Annexure A

DISASTER MANUAL





Employees' State Insurance Corporation ESI MODEL HOSPITAL BASAI DARAPUR, NEW DELHI-110015

Disaster Manual ESI Model Hospital , Basai Darapur, New Delhi 110015

updated on 01/01/2015 by :

- 1. Dr. Pascal DSouza (AMS Casualty)
- 2. Dr. Girish Arora (Casualty In-charge)
- 3. Dr. Banikanta Singha (SR Casualty)

Under the guidance of Medical Superintendent- Dr. Nisha Dhingra

Introduction:

ESI Hospital presently has indoor bed strength of 600. A/E department has 45 beds with capacity of additional 10 beds in the event of disaster. As per the directive of the Delhi Govt. a provision of additional 60 disaster beds are under process currently at this hospital. Department is well equipped with ambulances, equipments for critical care management, resuscitation devices, round the clock CMOs and doctors of all major specialities are available. There are 9 well equipped OTs and emergency operations are performed round the clock. Institution has ICU(6 beds), NICU, ICCU (6 beds), well equipped Labor room, Blood Blank, Radiology & Imaging, Pathology, Biochemistry, Microbiology, Laundry, CSSD, Kitchen and heavy duty generators.

Institutional Framework under Disaster Management Act 2005:

- a) National Disaster Management Authority (NDMA)
- b) State Disaster Management Authority (SDMA)
- c) District Disaster Authority (DDMA)

Objectives and Goals of ESI Hospital Basaidararpur:

The main objective of Hospital Emergency/Disaster plan is to optimally prepare the staff and institutional resources of the hospital for effective performance in different disaster situations. The Hospital disaster plans should address not only the mass casualties which may result from MCI(Mass Casualty Incident) that has occurred away from the hospital but should also address the situation where the hospital itself has been affected by a disaster – fire, explosion, flooding and earthquake.

DISASTER MANAGEMENT PLAN

Disaster normally follows a destructive event, which leads to human causalities requiring extra mobilization of medical resources. The management of disaster is a **Team Effort** and requires **Multidisciplinary Approach**. It is essential for every hospital to ensure that it is geared fully to meet any disaster. It is therefore important that every hospital has a **DISASTER PLAN** and a **DISASTER MANAGEMENT COMMITTEE** to oversee implementation of Disaster plan.

Disater Policy Committee

Committee of following officers/officials is constituted for planning of Disaster plan for this hospital:

<u>Name</u>	Address	<u>Contact</u>
		<u>Number</u>
Dr. Nisha Dhingra	J-3/64 IInd Floor,	M-
	Rajouri Garden,New Delhi	09899473565
		011-25190159
Dr.Ramneek	C-147,East of Kailash,New	09312227317
Duggal	Delhi-110065	01126823497
Dr. S.Dey		9971166078
Dr.Ram Avtar	14,MM DLF, Amur Vihar,	9810399857
	Loni,Gaziabad,U.P.	
DR.Madhu Gupta	C-2/83, Plot No.4, Sector-	9873581030
	11,	
	Dwarka Delhi-75	
Dr.Nirupama		9810349549
Sachdeva		
Dr.R.D.Ojha	137,Jahaj Aptt. Inder	9868125211
	Enclave,New Delhi-110087	
Mrs.Radha	B2-C36B Janakpuri N Delhi	9899131914
		011-25970728
DR.Pascal	EC-285, Maya Enclave, New	9868215047
DSouza	Delhi-110064	
	Dr. Nisha Dhingra Dr. Ramneek Duggal Dr. S.Dey Dr.Ram Avtar DR.Madhu Gupta Dr.Nirupama Sachdeva Dr.R.D.Ojha Mrs.Radha DR.Pascal	Dr. Nisha DhingraJ-3/64 IInd Floor, Rajouri Garden,New DelhiDr. RamneekC-147,East of Kailash,New Delhi-110065DuggalDelhi-110065Dr. S. DeyIDr. Ram Avtar14,MM DLF, Amur Vihar, Loni,Gaziabad,U.P.DR.Madhu GuptaC-2/83, Plot No.4, Sector- 11, Dwarka Delhi-75Dr. NirupamaImage Comparison of the sector of t

A. DISASTER MANAGEMENT COMMITTEE

Committee of following officers/officials is constituted for implementation of Disaster plan for this hospital:

Chairperson	: Medical Superintende	: Medical Superintendent	
Co-ordinator	Add. M.S. Casualty (I	Nodal Officer)	
Constitution	Name	Address	
Chairman,MS	Dr. Nisha Dhingra	J-3/64 IInd Floor,	
		Rajouri Garden, New Delhi	
HOD, Medicine	Dr.Ramneek Duggal	C-147,East of Kailash,New	
		Delhi-110065	
HOD, Surgery	Dr. S.Dey		
HOD, Ortho	Dr.Ram Avtar	14,MM DLF, Amur Vihar,	
		Loni,Gaziabad,U.P.	
HOD, Anaesth	DR.Madhu Gupta	C-2/83, Plot No.4, Sector-11,	
		Dwarka Delhi-75	
I/C Hospital Store	Dr.Nirupama		
	Sachdeva		
Add. M.S.	Dr.R.D.Ojha	137, Jahaj Aptt. Inder	
		Enclave, New Delhi-110087	
Nursing	Mrs.Radha	B2-C36B Janakpuri N Delhi	
Superintendent			
(officiating)			
AMS (Casualty)	DR.Pascal DSouza	EC-285, Maya Enclave,New	
Member Secretary		Delhi-110064	

- B. Lines of Authority : The following persons in the order listed will be incharge
 - Medical Superintendent
 Additional M.S.
 CMO incharge
 Director Administration
 Nursing Superintendent

C. DISASTER MANAGEMENT PLAN

Disaster management plan for ESI hospital has been prepared under following headings:

1. PREDISASTER PREPAREDNESS

- 2. ACTIVATION OF DISASTER PLAN
- 3. POST DISASTER REVIEW

1. PREDISASTER PREPAREDNESS

It is of utmost importance that action is initiated for identification of requirement and arrangement of Manpower and Material required for disaster management before the occurrence of such an event. Pre disaster preparedness is divided into following heads:

Discussion, finalization and review of disaster management plan:

The Disaster management committee shall meet **once in three months** in the chamber of the MS for discussion on the disaster management plan. All committee members shall be provided with a copy of the Disaster management plan and a copy of the plan shall also be displayed in a locked box to be called the "Disaster box" in Casualty. Add. M.S. Casualty (Nodal officer), Disaster Management will be responsible for convening meeting of members, bringing out minutes of the meeting, issuing requisite circulars, interacting with in charges and staff of other departments and to oversee the overall implementation of the disaster plan.

