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BMHRC

MANUAL OF DISASTER MANAGEMENT

CONTENTS

PREPAREDNESS FOR NATURAL DISASTER

A disaster is defined as a "A serious disruption of the functioning of a community or a society at any scale due to hazardous events interacting with conditions of exposure, vulnerability and capacity, leading to one or more of the following: human, material, economic and environmental losses and impacts." *(*UNISDR 2016*)*

Disasters affect millions of people each year on a personal, business, local community or national level. The golden rule for successful disaster management at all levels is to increase awareness, develop action plans and practice them. No single agency or department can handle a disaster situation of any scale alone. Different departments must work together to manage the disaster with an objective to reduce its impact.

Preparedness is the process of turning awareness of the natural hazards and risks faced by a community into actions that improve its capability to respond to and recover from natural disasters. The onset of a natural disaster can be sudden; recovery and reconstruction may take years and even decades. It is not only built structures that are threatened by natural hazards, damage to natural resources may have great economic and long term environmental impacts — for example, when an earthquake ruptures a pipeline that spills oil into marine and estuarine systems or a wildfire destroys a major forest. Natural resources should be fully covered in emergency preparedness plans. Preparedness plans need to address not just the immediate response, but also the longer-term recovery and reconstruction. The recovery process is multifaceted and complex. A systematic approach would reduce human hardship.

Specialized training is also needed. For example, search and rescue is a highly specialized emergency function that requires coordination among several disciplines. Training programs need to be developed for emergency responders, construction personnel, medical specialists, and volunteers. Health service managers and medical personnel would benefit from training in both initial handling and treatment of the injured and hospital management of mass casualties.

Adapting advances in information technology to emergency response needs is another significant area for coordination and communication. It is necessary to bring together specialists in emergency management and information technology and communications to develop prototype projects. Models need to be developed to test emergency plans and programs by simulating disasters or exercising such plans and programs in small scale events. Research shows that a key question disaster managers have to answer is not who In-charge is but how the coordination of every function can be ensured or facilitated.

PREPRATION OF HOSPITAL DISASTER MANAGEMENT PLAN

The Hospital Disaster Management Plan is divided into three phases

1. The Pre Disaster Phase :

The primary aim of BMHRC during the pre-disaster phase would be to critically asses the available medical resources within BMHRC and share them with other neighboring government hospitals. In other words the networking of the various medical resources and hospitals should be the main aim of the BMHRC in the pre-disaster phase. The networking includes transport vehicles like ambulances, blood banks, CT scan and trained manpower.

It will act in the following manner:

a) **Planning**: The hospital plans are formulated and then discussed in a suitable forum for approval.

b) **The Disaster Manual:** The hospital disaster plan is written down in a document form and copies of the same are available in all the areas of the hospital and BMHRC website.

c) **Staff Education and Training:** Regular staff training by suitable drills will be undertaken in this phase.

2) The Disaster Phase:

The Director BMHRC should set up a medical command structure which would work in tandem with other responsible hospital authorities/ departments. It will act in the following manner:

a) Phase of activation: Alert and notification of emergency.

b) Activation of the chain of command in the hospital.

c) Operational phase: This is the phase in which the actual tackling of mass casualties is performed according to the disaster/emergency plan.

d) Phase of deactivation: An important phase of the hospital emergency plan when the administration/ Command of the hospital are satisfied that the influx of mass casualty victims is not continuing to overwhelm the hospital facilities.

3) The Post Disaster Phase:

This is an important phase of disaster planning, where the activities of the disaster/ emergency phase are discussed and the inadequacies are noted for future improvements.

PRE DISASTER PHASE

1. PLANNING:

I. Constitution of a Disaster Management Committee.

The following officers of the Hospital will form the 'Disaster Management Committee' under the Chairmanship of the Director BMHRC. It would comprise of the following members:-

1. Director - Chairman
2. Medical Superintendent (In-charge) - Member
3. Incharge - Medical Departments - Member
4. Incharge - Surgical Departments - Member
5. Incharge- Anesthesiology & Critical Care - Member
6. Incharge -Investigation services -Member
7. Health Centre Coordinator - Member
8. Incharge -Finance & Purchase - Member
9. Incharge -Engineering & Security Services - Member
10. CPRO / Public Relation Officer - Member
11. Incharge- Medical Store - Member
12. Senior Most Medical Officer Casualty - Member Secretary

The Committee will co-opt any other functionary of the hospital depending upon the situation and the type of disaster. It would also form sub-committee/s to assist it as and when necessary. The Committee will meet at least once in 3 months to review the working of contingency plan, problem faced in recent disaster and amendment/ modification to be adopted in future. The Committee will be responsible for overall management of the disaster situation, take administrative decisions as and when required, review the disaster plan and to inform the appropriate authorities on the situation.

(ANNEXURE- 1).

II. Delineation of Job Responsibilities

III. Plan activation of different areas of hospital

The important areas of hospital emergency plan are:

A. Control Room :

The office of the Director would be the control room having good communication network like landline, mobiles.

The control room should mandatorily have all the contact numbers of the hospital staff.

The control room should also have contact numbers of District Medical Authorities, District Administration, Police, Fire Services, nearby hospitals, Private Physicians, Blood Banks, and NGOs etc. which can be contacted if external help is needed.

B. Patient Treatment Areas :

The disaster committee should identify the following areas in the hospital for patient care activities:

1. **Patient Reception and Triage Area : Nearby the Emergency**

This area is the first area of contact between hospital personnel and the incoming patients and will be manned by.

- Registration officer on the registration desk
- Triage Doctors/ Nurses
- Adequate number of doctors in the emergency room/ casualty
- Adequate number of stretchers/trolley bearers
- Hospital attendants

Initial registration and Triage will be done in this area.

- **Triage criteria for disasters and the patients will be color coded according to the kind of treatment they deserve**
  - **RED** : Needing immediate resuscitation – in the red area i.e. Main Casualty.
  - **YELLOW** : Needing urgent medical attention and possible surgery after 4 to 6 hrs in the yellow area i.e. disaster room.
  - **GREEN**: : Walking wounded (non urgent ambulatory) needing first aid and delayed treatment in the green area i.e. observation room.
  - **BLACK** : Dead, to be shifted to morgue under police custody.

2. **Patient Resuscitation Area:** Emergency department.
3. **Patient Observation Area:** Marked near the Emergency.
4. **Minor Treatment Area:** Should be away from the emergency. The staffs mainly nursing staffs and hospital attendants who are familiar with first aid, splinting and dressings can be sent to the Minor treatment areas and thus saving the Medical staffs for more intensive and resuscitation areas.
5. **Operation Theatre:** The committee should decide the policy regarding vacation of the operation theatre when the disaster is declared. All elective surgeries should be suspended and OT should get ready for emergency victims.

6. **Organization of Wards**: Demarcation of Disaster Beds and Creation of new beds by discharging old recuperating patients, discharging patients for elective surgery.

