action's points.
- Invite participants to present their group work in to planery
- Ask if any question they have and give answer.
- Summarize and conclude the session by giving thanks to the participants for active participants.

Note for Facilitator

Continuity of essential services

A disaster should not stop essential medical and surgical services (e.g., emergency care, urgent operations, maternal and childcare) that exists under normal circumstances. Rather, the availability of essential services needs to continue in parallel with the activation of a hospital emergency response plan. The determination of services that are considered essential is guided by the burden of disease, local and national priorities.

Continuity of essential services

The existing Essential Service Package of the Ministry of Health and Family Welfare is to be followed. The actions of the packages are as follows. List all hospital services, ranking them in order of priority.

1. Identify and maintain the essential hospital services, i.e., those that need to be always available in any circumstances. Take the Essential Service Package (ESP) into consideration.
2. Identify the resources needed to ensure the continuity of essential services in hospital, for the critically ill patients and other vulnerable groups (e.g., pediatric, elderly and disabled patients)

Continuity of essential services

3. Ensure the existence of a systematic and implementable evacuation plan that seeks to safeguard the continuity of critical care (including, for example, access to mechanical ventilation and life-sustaining medications)
4. Coordinate with the higher health authorities, neighboring hospitals and private practitioners on defining the roles and responsibilities of each member of the local health-care network to ensure the continuous provision of essential medical services throughout the community in disasters.

Continuity of essential services

5. Ensure the availability of appropriate back-up arrangements for essential lifelines, including water, power and oxygen.
6. Anticipate the impact of the most likely disaster events on hospital supplies of food and water. Take action to ensure the availability of adequate supplies.
7. Ensure contingency mechanisms for the collection and disposal of human, hazardous and other.
8. Hospital waste management.

Tool 6: Continuity of essential services

Steps	Actions		Use these cells to write the action's output for practice
Step 1	List all hospital services, ranking them in order of priority	⇩	
Step 2	Identify and maintain the essential hospital services	⇩	
Step 3	Identify the resources needed to ensure the continuity of essential hospital services, in particular those for the critically ill and other vulnerable groups	⇩	
Step 4	Coordinate with the health authorities, neighboring hospitals and private practitioners on defining the roles and responsibilities of each member of the local health-care network to ensure the continuous provision of essential medical services throughout the community	⇩	
Step 5	Ensure the availability of appropriate back-up arrangements for essential lifelines, including water, power and oxygen	⇩	
Step 6	Anticipate the impact of the most likely disaster events on hospital supplies of food and water. Take action to ensure the availability of adequate supplies	⇩	
Step 7	Ensure contingency mechanisms for the collection and disposal of human, hazardous and other hospital waste.	⇩	

Session- 10 : Human resources of essential services of the hospital and emergency response plan

Time: 1 hour.

Objectives:

After completion of the session participants will be able to:

- Explain the concept and importance of human resources and essential services of hospital and emergency response plan
- Explain actions of human resources and essential services of hospital and emergency response plan
- Explain and practice of tools of human resources and essential services of hospital and emergency response plan.

Steps, Contents, Time, Methods and Materials:

Steps	contents	Time	Methods/techniques	Materials
1.	Concept and importance of human resources and essential services	5 m	Brain storming, discussion and visualized presentation	Flip sheet, marker, VIPP board, multimedia
2.	Actions of human resources and essential services	15 m	Brain storming, discussion and visualized presentation	Flip sheet, marker, VIPP board, multimedia
3.	Tools of human resources and essential services	15 m	Brain storming, discussion and Visualized presentation	Flip sheet, marker, VIPP board, multimedia

4.	Practice on tools of human resources and essential services	20 m	Brain storming, discussion and Visualized presentation	vulnerability analysis tools flip sheet, marker,
5.	Sum up	5m	Q & A and discussion	Interaction with the participants

Process:

- Greet the participants and invite them to the session to participate.
- Ask the participants to share their ideas/thoughts about human resources and essential services and why it is important
- Discuss with the participants by sharing the power point presentation on human resources and essential services.
- Discuss and explain with the participants about actions points of human resources and essential services
- Discuss and explain with the participants about tools of human resources and essential services.
- Divide participants into four groups and provide them tools of human resources and essential services and tell them to write down output against each action's points.
- Invite participants to present their group work in to planery
- Ask if any question they have and give answer.
- Summarize and conclude the session by giving thanks to the participants for active participants.