Discussion and finalization of requirement for infrastructure and equipment:

A list of equipments, furniture items, drugs, surgical consumables and other misc. items required for exclusive use during disaster shall be finalized by the committee. The list shall be kept with the Nursing sister I/c Disaster and a copy shall also be displayed prominently in the **Disaster Box**. All items for exclusive use during disaster shall be stored separately, preferably in an open secure area in the hospital under the charge of **Nursing sister I/c Disaster**. She will be responsible for regular maintenance of these items in proper functional

condition. She shall also monitor the drugs and other consumables for expiry and replace them regularly with fresh stock, atleast once in every six months. The key of disaster store shall be kept in the custody of Nodal officer, Disaster and NS I/c Disaster. One additional key shall be kept in the disaster box and shall be used exclusively during the time of disaster incase regular key is not available.

.Senior hospital functionaries shall be assigned following supervisory duties at the time of disaster:

- i) P.R.O.
- ii) Chief, Operations
- iii) Chief, Planning
- iv) Chief, Logistics

P.R.O.

Addl.M.S. Casualty shall function or he may designate some other officer as P.R.O. at the time of Disaster. PRO shall be responsible for interacting with patients relatives, Media, issuing disaster related statements etc.

No other hospital staff, except the nominated PRO would be authorized to issue any statements on behalf of the hospital.

CHIEF, OPERATIONS

Nodal officer, Disaster Management / CCMO shall function as Chief, Operations at the time of Disaster. He shall be responsible for **Mobilisation of committee members/other staff,** contacting other nodal agencies for providing ancillary support, contacting neighboring/referral hospitals for shifting of patients and for overall supervision at the time of disaster. Nodal officer, Disaster Management /CCMO shall establish contact with ancillary agencies like Area Police station, Fire station, CATS, neighboring/referral hospitals, NGOs etc and **shall maintain directory of contact persons of these agencies**. **A copy of directory** should also be displayed in the Disaster box. Nodal officer, Disaster Management/CCMO shall also ensure that Addresses and telephone numbers of the disaster committee members/Incharges of various clinical units are displayed prominently in the

casualty/Disaster box. He/she shall also be responsible for **mobilization of field QRT as** well as field ambulance.

CHIEF, PLANNING

In-charge Orthopedics himself shall function or designate any specialist as Chief of Planning at the time of disaster. He shall be responsible for management of Triage area, classification/segregation of patients, admission/referral of patients, record keeping etc. For keeping record of patients, a separate register shall be maintained in the Triage area with following headings

D.No. / Conciousness level / Time / Name / Father's/Husband's Name / Age/sex / Address
/ Marks of identification / Valuables / Brought by / Diff. diagnosis / Colour coding / Outcome

CHIEF, LOGISTICS

In-charge of Hospital Medical Store himself/herself or designate an officer from store as Chief of Logistics at the time of Disaster. He/she shall be responsible for getting the disaster ward ready and arranging stores and material required for making the disaster ward functional. He/she shall also, in consultation with I/c Contractual Services, look after the security arrangements during disaster, Hygiene, Kitchen services, laundry etc.

Identification of space for Disaster ward:

ESI Hospital presently has indoor bed strength of 600. As per the decision of the Delhi Govt., a provision of additional 60 disaster is under process currently at this hospital. **The Canteen area in the services block and Waiting Lobby in OPD Regn.** have been identified for conversion into indoor ward at the time of a disaster. Additional beds can be accommodated in the area in front of Emergency and OPD block on the G.F.

Additional space shall also be created in existing indoor area by discharge of non-serious patients belonging to following categories.

- Convalescing patients
- Pre-operative elective surgery cases

• Patients who can be treated on domiciliary basis.

:

Identification of

Casualty will function as triage area at the time of disaster. Triage area shall be manned by Chief of Planning who shall supervise categorization of patients in triage area.

The patients shall be categorized and given colour coding ; colour ribbons to be tied preferably on the **Right upper arm** of the patient and colour marking/stickers to be put on the patient's card as per following criteria:

Category	Colour code	e Type of patient
А	Red	Patients requiring immediate Resuscitation
		(Immediate Priority)
В	Yellow	Patients having Potentially Life Threatening Condition
		(Urgent Priority)
С	Green	Walking Wounded
		(Delayed Priority)
D	Black	Dead

Nodal officer Disaster/ Adl. AMS Casualty shall initiate action for arranging colour code stickers for the purpose.

The patients can initially be triaged into the above 4 categories and moved into 4 different areas. The residents or consultants looking after those areas can further triage them and upgrade the category in the following circumstances.

Immediate Priority 1

- a. Any injury with respiratory or circulatory compromise
- b. Injuries to the facio maxillary area, trachea, neck (which will lead to respiratory compromise)
- c. Penetrating chest and abdominal injuries
- d. Major vascular injuries
- e. Massive internal/external bleeding
- f. Head injuries with signs of cerebral compression

- g. Facial burns, respiratory burns, burns 20-60% (>10% in children)
- h. Perforated eye injuries

Send to the resuscitation area.