C. Organization of the Morgue:

Those brought dead or died in hospital will be kept in the Morgue to its fullest capacity. Required formalities as laid down for Medico Legal Cases will be followed. Patients pronounced brought dead should be tagged with a Disaster Tag and body should be handed over to the concerned police personnel/police station. However, in case of a delay the body is to be kept in the Morgue under the custody of concerned police station / police personnel. A complete record of all bodies must be maintained by on-duty morgue employee. The Emergency Department should also notify about all deaths to the Control room. After bodies have been identified, the information will be filed on the Disaster Tag and Medical Records notified as to the identification of the patient. Appropriate paperwork is to be filled out accordingly. Officer In-charge photography section shall arrange to take photographs of dead bodies, if required.

D. Communications Office / Telephone exchange [EPABX]

E. Security Office - DDES Office

F. Holding Area for Relatives/non-injured - A hospital staff member will stay with the family members. (Medical Social Worker and clinical psychologists will be assigned here after reporting to the Control room and other personnel assigned as needed).

G. Area for Holding Media Briefings (Separate Media/PRO/Spokesperson Room).

H. Area for holding patients in case a part of the hospital is evacuated.

All these areas should be mapped on the outlay map of the hospital.

IV. How to increase bed capacity during Disaster

1. Discharge elective cases.
2. Discharge stable recovering patients.
3. Stop admitting non emergency patients.
4. Convert waiting/non-patient care areas into makeshift wards.

V. The Medical Support Services

The Operation Chief ensures that the necessary investigations (Radiology, Laboratory etc.) are not delayed. S/He is assisted by all the Heads & In-charges of various specialties.

In addition to the members of clinical staff, Para and preclinical disciplines (Nursing & Paramedical students) will render their services in managing the casualties. Duty roster for standby staffs will be available in the control room.

Duty roster (including those on standby duty) of all ancillary medical services (e.g. Radiology, Laboratory, Blood Bank etc) and also other hospital services (e.g. housekeeping, sanitation, stores, pharmacy, kitchen etc.) will be available with the duty officers /casualty. Department Head will call in their own personnel as needed after reporting to Control room to make necessary arrangements.

VI. The Nursing Services

Nursing Superintendent will directly report to the Operations Chief and provide adequate nursing staff where ever needed.

The Nursing Superintendent will prepare a list of nursing staffs that may be made available at a short notice and also able to mobilize additional nursing staffs from non-critical areas in association with Deputy Nursing Superintendents and other nursing supervisors.

VII Organization of the Logistics

The Logistics Chief (DDES & Security Officer) has an important role to play once the disaster is declared and takes over the charge of all ancillary services of the hospital like:

a. Security

- Work in close coordination with local police.
- Maintain law and order within and outside the hospital.
- Direct traffic so as not to block the free access of patient carrying vehicles to and outside the hospital.
- Protect key installation areas of the hospital (Emergency Department, Hospital Working areas, Power Station/ Generators, Water Tanks/Water Supply etc.).
- Restrict and strictly control access to the hospital.
- Direct the entry for authorized persons to appropriate areas (ambulances to emergency, relatives to waiting area, media to media room etc.).
- Protect hospital personnel and patients.
- All hospital personnel to carry Identity cards.

b. Communication

- Internal telephone exchange.
- Landline phones.
- Private mobile/cellular phones.
- Mobile for security and ambulance personnel.

All important numbers of hospital personnel, police, district functions of administration, other nearby hospitals etc. to be clearly mentioned in the disaster manual and a copy of this manual will be present in the telephone exchange.

c. Transportation :

- Transport is required to transfer patients to other hospitals.
- The transport room/driver duty room should also have a telephone or any other means of communication like intercom/mobile to remain in touch with the control room.

d. Dietary Supply – Dietician to remain in touch with the control room and to monitor adequate dietary arrangement during the disaster.

e. Sanitation – Coordinator housekeeping to remain in touch with the control room and ensure adequate sanitation services during the disaster.

f. Water & Electricity – Engineer & Supervisor to remain in direct contact with the control room and ensure continuous water and electricity supply during the disaster.

VIII. Medical Supplies :

Adequate stores of medicines, consumables and disposables to be kept separately in the Emergency/Casualty and be marked as **"Disaster Store".** The activation of this store is done only after the Disaster has been notified by the appropriate authorities.

As immediate measures, the buffer stocks earmarked for the Casualty/Emergency Services should be utilized till the fresh stocks are replenished from main Hospital stores/ disaster stores. One person specifically needs to be designated for the same.

Close liaison is to be kept between the Stores In-Charge and the Hospital administration (Control room). Any requirements to the Operational Areas/Treatment areas are conveyed to the control room.

Inventory for Disaster Store is given as (**ANNEXURE- 2)**

The Officer In-charge Stores will ensure that the hospital stores are open so that medical supplies are not hindered.

IX. CPRO / Public Relations Officer (PRO) :

The identified officer/s would liaison with the relatives of the victims to inform them on their clinical status. For such purpose, the hospital will make efforts to establish information desk to provide the requisite information. The list of the casualties along with their status is to be displayed at a prominent place outside casualty, in both English and Hindi and would be updated regularly. Arrangements for drinking water, tent etc. to be made for attendants outside casualty. CPRO / PRO shall be coordinating all regular media / press meetings.

X. Documentation :

Documentation will be done at the Casualty by CMO & resident doctors. All the MLCs will be recorded properly. However, the treatment of the patients will get priority over the paper work. The Duty Officer will prepare the list of casualties including nature of injury sustained. For heavy load of Causalities, Officer In-charge of Medical Record Section will post an additional Medical Records Assistant/ Technician to cater to the additional load of work. One nurse will be posted to check the documentation and identification of patients.

XI. Crowd Management :

On receiving the information of disaster, immediate mobilization of security staff available within the hospital campus will be made to augment the security in the casualty department and to manage the crowd. The local police station will also be informed to provide assistance in managing the crowd. The incoming traffic needs to be regulated to provide unhindered passage to ambulances.

XII. Financial Planning:

The disaster plans to be made in close association with Deputy Director Finance. This will make them more cost effective and avoid unnecessary and repeated expenditure.

XIII. Operations Planning:

CPRO / PRO and CMO on duty after notification of the hospital disaster, activate and alert the in-charges of different important areas of the hospital. The in-charges of various facilities in turn notify and alert the staff (medical / nursing / others staff) working in these areas to immediately reach the area and carry out their duties. The in-charges also call up the reserved staff not on duty to be ready in case they are needed.

2. THE DISASTER MANUAL:

The hospital disaster plan is written down in a document form and copies of the same are available in all areas of the hospital & BMHRC website (www.bmhrc.org.)

3. STAFF EDUCATION, TRAINING & DISASTER DRILLS:

An orientation and education program is required for personnel who participate in implementing the emergency preparedness plan. Education should address the following:

- Specific roles and responsibilities during disaster.
- The information and skills required to perform duties during disaster.
- The backup communication system used during disasters.
- How supplies and equipment are obtained during disasters.

The Disaster drills are to be used to identify strengths and weaknesses in hospital disaster management plan and the results gained from evaluation should be applied to further training and drill planning.

Hospital evacuation may become a necessity if the hospital itself becomes a victim of any disaster. Such situations need to be foreseen and proper planning has to go into as to how to evacuate and which areas of the hospitals need to be evacuated first in case of an internal disaster.