Note for Facilitator

Human resources

In an emergency, the hospital must mobilize an adequate number of staff. Lessons learned show that having the right people at the right time is critical to the success. This includes having the appropriate human resource management staff, skills, policies, and support.

Human resources

Effective human resource management is essential to ensure adequate staff and the continuity of operations during any incident that increases the demand for healthcare services Consider taking the following action.

1. Update the hospital staff contact list.
2. Estimate and continuously monitor staff absenteeism.
3. Establish a clear staff sick-leave policy, including contingencies for ill or injured family members or dependents of staff.

Human resources

4. Identify the minimum needs in terms of health-care workers and other hospital staff to ensure the operational sufficiency of a given hospital department
5. Establish a contingency plan for the provision of food, water and living space for hospital personnel.
6. Prioritize staffing requirements and distribute personnel accordingly.
7. Recruit and train additional staff as volunteers (e.g., retired staff, university affiliates/students and community volunteers) according to the anticipated need. Local community support will be needed.

Human resources

8. Trained health-care providers in high-demand services (e.g., emergency, surgical, and intensive care units).
9. Provide training and exercises in areas of potential increased clinical demand, including emergency and intensive care, to ensure adequate staff capacity and competency.

Human resources

10. Identify domestic support measures (e.g., travel, childcare, care for ill or disabled family members) to enable staff flexibility for shift reassignment and longer working hours.
11. Ensure adequate shift rotation and self-care for clinical staff to support morale and reduce medical error.
12. Ensure the availability of multidisciplinary psychosocial support
13. Ensure that staff dealing with epidemic-prone infectious diseases are provided with the appropriate vaccinations, in accordance with national policy and guidelines of the health authority.

Tool 7: Human Resources

Steps	Actions		Use these cells to write the action's output for practice
Step 1	Update the hospital staff contact list.	⇩	
Step 2	Estimate and continuously monitor staff absenteeism.	⇩	
Step 3	Establish a clear staff sick-leave policy, including contingencies for ill or injured family members or dependents of staff.	⇩	
Step 4	Establish a contingency plan for the provision of food, water and living. space for hospital personnel	⇩	
Step 5	Prioritize staffing requirements and distribute personnel accordingly.	⇩	

Step 6	Recruit and train additional staff according to the anticipated need	⇓	
Step 7	Address liability, insurance and temporary licensing issues relating to additional staff and volunteers who may be required to work in areas outside the scope of their training or for which they have no license	⇓	
Step 8	Establish a system of rapidly providing health-care workers	⇓	
Step 9	Provide training and exercises in areas of potential increased clinical demand, including emergency and intensive care, to ensure adequate staff capacity and competency.	⇓	
Step 10	Identify domestic support measures to enable staff flexibility for shift reassignment and longer working hours.	⇓	
Step 11	Ensure adequate shift rotation and self-care for clinical staff to support morale and reduce medical error	⇓	
Step 12	Ensure the availability of multidisciplinary psychosocial support teams that include social workers, counsellors, interpreters, and clergy for the families of staff and patients.	⇓	
Step 13	Ensure that staff dealing with epidemic-prone respiratory illness are pro-vided with the appropriate vaccinations, in accordance with national policy and guidelines of the health authority.	⇓	

Session- 11: Logistics and supply management of the hospital and emergency response plan

Time: 1 hour.

Objectives:

After completion of the session participants will be able to:

- Explain the concept and importance of logistics and supply management of hospital and emergency response plan
- Explain actions of logistics and supply management of hospital and emergency response plan
- Explain and practice of tools of logistics and supply management of hospital and emergency response plan.

Steps, Contents, Time, Methods and Materials:

Steps	contents	Time	Methods/techniques	Materials
1.	Concept and importance of logistics and supply management	5 m	Brain storming, discussion and visualized presentation	Flip sheet, marker, VIPP board, multimedia
2.	Actions of logistics and supply management	15 m	Brain storming, discussion and visualized presentation	Flip sheet, marker, VIPP board, multimedia
3.	Tools of logistics and supply management	15 m	Brain storming, discussion and Visualized presentation	Flip sheet, marker, VIPP board, multimedia
4.	Practice on tools logistics and supply management	20 m	Brain storming, discussion and Visualized presentation	vulnerability analysis tools flip sheet, marker,