Urgent Priority 2

- a. Compound fracture without vascular compromise.
- b. Other fractures without vascular compromise.
- c. Extremity non-bleeding soft tissue injuries without active bleeding.
- d. Stable abdominal injury.
- e. Head injury without signs of cerebral compression
- f. Stable eye injuries.

Send to area designated for stable patients.

Delayed Priority 3

- a. Minor cuts, bruises, abrasions
- b. Minor scald
- c. Burns<20% (<10% in children)

Send to OPD area to wait for treatment

Beyond Salvage Category

- a. In Cardiac arrest on arrival to hospital.
- b. Massive injuries incompatible with life.
- c. Burns 60% or more

Send to designated "beyond salvage " area

A coloured tag is put on each patient depending on the triage category the patient belongs to.

SITE TRIAGE OFFICER

The DC will dispatch the officer designated as Site Triage Officer to the site of the disaster, if necessity for this arises. The Site Triage Officer will perform pre hospital triage of victims as per the principles used by the Triage Officer (vide infra).

TRIAGE OFFICER (T.O.)

The second senior most person in the AE department at the time of disaster is designated as Triage Officer. His responsibility will be triage of victims either at the site of the disaster or at the entry of the hospital.

T.O. shall perform triage of victims applying the principles of medical sciences. Triage is performed irrespective of age, sex, social status or any other such factors. The result of the examination will be indicated on the appropriate performa and signed by the TO recoeding the date and time. Each patient will be given a number for reference which will be marked on the victim and the performa. The following will be assessed:

a.	Vital signs	: Respiration – Regular/Irregular/Absent
		Heart Beat – Regular/Irregular/Absent
		Major Pulse – Strong/Weak/Absent
b.	Sensorium	: Conscious/Semiconscious/Unconscious
c.	Active bleeding (any site)	: Yes/No
	Site	
d.	Major injuries requiring urgent	: Yes/No

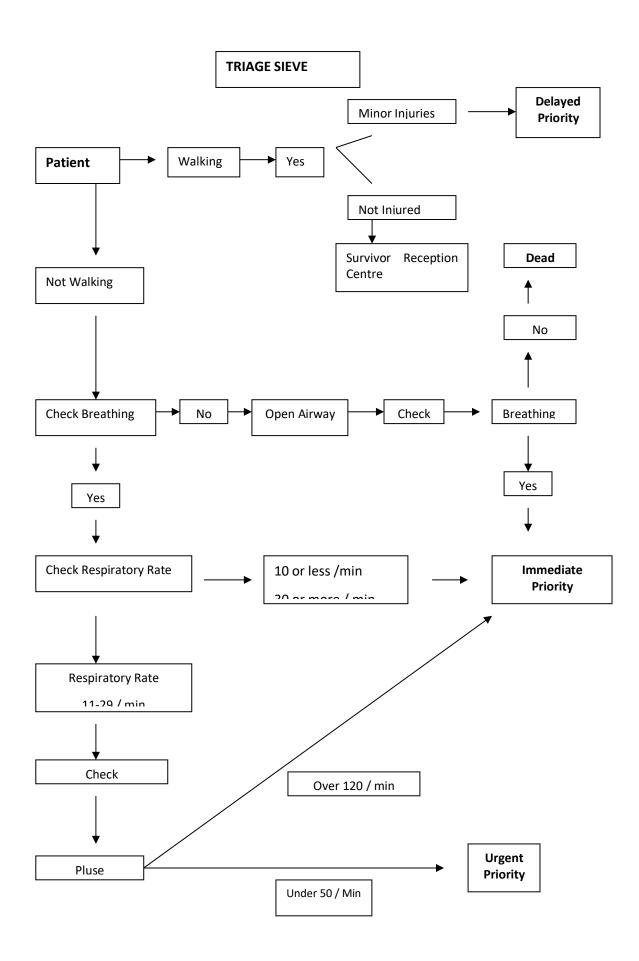
- Surgical/orthopedic intervention Specify
- e. Any other significant point :
- f. Colour Codes to be followed

RED	:	Priority I
	:	Critically ill
	:	Require urgent attention
	:	Will be transferred to RED ROOM
YELLOW	:	Priority II
	:	Seriously ill
	:	Transfer to YELLOW ROOM

GREEN	:	Priority III
	:	Minor problems
	:	Transfer to GREEN ROOM
BLACK	:	Unsalvageable. No further intervention required
	:	Dead. Transfer to MORTUARY

TRIAGE AREA PROFORMA

EXAMINATION	RED	YELLOW	<u>GREEN</u>	BLACK
	(any one or all)			
Respiration Heart Beat Major Pulse Sensorium Active Bleeding	Irregular/Laboured Irregular Weak/Absent Unconscious Large Volume	Regular Regular Weak Semi- conscious Small Volume	Regular Regular Strong Conscious Absent	None None None None
Major Injury	Require Immediate Surgery	Surgery can wait for some hours	None	None
Other Points				
Shift to	RED ROOM	YELLOW ROOM	GREEN ROOM	MORTUARY



Quick Response Team

The Quick response Team comprises of a doctor, nurse, pharmacist and 2 support personnel on rotation basis. There should be at least 3 such teams for a hospital with bed strength more than 200. The response plan for meeting out any disaster is as per emergency support function framework of the hospital. The response mechanism to be observed for the field level care shall be as under:

- 1. Any untoward incident with limited casualty
 - a) First responder will be police (100), Fire(101), Emergency Medical services (CATS), Representative from DDMA(1077) and available persons/bystander at the place of incident.
 - b) EMS(Ambulance Services) will be available through 102 and 1099.
- 2. Multiple / Mass Casualty Situation
 - a) First responder will be police (100), Fire(101), Emergency Medical services (CATS), Representative from DDMA(1077) and available persons/bystanders at the place of incident.
 - b) EMS(Ambulance Services) will be available through 102 and 1099.
 - c) Second responder to report in the field as per direction- Quick Response Team from the offices of Chief District Medical Officers and other Health implementing agencies. If situation so demand QRTs are to be deputed from nodal hospital and other hospitals in the district.