The evacuation plan of the hospital is shown in **(ANNEXURE - 3)**

Continuous revisions will be made in the Hospital Disaster Management Plan taking leads from the regular disaster drills in the hospital. This would refine the plan and cover up the deficiencies faced in the Drill Phase.

DISASTER PHASE

I. Disaster Activation :

- Plan to be activated to alert the disaster committee, staff, other facilities via phones and mobilizing resources to appropriate activated areas.
- As soon as any intimation regarding disaster is received/ Disaster patients arrive, doctor on duty at Casualty shall immediately inform the Nodal Officer and attend them promptly, efficiently and courteously.
- Nodal Officer will immediately alert all the staffs and concerned Heads of Unit and Departments with the help of central telephone exchange. All the available ambulances shall be put in service. List of all the categories of staff with addresses, telephone numbers is made available in the Control Room.
- The Nodal officer will immediately inform Director, MS (In-charge), Officer I/C casualty, all the Head of the Departments along with DDF, DDES, Security Officer, NS, Senior Manager Operations & Health Centre coordinator etc.
- Nodal Officer shall immediately put in service more number of trolleys, wheelchairs from casualty as well as the emergency wards and in case of necessity from other wards and will give instructions to regulate the patients and crowd with the help of security and police personnel.
- Doctors & Nursing Officers present in casualty will immediately conduct a triage i.e. sorting out case into 4 categories by putting coloured triage bands on patient's left/right upper arm and take steps accordingly,

- ❖ **RED:** Needing immediate resuscitation – in the red area i.e. Main Casualty.

- ❖ **YELLOW:** Needing urgent medical attention and possible surgery after 4 to 6 hrs in the yellow area i.e. Disaster room.
- ❖ **GREEN:** Walking wounded (non urgent ambulatory) needing first aid and delayed treatment – in the green area i.e. observation room.
- ❖ **BLACK :** Dead, to be shifted to morgue under police custody

The Colour Bands are to be available in the control room cupboard.

- Blood bank to ensure ready availability of blood and related products and patient taken to O.T. directly when so required.
- All the MLCs will be recorded properly and in details in MLC Register.
- More number of O.T. Tables shall be made available to handle increased load of surgery.
- A comprehensive list of all patients coming to casualty shall be prepared and prominently displayed in English & Hindi outside casualty.
- Dedicated telephone lines shall be activated with the help of central telephone exchange, as disaster help lines.
- As far as possible all the cases shall be disposed off in the shortest possible time.
- Extra resuscitation bags should always be available in Casualty whenever required.
- If necessary, extra dressings, suture trays and other equipment shall be indented from CSSD which is working round the clock.
- Creation of extra beds will take priority.
- All the dead bodies shall be properly packed; identification tags put on them and then sent to morgue under police custody.
- Arrangements for tent, drinking water etc. shall be made for attendants/ staff through kitchen, canteen.

The Hospital Administration must appoint following:

1. Nodal Officer:

a. The Nodal Officer must not be expected to carry out any patient care, logistical, security, or other activities, but must be free to command and coordinate the overall disaster response.

b. The Hospital Administration must choose the most competent person to be Nodal Officer (Competence in the context of coordinating a hospital during a disaster). An Emergency Department physician with Emergency Medical Services and disaster experience would be ideal, but the Nodal Officer need not be a physician, nurse, or administrator (For example, if a nonmedical person has managed many hospital disasters before, the Hospital Administration could appoint him as the Nodal Officer). The Nodal Officer inherits authority directly from the Hospital Administration.

c. The hospital Nodal Officer's job is to direct all aspects of the hospital's participation in the disaster operation.

2. **The Operations Chief:** The operations chief is overall in-charge of all patient care activities and supervises the following areas:

a. **Medical Care**

Emergency Services

Medical Services

Surgical services

Critical care Services

b. **Ancillary Services**

Laboratory Services

Radiology Services

Pharmacy Services

Morgue Services

c. **Human Services –**

Psychological & Social Support Services

3. The Logistics Chief: The logistics chief is overall in-charge of all support services of the hospital and supervises the following areas:

a. Communication systems

b. Transportation

c. Dietary Services

d. Stores

e. Sanitation, Water and Power Supply

4. The Planning Chief: The planning chief is overall In-charge of the manpower planning and is responsible for making immediate as well as extended rosters of the following staff:

a. Medical Staff

b. Nursing Staff

c. Group 'C' and 'D' Staff

5. CPRO/PRO's: The public relation officer is responsible for dissemination of all the information, medical or otherwise, to the relatives coming to the hospital as well as to the media. They are also responsible for maintaining a close liaison with other agencies providing rescue and relief to the victims of Disaster. Their work is to liaison with the following agencies:

a. The Police

b. The Ambulance Services

c. Railways or others agencies providing medical relief

d. Others hospitals in the network/ Area

e. Blood Banks or other ancillary medical services in the area

6. The Security Officer: The security officer is responsible for activating and alerting all the security staff within the hospital and mobilizing them to areas like hospital gate, emergency department etc. where they are needed most.

7. The Deputy Director Finance: The Deputy Director Finance will be responsible for allocation of emergency funds and facilitating emergency purchases as and when required in the course of the disaster.

Depending upon the time of the day and the level of disaster the positions mentioned in the Disaster Management Protocol (ANNEXURE 4) can be taken over by the staffs working in the hospital that time. Multiple roles can be performed by a single person till the time other people arrive to support the existing staff.

II. Disaster Deactivation Phase

- The decision to deactivate the hospital disaster plan should be taken after proper assessment of the situation by the Nodal Officer and hospital administrators.
- It is a very important phase of the disaster plan. The timing of the deactivation has a bearing on the successful outcome of the plan. An early deactivation might lead to a situation where casualties continue to come after disaster Plan has been deactivated and a late deactivation would put undue pressure in the hospital resources and also delay in resumption of normal activity.

POST DISASTER PHASE

Post disaster debriefing will be done under the chairmanship of the Director/ Medical Superintendent (In-charge).

(ANNEXURE- 1)

(A) JOB RESPONSIBILITIES - SURGICAL DEPARTMENTS (NEURO SURGERY, UROLOGY, GASTRO SURGERY, CTVS, AND OPHTHALMOLOGY)

i) Surgical Consultant Admitting Department

Reporting Area: Casualty
Reporting Officer: HOD of the admitting department

(1) Assess whether an emergency exists.
(2) Arrange for the entire surgery unit on call to report to the Casualty.
(3) Distribute treatment protocols to Senior/Junior Residents.
(4) Supervise treatment for patients who have been triaged.
(5) Assign residents to these patients.
(6) Prioritize patients for surgery in order of urgency.
(7) Communicate with relatives of surgical patients as and when required.

ii) Surgical Resident Doctors

Reporting Area : Casualty
Reporting Officer: HOD of the admitting department

(1) Report to unit consultant to collect treatment protocols and for instructions.
(2) Organize and carry on the treatment of the case assigned as per treatment protocol.
(3) Inform unit head of any problems.