5.	Sum up	5m	Q & A and discussion	Interaction with the participants

Process:

- Greet the participants and invite them to the session to participate.
- Ask the participants to share their ideas/thoughts about logistics and supply management and why it is important
- Discuss with the participants by sharing the power point presentation on logistics and supply management.
- Discuss and explain with the participants about actions points of logistics and supply management
- Discuss and explain with the participants about tools of logistics and supply management.
- Divide participants in to four groups and provide them tools of logistics and supply management and tell them to write down output against each action's points.
- Invite participants to present their group work in to planery
- Ask if any question they have and give answer.
- Summarize and conclude the session by giving thanks to the participants for active participants.

Note for Facilitator

Logistics and supply management

During a disaster, supply chain vulnerabilities such as power, transportation, and communication can disrupt the delivery of medications and medical supplies, limiting the ability to provide critical care services. Disasters can also disrupt information technology (IT) in health-care systems, causing disruptions in patient care, particularly critical care, and other health-care business functions.

Logistics and supply management

Continuity of the hospital supply and delivery chain is often an underestimated challenge during a disaster, requiring attentive contingency planning and response Consider taking the following action.

1. Develop and maintain an updated inventory of all equipment, supplies and pharmaceuticals; establish a shortage-alert mechanism.
2. Estimate the consumption of essential supplies and pharmaceuticals, (e.g., amount used per week)

Logistics and supply management

3. Consult with authorities to ensure the continuous provision of essential medications and supplies (e.g., those available from institutional and central stockpiles and through emergency agreements with local suppliers and national and international aid agencies).
4. Assess the quality of contingency items prior to purchase; request quality certification if available.
5. Ensure the procurement and prompt delivery of equipment, supplies and other resources in times of shortage
6. Identify physical space within the hospital for the storage and stockpiling of additional supplies, taking ease of access, security, temperature, ventilation, light exposure, and humidity level into consideration. Ensure an uninterrupted cold chain for essential items requiring refrigeration.

Logistics and supply management

7. Stockpile essential supplies and pharmaceuticals in accordance with national guidelines. Ensure the timely use of stockpiled items to avoid loss due to expiration.
8. Define the hospital pharmacy's role in providing pharmaceuticals to patients being treated at home or at alternative treatment sites.
9. Ensure that a mechanism exists for the prompt maintenance and repair of equipment required for essential services. Postpone all non-essential services when necessary.
10. Coordinate a contingency transportation strategy with prehospital networks and transportation services to ensure continuous patient transferal.

Tool 8: Logistic and supply management

Steps	Actions		Use these cells to write the action's output for practice
Step 1	Develop and maintain an updated inventory of all equipment, supplies and pharmaceuticals; establish a shortage-alert mechanism.	⇩	
Step 2	Estimate the consumption of essential supplies and pharmaceuticals, (e.g., amount used per week) using the most likely disaster scenarios	⇩	
Step 3	Consult with authorities to ensure the continuous provision of essential medications and supplies.	⇩	
Step 4	Assess the quality of contingency items prior to purchase; request quality certification if available.	⇩	

Step 5	Establish contingency agreements (e.g., memoranda of understanding, mutual aid agreements) with vendors to ensure the procurement and prompt delivery of equipment, supplies and other resources in times of shortage.	⇩	
Step 6	Identify physical space within the hospital for the storage and stockpiling of additional	⇩	

	supplies, taking ease of access, security, temperature, ventilation, light exposure, and humidity level into consideration. Ensure an uninterrupted cold chain for essential items requiring refrigeration.		
Step 7	Stockpile essential supplies and pharmaceuticals in accordance with national guidelines. Ensure the timely use of stockpiled items to avoid loss due to expiration.	⇩	
Step 8	Ensure that a mechanism exists for the prompt maintenance and repair of equipment required for essential services.	⇩	
Step 9	Coordinate a contingency transportation strategy with prehospital networks and transportation services to ensure continuous patient transfer.	⇩	

Session-12: Post disaster recovery of the hospital and emergency response plan

Time: 45 m

Objectives:

After completion of the session participants will be able to:

- Explain the concept and importance of post disaster recovery of hospital and emergency response plan
- Explain actions of post disaster recovery of hospital and emergency response plan
- Explain and practice of tools of post disaster recovery of hospital and emergency response plan.