Maintenance of patient record:

All Patient related details shall be maintained in the triage area in a separate register under the direct supervision of Chief, planning. The committee shall finalise the format for such records and accordingly printed registers shall be made available at Casualty for use during disaster.

Ambulance service:

Hospital presently has two fully equipped ambulances and hearse van on contract which shall be used for transfer of patients/dead bodies at the time of disaster. CCMO shall ensure maintenance of these vehicles in proper working condition through Adl.AMS casualty. No Ambulance shall be sent to bring any the staff member during the disaster under any circumstances.

Mortuary services:

Hospital has a storage capacity for three dead bodies in the hospital mortuary. Any additional load of dead bodies can be stored in a vacant area near **Mortuary**. CCMO shall ensure that the mortuary cabinets are in proper working condition. One key each of Mortuary shall be kept in the custody of **Nodal officer**, **Disaster**, **NS I/C Disaster and CMO** on duty.

- a) DOA(Death on arrival) will be tagged with a disaster tag(Black).Personal belongings will not be removed.
- b) Security persons will remain with bodies until removed by proper authorities.
- c) Bodies will be handed over to the relatives through police personnel after completion of necessary procedures.

Structural Mitigation measures:

Nodal officer, Disaster Management shall, in discussion with PWD agencies initiate action of identification and carrying out various structural mitigation measures for strengthening of the existing hospital building structure.

Non-Structural Mitigation measures:

A committee of Nodal officer, Disaster Management (designated chief operations), Incharge Orthopedics (designated chief planning), In-charge medical store (designated chief logistics),CCMO shall make a survey of the hospital and suggest **measures for safety and stability of various movable equipments/furnitures /instruments and other consumable items during a disaster such as Earthquake.**

Disaster mock exercise:

Adl. AMS Casualty/ Nodal Officer will plan for disaster mock exercises to be undertaken at regular intervals, preferably every six months to assess the readiness and functional adequacy of the plan.

2. ACTIVATION OF DISASTER PLAN

The CMO on duty, on receipt of information about disaster shall activate the disaster Plan. Before activation of disaster plan, he shall confirm the onset of disaster in following manners :

- Call Back at the disaster site
- Confirm from Local P.S.
- Confirm from the control room of CATS
- Confirm from control room Fire Station

After confirmation of disaster, the CMO on duty shall also assess the magnitude of disaster, after receiving patients in casualty, by following method :

No. of patients expected = No. of patients received in two hours x 2

On the basis of above assessment, the disaster shall be divided into following categories:

A- Moderate Disaster	Expected Patient load less than 30
B- Severe Disaster	Expected Patient load more than 30

Classification of disaster shall help in arranging manpower/material as per the expected patient load.

In addition to above, CMO on duty shall also inform the Nodal officer, Disaster Management /I/C Casualty and mobilize the staff available in different areas of the hospital/staying in staff quarters in hospital complex.

CMO on duty shall carry out the duties of Nodal officer, Disaster Management till the arrival of the nodal officer. He shall get the disaster ward readied for admission/management of patients. He shall Sound alert in different areas of the hospital e.g. laboratory, radiology, security, operation theatre, telephone deptt. etc. He will keep the ambulance ready for transfer of patients from disaster site.

Communications:

- 1. A **Command Center** will be set up in Casualty to handle and coordinate all internal communications. All department heads or their designee will report to this office and call as many of their employees as needed.
- 2. Person directing personnel pool shall send a "**Runner**" to all departments to advise them of the type of disaster and number of victims and extent of injuries when this information is available.
 - Nursing will be notified by the designated persons.
 - Department Heads will be notified by designated staff.
 - Department Heads will notify their key personnel.

3 A **"Visitor Control Center"** will be set up in the front lobby. Families of casualties will be instructed to wait there until notified about the patient's condition. Normal visiting hours will be suspended during the disaster situation.

- A hospital staff member will stay with the family members. (Social Services will be assigned here after reporting to the Command Center and other personnel assigned as needed)
- A list of the visitor's names in association with the patient they are inquiring about should be kept. Volunteers may be needed to escort visitors within the facility.

4. Telephone lines will be made available for outgoing and incoming calls. One line will be designated as the open line to the external Command Center. The person in charge will designate assigned staff to monitor the phones.

Supplies and Equipment:

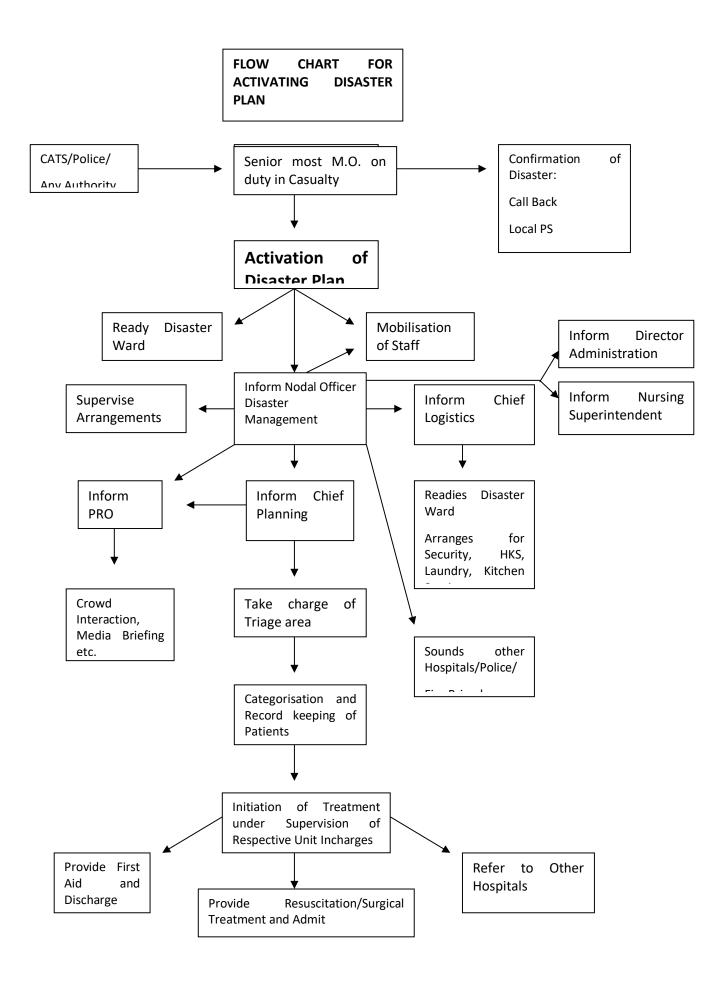
- 1. Extra supplies will be obtained from indoors and from hospital stores through runners.
- 2. Outside supplies will be ordered by the Hospital Stores In-Charge.