(B) JOB RESPONSIBILITIES – CASUALTY

Medical Officer (Casualty & Health Centre)
Reporting Area : Casualty
Reporting Officer: Medical Superintendent In-charge & Health Centre Coordinator

1. Clear the emergency department at the earliest, of any patients either to admit or discharge them.
2. Organize and carry on the treatment of the case assigned to them as per the treatment protocol.
3. Inform the Nursing Supervisor, Casualty to organize additional trolleys, drugs and disposables.
4. Allot emergency residents and physicians to the different receiving areas of the department.
5. As the patients come in, inform the Head of concerned departments.
6. Inform all doctors who are not on duty depending on the number of patients that have arrived.
7. Shift patients requiring acute resuscitation to the resuscitation rooms.
8. Shift the walking wounded patients to the designated area for them.
9. Shift brought dead patients to the morgue if required under police custody after identification and other medico legal procedures.

C. JOB RESPONSIBILITIES – DEPARTMENT OF ANESTHESIOLOGY

Anesthesiology Consultant on duty
Reporting Area : Operation Theatre /Casualty / GICU
Reporting Officer: HOD Anesthesia

(1) Arrange for the entire unit on call to report to the Casualty.
(2) Inform the HOD about the emergency.
(3) Depute one doctor to contact hostel to mobilize all residents.
(4) Distribute treatment protocols to resident doctors.
(5) Supervise treatment for patients who have been triaged and assign doctors to these patients.
(6) Assign consultant and residents to the operation theatre.
(7) Prioritize patients for surgery in order of urgency.
(8) Communicate with relatives of patients as and when required.
(9) Inform the nurse In-charge of OT about the Emergency.
(10) Oversee the functioning of the Operation theatres.
(11) Inform the concerned wards about the cancellation of the elective surgery list.

D. JOB RESPONSIBILITIES – MEDICAL DEPARTMENTS (CARDIOLOGY, PULMONARY, GASTRO MEDICINE, NEURO MEDICINE, PSYCHIATRY, AND NEPHROLOGY.

Consultant on-call of respective department.
Reporting Area : Casualty
Reporting Officer : HOD of Respective department.
Alert residents and consultants of the concerned unit.
To take over the medical management of cases in the Casualty.

E. JOB RESPONSIBILITIES OF NURSING SUPERVISOR OF CONCERNED WARD TO RECEIVE EMERGENCIES

Nursing Supervisor
Reporting Area : Concerned Ward
Reporting Officer : Deputy Nursing Superintendent.

(1) Arranges to shift patients from that ward to other hospital beds after getting a list of vacant beds from the reception.

(2) Arranges for an adequate number of mattresses for the emergency patients.

(3) Contacts the Deputy Nursing Superintendent to depute necessary additional staff to the ward.

(4) The drugs, supplies and equipment required for the emergency as per the list have to be brought from the store.

(5) Allot nurses to receive, resuscitate and stabilize the urgent cases, triaged in from the Casualty.

(6) Shift these cases to the OT, GICU, CCU, CTVS ICU, HDU & dialysis unit or other areas as specified by the respective consultants managing the cases.

(7) Receive postoperative cases in a separate receiving area.

F. JOB RESPONSIBILITIES – STORE OFFICER / PURCHASE OFFICER

Reporting Area: Casualty
Reporting Officer: Senior Manager Operations/ Officer In-charge Medical Store

Arrange to shift medical / surgical supplies and equipment as previously designated in the disaster plan to the casualty and other designated areas.

G. JOB RESPONSIBILITY – NURSING SUPERVISOR OT

Reporting Area : Operation Theatre
Reporting Officer : Deputy Nursing Superintendent

(1) Mobilizes adequate personnel and gets the theatres ready.

(2) Quickly gets the premedication and recovery rooms ready.

(3) Organizes shift duties and sees that reserve operation theatre staff is available 24 hours a day.

(4) Ensures that additional supplies of clothing and sterile surgical instruments are readily available.

(5) Allots staff to receive and transfer out the operated cases.

(6) Allots staff to transfer postoperative cases back to the designated ward.

H. JOB RESPONSIBILITIES – NURSING SUPERINTENDENT

Reporting Area: Control Room
Reporting Officer: Medical Superintendent In-charge

(1) Mobilizes adequate nurses to the casualty and other designated areas.

(2) Organizes shift duties so that the nurses can be replaced after 8 hours by a fresh batch of nurses

(3) To ensure efficient patient care.

I. JOB RESPONSIBILITIES – MEDICAL OFFICER BLOOD BANK / RESIDENT DOCTORS.

Reporting Area: **Blood Bank**
Reporting Officer: **HOD Transfusion Medicine**

(1) Make necessary arrangements for grouping and issue of blood or blood components.

(2) Recruits additional technical staff.

(3) Assigns one person to mobilize voluntary donors as per the existing list.

(4) Liaisons with other blood banks to procure additional blood.

J. JOB RESPONSIBILITIES – CONSULTANT PATHOLOGY AND MICROBIOLOGY LABORATORIES

Reporting Area : Laboratories
Reporting Officer : HOD of respective department.

(1) Arranges additional residents, consultants and laboratory technicians.

(2) Deputes staff to the casualty to collect the specimens.

(3) Deputes a senior laboratory technician to keep all the required material for processing the specimens, like the stains, media and reagents for various biochemical tests ready.

K. JOB RESPONSIBILITIES – CONSULTANT RADIOLOGY

Reporting Area: **Radiology Department**
Reporting Officer: **HOD Radiology**

(1) Ensures the presence of adequate medical and technical staff in the department to handle the requests for various radiological investigations including X-rays, Ultra sonography, CT scan, etc.

(2) Ensures that the necessary quantities of film and developer are available.

(3) Collaborates with the HOD of Anesthesiology to ensure that facilities for resuscitation of patients are available in the department.

(4) Allots a separate portable X-ray machine for the Casualty and the other designated wards so that unstable patients do not have to be shifted to the radiology department.

L. JOB RESPONSIBILITIES – MEDICAL RECORD OFFICER

Reporting Area: **Medical Records Department**
Reporting Officer: **Senior Manager Operations**

(1) Mobilizes staff to the Casualty and the registration area to register victims in the emergency.

(2) Designates one staff from the MRD to keep up to date records of the hospital bed position and send the list of vacant beds to the Casualty nurse In-charge.

M. JOB RESPONSIBILITIES – HOUSEKEEPING SUPERVISOR (COORDINATOR).

Reporting Area: **House keeping department**
Reporting Officer: **Dy. Director Engineering Services**

(1) Mobilizes additional aides and helpers to the Casualty and other designated areas.

(2) Mobilizes extra staff to move patients to and from the theatre and radiology department, to bring linen, medicine, IV fluids, blood etc., to take specimens to the laboratories for analysis etc.

N. JOB RESPONSIBILITIES – SUPERVISOR / ENGINEER -CIVIL & ELECTRICALS

Reporting Area: **Maintenance Department**
Reporting Officer: **Dy. Director Engineering Services**

Depute additional people to look after the electricity, water supply, sanitation services etc required during the emergency.

O. JOB RESPONSIBILITIES – SUPERVISOR LAUNDRY / BOILER

Reporting Area : Laundry

Reporting Officer: Dy. Director Engineering Services

Ensures fresh supply of linen to the casualty, other designated areas and the operation theatres.

P. JOB RESPONSIBILITIES – SUPERVISOR CSSD

Reporting Area: **Sterilization Unit.**
Reporting Officer: **Medical Superintendent (In-charge)**
Supplies sterile equipment and linen to the casualty, other designated areas and the operation theatres.