Steps, Contents, Time, Methods and Materials:

Steps	contents	Time	Methods/techniques	Materials
1.	Concept and importance of post disaster recovery	5 m	Brain storming, discussion and visualized presentation	Flip sheet, marker, VIPP board, multimedia
2.	Actions of post disaster recovery	15 m	Brain storming, discussion and visualized presentation	Flip sheet, marker, VIPP board, multimedia
3.	Tools of post disaster recovery	15 m	Brain storming, discussion and Visualized presentation	Flip sheet, marker, VIPP board, multimedia
4.	Practice on tools of post disaster recovery	20 m	Brain storming, discussion and Visualized presentation	vulnerability analysis tools flip sheet, marker,
5.	Sum up	5m	Q & A and discussion	Interaction with the participants

Process:

- Greet the participants and invite them to the session to participate.
- Ask the participants to share their ideas/thoughts about post disaster recovery and why it is important
- Discuss with the participants by sharing the power point presentation on post disaster recovery.
- Discuss and explain with the participants about actions points of post disaster recovery
- Discuss and explain with the participants about tools of post disaster recovery.
- Divide participants in to four groups and provide them tools of post disaster recovery and tell them to write down output against each action's points.
- Invite participants to present their group work in to planery
- Ask if any question they have and give answer.
- Summarize and conclude the session by giving thanks to the participants for active participants.

Note for Facilitator

Post disaster recovery

Post disaster recovery planning with activities for the health sector includes pre-hospital resources, hospital-based care, and out-of-hospital care delivery systems should ideally be focused on a continuum of community needs, ranging from short-term early recovery needs to long-term healthy community goals. The later goals, if properly developed, can assist communities in not only recovering from a disaster but also addressing chronic community health concerns such as access to healthcare services.

Post disaster recovery

Recovery planning is important as response planning. Recovery plans should ideally be developed prior to a disaster and implemented while the response is still underway to assist healthcare facilities and providers in returning to normal operations or establishing a new normal state. This will allow hospital authority to continue providing care to the community while also maintaining financial viability in the aftermath of a disaster.

Post disaster recovery

Post-disaster recovery planning should be performed at the onset of response activities. Prompt implementation of recovery efforts can help mitigate a disaster's long-term impact on hospital operations. Consider taking the following action.

1. Appoint a disaster recovery officer responsible for overseeing hospital recovery operations.
2. Determine essential criteria and processes for system recovery
3. In case of damage to a hospital building, ensure that safety assessment is performed (
4. If evacuation is required, determine the time and resources needed to complete repairs and replacements before the facility can be reopened

Post disaster recovery

5. complete repairs and replacements before the facility can be reopened
6. Organize a team with hospital staff to carry out a post-action hospital inventory assessment. The team must be composed of staff familiar with the location and inventory of equipment and supplies. Consider including equipment vendors to assess the status of sophisticated equipment that may need to be repaired or replaced

7. Provide a post-action report to hospital administration, emergency managers and appropriate stakeholders that includes an incident summary, a response assessment, and an expenses report.

Post disaster recovery

8. Organize professionally conducted debriefing for staff within 24–72 hours after the occurrence of the emergency incident to assist with coping and recovery, provide access to mental health resources and improve work performance.
9. Establish a post-disaster employee recovery assistance program according to staff needs, including, for example, counselling and family support services.
10. Show appropriate recognition of the services provided by staff, volunteers, external personnel and donors during disaster response and recovery.

Tool 9: Post-disaster recovery

Steps	Actions		Use these cells to write the action's output for practice
Step 1	Appoint a disaster recovery officer responsible for overseeing hospital recovery operations.	⇩	
Step 2	Determine essential criteria and processes for incident demobilization and system recovery.	⇩	

Step 3	In case of damage to a hospital building, ensure that a comprehensive structural integrity and safety assessment is performed.	⇩	
Step 4	If evacuation is required, determine the time and resources needed to complete repairs and replacements before the facility can be reopened.	⇩	
Step 5	Provide a post-action report to hospital administration, emergency managers and appropriate stakeholders that includes an incident summary, a response assessment, and an expenses report	⇩	
Step 6	Establish a post-disaster employee recovery assistance programme according to staff needs, including, for example, counselling and family support services	⇩	
Step 7	Show appropriate recognition of the services provided by staff, volunteers, external personnel and donors during disaster response and recovery.	⇩	