Valuables and Clothing:

1. Large paper or plastic bags will be made available in the treatment Areas and the storeroom for patient's clothing and valuables.

Public Communication Center:

- 1. A communication center for receiving outside calls and giving information to the press, radio and relatives shall be set up.
- 2. The press can use the designated area/room as their headquarters.



General Responsibilities of Individuals and Departments after Notification of Disaster:

1. Medical Administrator:

In a major disaster will do the following functions:

- 1. Check with local authorities to verify the disaster and obtain additional information.
- 2. Authorize announcement of disaster to hospital personnel.
- 3. Ask for help from local police and volunteer organizations as deemed necessary.
- 4. Stay in the area of administrative offices to be available to assist, as requested, by Disaster Controller.

2. Nursing Superintendent / Nursing Supervisor:

- 1. In a major disaster NS will do the Administrator's functions, if he/she is absent.
- 2. Is responsible for notifying all department heads or alternates.
- 3. In a major disaster be responsible to see that families of victims are notified as soon as possible. These calls may be made by the designated personnel.
- 4. Will set up a Command Center.
- 5. Will provide adequate numbers of nursing and paramedical personnel.
- 6. Arrange for drugs/dressings/linen, etc.

4. Patients Admission Department

- 1. Department head or designee will call in their own personnel as needed after having reported to the Command Center.
- 2. Notify Emergency Communications Center if internal disaster is involved.
- 3. Do not accept routine non-emergency admissions except obstetrics cases.
- 4. Refer all public information calls and press to desk in Reception Area.
- 5. Direct press to the designated area/room.
- 6. Assign an admissions person to aid with discharge of hospital in-patient.

5. Dietary

- Department head or designee will call in their own personnel as needed after reporting to Command Center.
- 2. Prepare to serve nourishments to ambulatory patients, house patients and personnel as need arises.
- 3. Be responsible for setting up menus in disaster situation and maintain adequate supplies.

6. Maintenance

- Department head or designee will call in their own personnel as needed after reporting to Command Center.
- 2. Maintain full operation of all facilities.
- 3. Be responsible for setting up extra beds in hospital if needed, as well as transporting storeroom supplies and bringing in extra supplies from other areas.
- 4. Be willing to help with movement of victims from ambulance to Triage.

7. Housekeeping and Laundry

- 1. Department head or designee will call in their own personnel as needed after reporting to Command Center.
- 2. Be available to help clean receiving area, and clean rooms between cases in treatment areas.
- 3. Be sure all hallways or traffic areas are clear of cleaning carts, equipment and etc.

8. Operating Rooms

- 1. OT Controller will supervise Operating Room and call all needed personnel after reporting to Command Center.
- 2. Call additional surgeons, anesthetists and technical staff as needed.
- 3. Check area for supplies and equipment.
- 4. Ask for additional help to carry out surgery and treatments in Operating Rooms and Recovery Room.
- Inform Triage Officer when Operating Rooms and Recovery Room is available for more patients.
- 6. Keep minimum list of supplies on hand and be prepared to process additional sterile supplies quickly.
- 7. Notify OT Technicians and In-charge Nursing Sister who will maintain adequate anesthesia and drug supplies.

9. Blood Bank

1. The department head or designee will find out the number of patients involved and any other pertinent information from the Command Center.

- 2. The department head or designee will be responsible for calling in any and all personnel needed to sufficiently handle the patient load.
- 3. The department Head or designee shall mobilize additional requirement of blood if necessary from other adjacent/nearby blood banks.

10. Hospital – All Supervisors will:

- 1. Prepare for expansion by notifying maintenance of number of extra beds needed and where to set them up.
- 2. Discharge and movement of hospital patients to create more room for casualties.
- 3. Send for extra supplies needed from Purchasing, CSSD, Laundry, and Dietary.
- 4. In case of internal disaster, prepare for evacuation of patients to safe area.
- 5. Send designated personnel to Command Center with wheelchairs.
- 6. Periodically send messenger to Command Center to check for update.
- The elevators will be used ONLY for the transportation of patients or equipment. All
 personnel will use the stairway.

11. In-Charge ICU:

- 1. Evaluate patients in the Intensive Care Unit for possible transfer out. Use established discharge criteria as a guide.
- 2. Prepare to admit more critically ill patients.
- 3. Send runner to Command Center or phone for help.

12. Obstetric Unit

1. Staff from Obstetric Unit can be used to assist the disaster team. Volunteers can be used from OB to assist in disaster.

13. Radiology and Imaging

Day Shift:

- 2. The department head or designee will find out the number of patients involved and any other pertinent information from the Command Center.
- 3. The department head or designee will be responsible for calling in any and all personnel needed to sufficiently handle the patient load

Evening Shift:

- 1. The technologist on duty or on call for the Radiology Department will be alerted by the supervisor.
- 2. It will be the duty of this technologist to call in extra help as needed. All extra help called in will report directly to Radiology.