Q JOB RESPONSIBILITIES – SUPERVISOR MANIFOLD

Reporting Area: **Casualty**
Reporting Officer: **Medical Superintendent (In-charge)**
Ensure medical gas supplies to essential critical areas.

R. JOB RESPONSIBILITIES – DIETICIAN

Reporting Area: **Casualty**
Reporting Officer: **Nursing Superintendent**
Makes the necessary arrangement to provide snacks to the casualty, other designated areas and the operation theatre.

S. JOB RESPONSIBILITIES – CPRO / PUBLIC RELATIONS OFFICER

Reporting Area: **Control room**
Reporting Officer: **Director**

1) Is responsible for giving information to the press and public.

2) Issues periodic bulletins that provide information of general interest.

T. JOB RESPONSIBILITIES – COORDINATOR OF SECURITY SERVICES

Reporting Area: Control room

Reporting Officer: Deputy Director Engineering Services

(1) Is responsible for maintaining order and safety within and outside the hospital

(2) Allots personnel to direct traffic so that ambulances are guaranteed free access to the incoming patient area.

(3) Allots personnel to protect the key installation areas of the hospital.

(4) If the hospital's security personnel are not sufficient to handle the situation, requests help from the police.

(5) Deputes additional security staff to the Casualty and other designated wards.

(6) Designates a separate waiting area in the OPD block for relatives of the injured.

(7) Makes sure that on no account will be relatives be permitted into the Casualty or designated wards during the emergency.

8) Deputes an officer to be In-charge of ensuring the comfort and needs of the relatives. He will be responsible for obtaining information about individual patients to pass on to the relatives.

U. JOB RESPONSIBILITIES – MEDICAL SOCIAL WORKER

Reporting Area: Casualty / Control Room

Reporting Officer: Medical Superintendent (In-charge)

1. Will stay with the family members of the disaster victims.
2. Counseling & information regarding injured patient.

V. JOB RESPONSIBILITIES – BIO MEDICAL ENGINEER

Reporting Area: Casualty / Control Room

Reporting Officer: Deputy Director Engineering Services

1. To ensure proper functioning of all medical equipments.
2. To ensure arrangement of shifting of these equipments, if possible, where ever necessary promptly.

According to Dr. Seema Navaid, Senior Medical Officer, Clinical Incharge Blood Bank, BMHRC,Bhopal

1. Inclusion in inventory a list of critical products (Blood Bags, Anti Sera, TTI Kits, Test Tubes, Slides) services, and supplies related to collection, testing, processing, distribution (controlled-temperature transport), and storage of blood products.
2. Determination of necessary inventory of each item (i.e. number or days of supply).
3. Conduction of risk analysis of critical supplies on the basis of the kind of disaster-related events and reassess minimum inventory requirements.
4. Determination of additional space requirements and storage conditions.

According to Mr. Nitin Bhatia, Senior Manager Operations & IT In-charge, BMHRC, Bhopal.

A) Alarm system

A hospital is exposed to emergency and life threatening situations – form medical emergencies like cardiac arrest, accidents, casualties and disaster to danger arising from fire & bomb threat. Building safeguards and preparedness are the essence of all safety programmes. The alarm system is one such programmes. It is recommended that BMHRC should use codes e.g. – in case of fire, use the code Doctor Red or Code Red, whenever a disaster strikes.

B) Job Responsibilities of MRD, IT & Registration

a) Job responsibility – Medical Record Supervisor

Reporting Area – Medical Record Department

Reporting Officer – Sr. Manager Operations & MRD Incharge

Any other work assigned by superior in disaster apart from routine job responsibilities to be carried out by the staff of Medical Record Department.

b) Job responsibility – IT Supervisor

Reporting Area – EDP Department

Reporting Officer – Sr. Manager Operations & IT Incharge

Any other work assigned by superior in disaster apart from routine job responsibilities to be carried out by the staff of EDP Department

c) Job responsibility – Registration Personnel

Reporting Area – Medical Record Department

Reporting Officer – Sr. Manager Operations Registration Incharge

Any other work assigned by superior in disaster apart from routine job responsibilities to be carried out by the staff of Registration Department

Note: Any other responsibility as deemed appropriate may be given to any of the above Officers in addition to this by the competent authority.

(ANNEXURE- 2)

PROPOSED STOCK INVENTORY FOR DISASTER STORE

Sl. No.	Items	Total Quantity Required/ Place
	I.V. Fluids	**Emergency Department**
1.	Normal Saline 500 ml	50 bottles
2.	Dextrose 5% 500 ml/ 500ML	50 bottles
3	Dextrose 5%+saline 0.9% soln	50 bottles
4	Ringer lactate 500 ml	50 bottles
5.	Dextrose soln 25%100ml	10 amps
6.	Inj. Mannitol (20%) (100 ml)	10 bottles
	Resuscitation Drugs	
1.	Inj.Adrenaline 1mg	50 amps
2.	Inj. succinyl chloride	05 amp
3.	Inj. Rocoronium Bromide	10 amp
4.	Inj.Atropine sulphate 0.6 mg	50 amps
5.	Inj. Propofol 20 ml	10 amp
6.	Inj. Thiopentone sodium 1gm	05 amp
7.	Inj. Lignocaine HCl (Xylocard) 2% (50ml)	10 vials
8.	Inj.Calcium gluconate/chloride 1 gm	20 amps
9.	Inj.Hydrocortisone 100 mg	100 vials
10.	Inj.Dopamine 200 mg	10 amps
11.	Dobutamine HCL inj. 250mg	20 amps
12.	Noradrenaline inj. 2ml	20 amps
13.	Magnesium Sulphate inj. 1ml	10 amps
14.	Inj.Soda Bicarbonate 25 ml	20 amps
15.	Inj.Potassium Chloride 10 ml	10 amps
16.	Amiodarone inj. 50mg/ml	10 amp
17.	ORS	20 packets
	Antibiotics	
1	Inj.Cefotaxime 1 gm	50 vials
2	Amoxclave inj 1.2gm	50 vials
3	Ciprofloxacin inj. 100ml	50 vials
4	Inj.Metronidazole 500 mg	50 vials
	Antiallergics	
1	Inj.Chlopheniramine Maleate (2 ml)	50 amps
	Antidotes	
1	Inj.Tetanus Toxoid	20 amps
	Bronchodilators	
1	Ipratropium bromide neb soln 15ml	10 bottles
2	Liq.Salbutamol (15 ml)	10 bottles
3	Budesonide Neb. Soln. 0.5mg/2ml	50 amp
	Analgesic and Anesthetic Agents	
1	Lorazepam 2mg	10 amps

2	Inj.Midazolam 5 mg	5 vials
3	Inj.Lingocaine HCI without adrenaline 2% (30 ml)	5 vials
4	Diclofenac inj. 3ml 1m	50 amps
5	Paracetamol inj. 1% 100ml	20 bottles
6	Paracetamol inj. 2ml	20 amps
7	Inj. Tramadol 50 mg	50 amps
8	Pantoprazole inj. 40mg	20
9	Inj.Haloperidol 10 mg	05 amps
	Diuretic Agents	
1.	Inj.Frusemide 10 mg	50 amps
	Antiepileptics	
1.	Inj.Phenytoin Sodium 100 mg	50 amps
	Anti coagulants	
1.	Inj.Heparin 25,000 IU	2 vials
	Anti Emetics	
1	Inj.Ondansetron 4 mg	30 amps
2	Metoclopramide inj. 2ml	20 amps
	Eye drops/ointment	
1.	Paracain eye drops	5 bottles
2.	Prednisolone Acetate eye drops	50 bottles
3.	Cyclopentolate eye drops	1 bottle
4.	Oflox eye drops	50 bottle
5.	Tropicaplus eye drops	5 bottle
6.	Polyvinyl alcohol eye drop	50 bottle
	Antiseptic Solutions	
1.	Betadine solution 5% (1 litre)	5 bottles
2.	Handscrub 1 litre	5 bottles
3.	Surgical spirit 1 litre	5 bottle
4.	Hydrogen peroxide Soln. 400ml	10 bottle
	Dressing Materials (Disposable)	
1.	Small towel bins	3
2.	Gauze (Big bin)	3
3.	Bandage roll (6” rolls)	60
4.	Crepe bandage (4” rolls)	5
5.	Micropore Tape 5 cms.	20 nos
6.	Elastoplast 10 cms	5
7.	Safety pins	10 nos
8.	Eye pads (Small bin)	1 no
9.	Abdominal packs	2 bins
	Dressing Materials (non disposable)	
1.	Scissors	5
2.	Sponge holders	5
3.	Kidney trays (enamel)	5

4.	Bowls (12”)	5
5.	Basins (18”)	2
	Instruments and Trays	
1.	Dressing packs	25
2.	Tracheostomy sets	2
3.	Catheterisation trays	6
4.	Suture trays	10
5.	Magil’s forceps	1
6.	IC tube sets with under water seal	2
7.	DPL sets	1
8.	Pressure infusion cuffs	2
9.	IV infusion pumps	4
10.	Gauze pad bin	1
	Disposable Materials	
1.	IV infusion sets	40
2.	Blood transfusion sets	20
3 a.	IV cannulae 16G, 18G	20 each
3 b.	IV cannluae 20G, 22G	20 / 05 nos
4.	Disposable syringes 2 ml, 5 ml, 10 ml Disposable syringes 20 ml	20 each
5.	Disposable needles - 20 G, 21 G	10 each
6.	Surgical gloves (sterile) – Size 6 Sizes 6.5 and 7, 7.5	100 nos total
7.	3-way Cannulae	10
8.	Disposable surgical masks	100 nos
9.	Suture material	
	Airway Equipment	
1.	Tracheostomy tubes (cuffed): Size 6,7,8	1 each
2.	Endotracheal tubes: Size 7.5, 8.5	5 each
2 a	Size 3, 3.5, 4, 4.5, 5, 5.5, 6, 6.5, 7, 8	1 each
2 b	Stylets 3 sizes	1 each
3.	Ambu bags Paediatric	1
3 a	Ambu bags Adult	2
4.	Oropharyngeal tubes: Sizes 3,4	5 each
4 a.	Oropharyngeal tubes: Sizes 1,2	2 each
4 b.	Suction Catheters Size 14	10
4 c.	Ryles Tube Size 14	10
5.	Simple Face masks	10

6.	Laryngoscopes (with all blades)	2
7.	Mobile suction apparatus (battery operated)	2
8.	Oxygen cylinder with trolley	4
	Linen	
1.	Bedsheets	20
2.	Drawsheets	20
3.	Pillow-cases	20
4.	Towels	20
5.	Blankets	20
	Miscellaneous	
1.	Patient's trolleys with mattresses	10
2.	Wheel chairs	10
3.	Torch with batteries	10
4.	Portable emergency lamps	5
5.	Mackintosh (disposable)	20
6.	Oxygen cylinders on patient's trolleys	2
7.	Defibrillator	1
8.	Capnometer	2
9.	Portable Pulse Oximeter	10
10.	Nebulizer	2
11.	BP apparatus	2
12.	Bed pans	2
13.	Urinals	2
14.	Measuring jars: 1000 ml, 500 ml	1 each
15.	Thermometer	2
16.	Disposable cups	10

(ANNEXURE-3)

HOSPITAL EVACUATION PLANS AND GUIDELINES ACCORDING TO INTERNATIONAL BEST PRACTICES

I. Purpose:

Evacuation - the removal of patients, staff and/or visitors in response to a situation which renders any medical facility unsafe for occupancy or prevents the delivery of necessary patient care.

II. Policy Statement:

- **Partial Evacuation** - patients are transferred within the hospital. There are two levels of a partial response:

1. Horizontal - first response; patient movement occurs horizontally to one side of a set of fire barrier doors.
2. Vertical - movement of patients to a safe area on another floor or outside the building.

   This type of evacuation is more difficult due to stairways which will require carrying of non-ambulatory patients; elevators cannot be used.

- **Full Evacuation** - patients are transferred from Hospital to an outside area, other hospitals, or other alternatives areas.

1. Paramedic escorted patients will be diverted from the Emergency Department due to internal disruption.
2. The building should be evacuated from the top down as evacuation at lower levels can be easily accelerated if the danger increases rapidly.

III. Responsibility:

Authorization for Evacuation - Director BMHRC.

The decision to evacuate from unsafe or damaged areas shall be based on the following information:

1. The Engineering Department's evaluation of the utilities and/or structure of the department.
2. The medical staff and/or Nursing Department's determination whether adequate patient care can continue.
3. Evacuation should only be attempted when the authority is certain the area chosen for the evacuees is safer than the area of leaving.
4. Evacuation plan is based on the premise that an event has occurred, causing the hospital to be in an internal disaster mode

IV. Procedure:

a. General Instructions-

1. Evacuate most hazardous areas first (those closest to danger or farthest from exit).
2. Use nearest or safest appropriate exit. Sequence of evacuation should be:

a) Patients in immediate danger

b) Ambulatory patients

c) Semi-ambulatory patients

d) Non-ambulatory patients

3. Close all doors. If time permits, shut off oxygen, water, light and gas, if able.
4. Elevators may be used, except during a fire or after an earth quake.

b. Hospital Emergency Disaster Management Protocol: -

1. Emergency incident command (In The control Room).

a. All available information shall be evaluated and evacuation schedule established in coordination with the HODs & In-charges of departments. This information shall include:

   i. Structural, non-structural, and utility evaluation from Engineering/Damage Assessment & Control Officer.

   ii. Patient status reports from Planning Section Chief.

   iii. Evaluate manpower levels and authorize activation of staff call-in plans, as needed.

b. Disaster evacuation schedule to:

   i. Planning Section Chief

   ii. CPRO/PRO

   iii. Safety and Security Officer

   iv. Logistics Chief

   v. Operations Chief

2. CPRO/PRO

   a. Maintain contact with Public Safety Officials, Health Dept. and Ambulance Agency.

   b. Complete "Hospital Evacuation Worksheet"

3. Logistics Chief

   a. Assign Transportation Officer to assemble evacuation teams from Labor Pool.

   b. Notify Planning Section Chief of plans.