Duties of Radiology and Imaging Personnel

Department Head will:

- 1. Call any or all personnel needed.
- 2. Arrange for extra supplies to be brought in if needed.
- 3. Coordinate flow of work and delegation of work areas.
- 4. Other Technologists will:
- 5. Perform all x-ray exams and prepare records as needed and assigned.

14. Laboratory

- 1. Department Head or designee will call in their own personnel as needed after reporting to Command Center.
- 2. Call personnel from nearby hospitals and clinics as necessary.
- 3. Have arrangements made to obtain additional blood, equipment and supplies from nearby institutions.

15. Medical Stores - Purchasing

- 1. Department Head or designee will call in their own personnel as needed after reporting to Command Center.
- 2. Be prepared to supply all departments with needed supplies.
- 3. Stores In-Charge will designate assistant to supply runners or volunteers to deliver supplies.
- 4. Have an up-to-date list of suppliers who can quickly supply extra materials.

16. Pharmacy (Drugs and Dressings)

1. Report to Command Center, then remain in department.

- 2. Have list of drug suppliers that can provide emergency supplies quickly.
- 3. Keep minimum supply of emergency drugs on hand at all times.
- 4. Pharmacy should remain open and have a runner to deliver needed meds to areas.

17. Social Services (Medico-Social Worker)

- 1. Report to the Command Center and be prepared to stay with relatives of victims in hospital lobby.
- 2. Will provide Command Center with a list of the family members that are here.

18. Security

1. Report to Command Center.

19. Nursing Personnel Assigned to Disaster Victims

- Obtain information and fill out available information and time on disaster tags. Even if no information is available as to identity, give information as to condition, types of injuries, etc.
 - If top sheet on tag has already been picked up, use O.P. record to record changes in patient's condition, additional information, etc.
 - Be sure to use hospital disaster tag number for identification (the tag is in triplicate).
- 2. BE SURE top sheet of disaster tag is made available to Medical Records with pertinent information.
- 3. DO NOT leave your patient unattended. Patient may be signed off to person in charge when admitted to a unit.
- 4. Give aggressive first aid treatment.
- 5. Make out the appropriate lab slips and x-ray requisitions with disaster number. It is essential that they have these slips made out.
- 6. Patients who have been admitted to the hospital should have the information slips placed with the Command Center in the Emergency Department.
- 7. If a patient is transferred, be sure to indicate on the tag to which hospital he has been sent.
- 8. If a patient is admitted to hospital, be sure and send all oxygen equipment to his room with him.

9. Sign disaster tags.

20. Medical Records

- 1. Department Head or designee will call in their own personnel as needed after reporting to the Command Center.
- 2. Assign person to be responsible for maintaining casualty lists and assist with paperwork as needed at Command Center.
- 3. Supply extra forms as needed.

2. POST-DISASTER REVIEW

Post disaster review is an important part of disaster management plan. The disaster committee shall meet, after the disaster under the chairpersonship of the MS and discuss threadbare the shortcomings faced during the disaster. Nodal officer, Disaster Management shall initiate requisite action as per the decision of the committee for prevention of recurrence of the shortcomings in future.

ANNEXURE – I

LIST OF EMERGENCY DRUGS (Including BUFFER Stock), DISPOSABLES AND EQUIPMENT

- 1. IV Fluids
 - Ringer Lactate
 - Normal Saline
 - 10% Dextrose
 - 5% Dextrose
 - Haemaccel
- 2. Emergency Drugs (Injections and Tablets)
- Adrenaline
- Atropine
- Buscopan
- Dopamine and Dobutamine
- Dilzem
- Dextrose 25%
- Effcorlin
- Eptoin
- Res. Salbutamol
- Sodabicarb
- T.T.
- Decadron
- Deriphylline
- Local Anesthetics
- Painkillers (Tramadol, Voveran)
- Medazolam
- Emset
- Phenergan

- Avil
- KCl
- Lasix
- Cardioron
- Solimedrol
- Rantac
 - 3. Equipment
- Suction Apparatus
- Defibrillator
- Multipara Monitors
- Pulse Oximeters
- Ventillators (including Transport Ventillator)
- Laryngoscope (Adult & Pediatric)
- ET Tubes (All sizes)
- Nebulizers
- Pneumatic Torniquet
- Cervical Collar Braces
- Spinal Stretcher
- Stretchers
- Wheel Chairs
- Ambu Bags (Adult & Pediatric)
- Oxygen Cylinders
- BP Apparatus
- IV Stands
- Torches

- 4. Disposables/Dressing Materials
- IV Catheters (16, 18 & 20)
- IV Sets, BT Sets
- Savlon/Betadine/Hydrogen Peroxide
- Silver sulfadiazine ointment
- Syringes/Needles
- Cotton & Bandages
- Bandaid
- Splints of various sizes
- Gloves/Face Masks
- Oxygen masks
- Adhesive Tapes
- Vaccutainers
- Soaps
- Towels
- Bed Sheets
- Cleaning Materials

ANNEXURE – II

CHECKLIST FOR DISASTER CONTROLLER

Date:		
Type of Disaster	:	
Time of Disaster	:	
Activity	Tick if completed	Time
ALERTING		
Chairman, DPC		
Chairman, DMC		
Triage Officer		
Clinical Controller		
OT Controller		
Nursing Controller		
Police		
LOGISTIC SUPPORT		
Ambulance Ready		
(No.)		
Disaster Supplies		
Available		
Area Prepared		

Intra AE Triage

Communication

secured

On Standby

Blood Bank

Hospital Stores

Laboratory

Radiology

Kitchen

Any Additional

Points

Date:

Time:

Signature:

Name:

Designation:

ANNEXURE – III

DISASTER POLICY COMMITTEE

Constitution	Name	Address	Contact Number
DISASTER MANA	AGEMENT COMMIT	TEE	
Name	Address	Tel. No.	
NURSING STAFF			
Name	Address	Tele.No.	
ECG TECHNICIAN	N		
Name	Address	Tel. No.	
X-RAY TECHNICI	AN		
Name	Address	Tel. No.	
LAB TECHNICIAN	١		
Name	Address	Tel. No.	
PLASTER TECHN	ICIAN		
Name	Address	Tel. No.	