4. Tr**ansportation** O**fficer**

   a. Assemble evacuation teams from Labor Pool.

   b. Ensure coordination of off-campus patient transportation.

   c. Confirm implementation of transportation action plan.

   d. If able, assign six people to each floor for evacuation manpower.

   e. Brief team members on evacuation techniques.

   f. Arrange transportation devices (Wheelchairs, Gurneys, etc. to be delivered to assist in evacuation).

g. Report to floor being evacuated and supervise evacuation.

h. Report to Nursing Supervisor /In-charge Nurse for order of patients being evacuated and method of evacuation.

5. Deputy nursing superintendents in coordination with Nursing Superintendent.

a. Designate holding areas for critical, semi-critical, and ambulatory evacuated patients.

b. Organize efforts to meet medical care needs and physicians staffing of Evacuation Holding areas.

c. Distribute evacuation schedule to Nursing Supervisor / In-charge Nurses.

d. Verify Nursing Supervisor / In-charge Nurses have initiated evacuation procedure.

e. To notify physicians of need for transfer orders.

f. Assign holding area, Coordinators, and adequate number of nurses to holding areas.

g. Contact pre-established lists of hospitals, extended care facilities, etc. to determine places to relocate patients. Forward responses to Planning Chief.

6. Para Medical Staff

a. Notify physicians of need for patient transfer orders.

b. Assist Nursing Officers as needed.

7. Nursing Supervisors /In-charge Nurses

a. Determine patient status. Patients will be evacuated according to status.

b. Communicate status with large sticker on patient's chart according to the following criteria:

i) Non-critical/Ambulatory

ii) Non-critical/Non-ambulatory

iii) Critical/requires ventilation or special equipment

c. Report patient status to Deputy Nursing superintendents.

d. Assign nursing officer to maintain patient care.

e. Assign two nursing officer to prepare patients for evacuation.

I. Place personal belongings in a bag labeled "BELONGINGS" with name Patient No. with medications, prosthetics, and special Patient need items the inside bag.

II. Place Addressograph in Patient's chart secured with tape, which is to remain with the patient.

f. Designate a safe exit after determining location of patients to be evacuated.

g. Assign a person to record Evacuation Activity, including:

1. Time of evacuation

2. Method of evacuation

3. Name of patient

4. Evacuation status

5. Evacuated from

6. Evacuated to

h. Forward documentation of evacuation and patient disposition to Medical Record Officer and CPRO/PRO.

8. Medical Record Officer

a. Compile patient info on Inquiry Sheets.

9. Head of Department of Anesthesia

a. Assign staff members to perform ventilation on required patients.

b. Assess number of positive pressure breathing devices/bag-valve-masks available

10. Safety and Security Officer

a. Sign a security person to each area being evacuated for traffic control/safety.

b. Turn off oxygen, lights, etc. as situation demands.

c. Check the complete evacuation has taken place and that no patients/staff remain.

d. Place "Evacuated at" (date/time) sign up at main area exit/entrance of evacuated area after evacuation is complete.

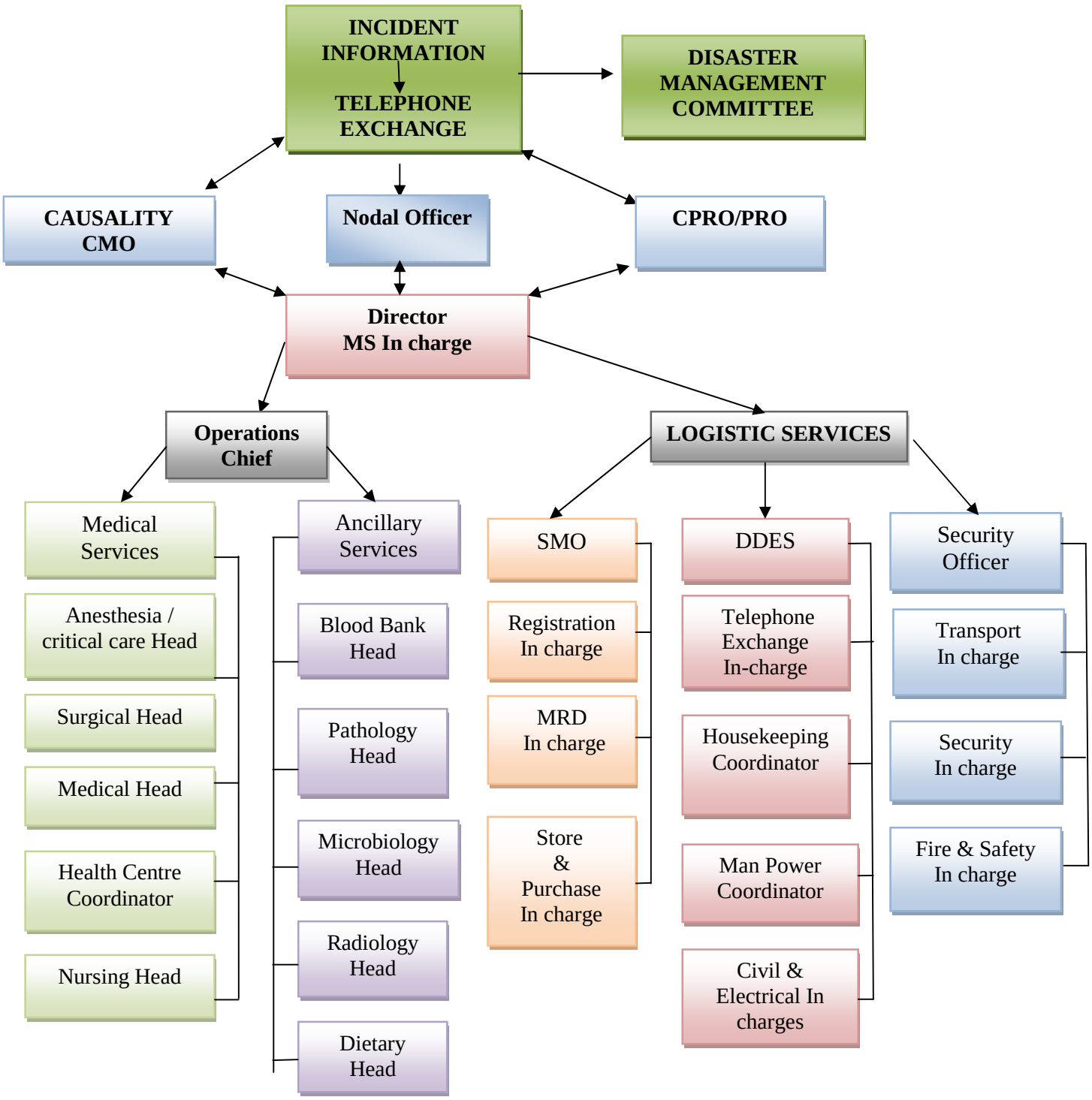
11. Bio Medical Engineer

Obtain equipment/supplies needed for structural safety during evacuation.

12. Asst. Administration Officer

All available Engineering, Housekeeping, Security staff, etc. not previously assigned to incident will assist in the movement of patients.

(ANNEXURE- 4)



FLOW CHART: DISASTER MANAGEMENT PROTOCOL

(APPENDIX -1)

GUIDELINES FOR AVAILABILITY OF KNOWLEDGE, SKILLS AND RESOURCES FOR DISASTER MANAGEMENT

Airway	Skills/ treatment required	Assessment of airway compromise, manual maneuvers (chin lift, jaw thrust, positioning), insertion of oral and nasal airway insertion, bag and mask ventilation, use of suction, endotracheal intubation, cricothyroidectomy.
	Resources required	Oral/nasal airway, Ambu bag, suction device with tubing and tip, laryngoscope, endotracheal tube, basic trauma pack, Magill forceps, esophageal detector device, other advanced airway equipment.
Breathing	Skills/ treatment required	Assessment of respiratory distress and adequacy of ventilation, administration of oxygen, needle thoracostomy, three way dressing, chest Tube insertion.
	Resources required	Stethoscope, oxygen supply, face mask with associated tubing, needle and syringe, nasal prangs, chest tubes, underwater seal bottle, pulse oximetry, ABG analyzer, mechanical ventilators.
Circulation and shock	Skills/ treatment required	Assessment of shock, control of hemorrhage, arterial tourniquet, splinting of fractures, fluid resuscitation, peripheral IV access, recognition of
		hypothermia and external re-warming for it, use of fluids and antibiotics for shock, peripheral cut down access, knowledge of resuscitation parameters, differential diagnosis of shock, urinary catheterization, central/ intraosseous venous access, pelvic wrap for hemorrhage control, transfusion knowledge, use of pressors for neurogenic shock, use of warmed fluids, core rewarming, interfascial packing for severe wounds, CVP monitoring, ABG analyzer, right heart catheterization.
	Resources required	Watch with second hand, stethoscope, BP cuff, gauze and bandage, arterial tourniquet, crystalloids, IV set, thermometer, urinary catheter, NG tube, weighing scale for children, blood transfusion capability, CVP line, intraosseous needle, lab facility for hematocrit and electrolyte, pressors, fluid warmers, CVP monitors and more advanced patient monitoring system, colloids, ABG analysis.
Chest injury	Skills/ treatment required	Adequate pain control and respiratory physiotherapy for chest injuries/ rib Fractures, rib/intra-pleural block, epidural block, Auto-transfusion from chest tubes, skill for thoracotomy.
	Resources required	Analgesics, local anaesthetics, syringes, spinal-epidural set, thoracostomy set, cell saver, X-Ray machine, CT scan desirable.
Abdominal injury	Skills/ treatment required	Clinical assessment, diagnostic peritoneal lavage (DPL), ultrasonograhy, skill for intermediate/advanced laparotomy, CT scan facility.
	Resources required	Ultrasonograhy machine, laparotomy set, X-Ray machine, CT scan.

Head injury	Skills/ treatment required	Recognisation of altered consciousness, lateralizing signs, pupils, maintenance of normotension and oxygenation to prevent secondary brain injury, protein and calorie supplement, avoidance of over hydration in raised ICP, burr holes, monitoring and treatment of raised ICP, surgical treatment of closed/open depressed skull fractures, more advanced neurosurgical procedures.
	Resources required	X-Ray machine, CT scans, MRI desirable.
Spinal injury	Skills/ treatment required	Assessment-recognisation of presence of spinal injury, monitering neurological function, immobilization, maintenance of normotension and oxygenation to prevent secondary spinal injury, proper management immobilization patient to prevent complication e.g. bed sores, urinary retention/infection, non-surgical management of spinal trauma as indicated, assessment by international classification system, surgical treatment of spinal injury/neurological deterioration in presence of spinal cord compression.
	Resources required	Cervical collar , back board, CT scans, MRI desirable, spinal surgery set,
Neck injury	Skills/ treatment	External pressure for bleeding, recognisation of platysmal penetration, packing/ balloon tamponade for bleeding, skill to explore neck, contrast radiography, endoscopy, angiography
	Resources required	Gauze and bandages, standard neck dissection set endoscope, X-Ray machine, CT scan, angiography facility, MRI desirable.
Extremity injury	Skills/ treatment required	Recognisation of neurovascular compromise, basic immobilization (sling, splint), pelvic wrap for hemorrhage control, assessment and splinting of hand injury, application of spine board, proper management immobilization patient to prevent complication, skin/ skeletal traction, internal/external fixation, operative wound management, debridement, closed/open reduction, tendon repair, amputation, repair/fixation of hand injury, measurement of compartment syndrome and fasciotomy
	Resources required	Slings and splints, spine board, X-Ray, instruments for skin/ skeletal traction, internal/external fixation, tendon repair and amputation, portable X-Ray, image intensifier, CT scan, MRI desirable

(APPENDIX -2)

RAPID HEALTH ASSESSMENT

(To be submitted within 24 hrs)

A. Description of the Event

Nature of the Event: ----------
Time of the Event: ----------
Date of the Event: ----------
Place of the Event: ----------

B. Number of persons affected

Death: ----------
Injured: ----------
Referred to hospital: ----------
OPD: ----------
Admitted: ----------
Total: ----------

C. Action Taken

D. Problems Encountered

E. Recommendations

Prepared by: ----------
Position: ----------
Office: ----------
Date: ----------

LIST OF ABBREVIATIONS

ABBREVIATION	PARTICULARS
CCU	Critical Care Unit
CMO	Casualty Medical Officer
CPRO	Consultant Public Relation Officer
CSSD	Central Sterile Services Department
CTVS-ICU	Cardiothoracic Vascular Surgery-Intensive Care Unit
DDES	Deputy Director Engineering Services
DDF	Deputy Director Finance
DNS	Deputy Nursing Superintendent
EPABX	Electronic Private Automatic Branch Exchange
GICU	General Intensive Care Unit
HDU	High Dependency Unit
HOD	Head of Department
IC	Incident Commander
MLC	Medico Legal Cases
MRD	Medical Record Department
MS	Medical Superintendent
MSW	Medical Social Worker
NS	Nursing Superintendent
OT	Operation Theatre
PRO	Public Relation Officer
SMO	Senior Manager Operations

Approved by:
Director
(Incharge) BMHRC

PROPOSED SOP FOR THE PREPAREDNESS FOR NATURAL DISASTER

Dr. A Rashid Senior Medical Officer & Nodal Officer (AB-PMJAY) **(Member Secretary)**	Mr. Nitin Bhatia, Senior Manager Operations & IT In-charge, BMHRC, Bhopal **(Member)**	Dr. Lalit Kumar, Specialist Grade 1, Dept. of Pulmonary Medicine, BMHRC, Bhopal **(Member)**
Dr. Saifullah Tipu, Professor, Dept. of Anaesthesia, BMHRC, Bhopal **(Member)**	Dr. Meena Zinjare, Specialist Grade 1, & Health Centre Coordinator, BMHRC, Bhopal **(Member)**	Dr. Sandeep K.Sorte, Professor, Dept. of Neuro-Surgery, BMHRC, Bhopal **(Member)**
Mr. Atul Jain, Deputy Director Finance, BMHRC, Bhopal **(Member)**		Mr. S.R.Ganvir Deputy Director Finance **(Member)**
	Dr. Anurag Yadav Prof. & HOD Dept. of Anaesthesia & Medical Superintendent **(Chairman)**	

Approved by:
Director BMHRC