DRESSER

Name	Address	Tel. No.
PHARMACIST		
Name	Address	Tel. No.

List of Hospitals and Casualty Phone Numbers near ESI Hospital Basaidarapur:

1. Acharyashree Bhikshu Hospita	l - 25423514
2. Baba Saheb Ambedkar Hospita	al - 27055585, 27933256
3. Bhagwan Mahaveer Hospital -	- 27033947
4. Deen Dayal Upadhyay Hospita	l - 25494402
5. Guru Govind Singh Govt. Hosp	ital- 25988532
6. Sanjay Gandhi Memorial Hosp	ital –27900103
7. AIIMS	26594405, 26594706
8. Safdarjung Hospital	-26179048

Hospital specific DM plan Template BROAD INFORMATION OF THE HOSPITAL

- 1. Name of the hospital: ESI Hospital Basaidarapur
- Address: <u>Employees' State Insurance Model Hospital</u>, <u>Basai Darapur, Near Raja Garden Ring Road</u>, <u>New Delhi-110015</u>.
- 3. Type of Hospital (Tertiary / Secondary / Primary) <u>Tertiary care and a referral center for other</u> <u>ESI hospitals of Delhi and NCR</u>.
- 4. Names of hospital senior managers (e.g. chief executive, medical director, nursing director, administration director):

Designation	Name
Medical Superintendent	Dr. S K Raju
Addl. Medical Superintendent	Dr Inder Pawar
Addl. Medical Superintendent	Dr Anita Mittal
Incharge Hospital Store	Dr Rajpal
Joint Director (Admin.)	Vikas Kundal
Deputy Director (Admin & Cash)	Vijay Aggarwal
Deputy Director (Fin)	S K Pandey
Assistant Director (Admin)	Mrs Saraswati Rawat
	Mrs Anita
Nursing Superintendent	Mrs Claudia Kispotta

Designations and contact details of hospital emergency/disaster managers (e.g. Nodal officer / D M committee, coordinator, manager of security/fire services):

<u>Nil</u>

- 6. Year of construction : <u>Commissioned on 1st Dec 1971.</u>
- Name and Telephone Number of Fire Safety Officer and Deputy Fire Safety Officer. <u>The Fire</u> safety is taken care of by UP Nirman Nigam with deployment of two persons per eight hour shift. <u>These personals are locally trained for maintenance of FF equipment and carry out small fire fight.</u>

- 8. Number, location and type of fire stairs and/ or fire towers : No separate fire escape stairs exist.
- 9. Number, location and type of horizontal exits or other areas of refuge. Nil
- 10. Number, location, type and operation of elevators and escalators. <u>There are five elevators/lifts in</u> each new block with capacity ranging between eight persons to sixteen persons, 6 lifts in old block. <u>There are two stairs each in new blocks and five in old block</u>. Presently only one ramp exists in old block and no ramp has been constructed in new blocks.
- 11. Internal fire alarms, or alarms of central stations. <u>No hooter exists, the central console for fire alarm</u> is non functional and is primitive.
- 12. Means of Communications (walkie talkie, telephones etc). <u>The primary means of communication</u> is 400 line Intercom, no walkie talkie or PA system is in place.
- 13. Water supply system, size and location of risers, fire pump. <u>There are three interconnected water</u> tanks with capacity of 1 Lakh ltr each, Pumps and Hydrants are existing and functional for each block. No fire buckets, hooks, showels and beaters are present.
- 14. Sprinkler system. Existing, however dedicated water tank not existing as the building is still under construction.
- 15. Source of primary and secondary water supply. <u>Primary source is the storage water tanks which are</u> always full (maintained by Delhi Jal Board). Secondary source is a single bore well and water tankers available on hire.
- 16. Special extinguishing system, if any, components and operation. <u>Partial fire points have been</u> established near each block, lacking all essential tools for fire fighting
- 17. Total number of security persons normally employed in building. Security is out sourced with:-
 - Total Security persons 225
 - Daytime 86
 - Night time 52
- 18. Emergency Telephone numbers (include area/city code): 011-25100949

19. Website : <u>www.esih-basai.org</u>

20. E-mail: ms-basaidarapur.dl@esic.in, ms-odcdelhi@esic.nic.in

21. Total number of beds: 600 beds

22. Specialty wise beds

Deptt	Sanctioned Beds	Deptts requiring addl Beds	Pooled Beds
PNC Ward	66	G Recovery	10
Ortho Ward	44	Ortho Recovery	09
Gynae Ward	53	FF Recovery	10
ANC Ward	41	Main OT Recovery	09
Burn Ward	08	P Cty	10
M Surg Ward	37	Main Cty	52
F Surg Ward	38	RICU	06
ODC Ward	30	NICU	04
ICU	06	Main OT Prep Room	06
F Med Ward	48	Ortho OT Prep Room	07
Eye /ENT Ward	37	EMY/PP OT	04
ICCU	11	Dialysis	06
Paed Ward	70	Blood Bank	02
LR	22		
Nry	19		
Cardiac Ward	10		
Total	600	Total	137

23. Average bed occupancy (in normal situations): 80% - 85%.

24. Number of personnel employed by the hospital:

Medical (Doctors)	110
Nurses	256
Para-Medical staff + Nursing Orderlies	226
Others	303

25. General narrative of the hospital: <u>The hospital is under Ministry of Labour, a tertiary care referral hospital where the departments are well equipped for critical care management, resuscitation devices, round the clock CMOs and doctors of all major specialities are available. There are nine well equipped OTs and emergency operations are performed round the clock. Institution has ICU(6 beds), NICU, ICCU (6 beds), well equipped Labour room, Blood Blank, Radiology & Imaging, Pathology, Biochemistry, Microbiology, Laundry, CSSD, Kitchen and heavy duty generators. A/E department has 45 beds with capacity of additional 10 beds in the event of disaster. As per the directive of the Delhi Govt. a provision of additional 60 disaster beds are under process currently at this hospital.</u>

(i) Old Block: -	Four storey building housing following services:-
Ground Floor:	ODC, Eye OPD, ENT OPD, Chest OPD,X-Rays for Old Block OPD Patients
FirstFloor:	Indoor patients of Medicine, Paediatric, Ophthalmology, chest, cardiology, ODC, ENT
Second Floor:	Paediatric casualty
Third Floor	Dialysis Unit
(ii) New Block(3)	Eight Storied building
Ground Floor:	Administration Unit, Accounts Deptt. Bio-chemistry Lab and Kitchen
First Floor To Seventh Floor:	Indoor beds for Surgery, Orthopedic, Gyane, AN Ward, PN Ward, ICCU (First Floor), Gynae Recovery (Second Floor) Blood Bank (Third Floor) Burns and Plastic Surgery(Fourth Floor)
(iii) O.T.Block:	Four Storied Building
Ground Floor:	Path. Lab, CSSD, Med. Library, Central AC Plant
First Floor:	Four O.Ts, Recovery Ward and ICU
Second Floor:	Labour Room and Gynae casualty ,Neonatal Nursery and Family Planning O.T
Third Floor:	Ortho, Eye, ENT O.T and Recovery ward.

26. <u>Layout of Hospital</u> (presently new construction is underway hence changes have taken place)

Annexure B (Contd)

(iv) OPD BLOCK:	Double Storied building
Ground Floor	OPD Services of Medicine, Surgery, Gynae & Obst., Ortho, Dental, Cardiology, Heart Station, Radiology, Physiotherapy, Occupational therapy, Central Registration and Medical Records, Minor O.T., Family Planning and Yoga
First Floor:	Skin OPD, Psychiatry OPD, Pediatric OPD, ISM OPD Deptt of Micro Biology, Auditorium with seating capacity of about 300 persons
(v) Casualty block	Single storied building
	24 hour emergency services to outdoor and indoor emergency wards of department of Medicine, surgery, orthopedics, Minor O.T & Dressing room, ECG, Laboratory services, X-Rays, Plaster room Doctors' Duty room, Inquiry, Central Registration and Police control room
	Administrative staff of Directorate (M) Delhi including Accounts
(vi) Laundry block	Two Nos. of 1000 KPH Boilers, Laundry machines and storage space for linen.
(vii) Mortuary	Space & facility to store six bodies
(viii) Hospital stores	Single storied building
(ix) Nurses' hostel block	Under Construction

- 27. Any past history of damage / indication of the same: Nil
- 28. Whether retrofitting done? <u>NA</u>
- 29. No of exits:

Staircases: Two per new block and five in old Ramps: One in old block and nil in new

Lifts: Five each in new block and two in old Non Functional: Three each in new block

30. A&E Deptt: Is area earmarked for

Reception	Yes		
Triage	Yes		
Resuscitation	Yes		
Treatment area	Yes	No of beds	<u>Ten</u>
Investigations: X-ray/C	Г Scan/US	G In the main	n Lab
Emergency OT	One of th	e OT is earmar	ked as Emergency OT

31. Diagnostic Services (Specifications and year of installation)

Diagnostic	Qty	Yr of	Specifications	Functional/
Services		Installation		Non
				Functional
MRI	01	2010	1.5 Tesla	Functional
CT Scan	01	2010	64 Slices	Functional
USG	06	2009,2010,		Functional
		2011,2016		
X Ray	01	1994	800 MA	Functional
	02	2009,2010	500MA	
	01	2009	200MA	
	02	2002	60MA (Ptbl)	
	03	2009	30MA (Ptbl)	

32. Support Services

a) <u>Pharmacy</u>:-

- i. Days of Reserve Stock $\frac{1/3^{rd} \operatorname{stock}}{1/3^{rd} \operatorname{stock}}$
- ii. Lead Time for Replenishment <u>Two months</u>

iii. Contingency Plan in case of crises MOU with local Pharmacist

iv. Vendor support in crises Available

b) <u>CSSD</u>

- i. Own / Outsourced:- Own
- ii. Functional State <u>Functional</u>

- c) Medical gases.
 - i. PMGV System with manifold yes
 - ii. Liquid Oxygen plant yes
 - iii. Whether AMC /CAMC done yes

d) Licensed Blood Bank

- i. Numbers : Govt <u>One</u> Private <u>Nil</u>
- ii. Storage Capacity <u>1000</u> Units. Average stock <u>350 to 400 units.</u>
- iii. Facility for Components Yes / No

e) <u>Dietary Services</u> :

- i. Own / Outsoursed
- ii. Equipment Installation yr <u>2016</u>. Functionality <u>Functional</u>

f) <u>Laundry</u>:

- i. Own / Outsoursed
- ii. Equipment functionality : Non Functional due to relocation

g) Ambulance :-

- i. No of Ambulances available :- Outsourced to private contractor
- ii. Essential drugs kit checked daily : Yes / No
- iii. Resuscitation equipments :- Yes / No.

h) <u>Telephone / EPABX</u>

- i. No of line exchange <u>400 lines</u>
- ii. Alternate means of communication ,if telephone fails :- Nil
- iii. Contact details of all employees :- Not held
- i) <u>Generators</u> :- Nos <u>Seven (operated by civil engr deptt)</u>

Specifications	POL capacity
----------------	--------------

- 2x 60 KVA 200 ltr
- 2x 125 KVA 200 ltr
- 2x 160 KVA 500 ltr
- 1x 1010 KVA 2000 ltr

- j) <u>Bio-medical waste management</u>
 - i. Disposal method <u>Own system / Outsourced</u>
 - ii. Alternate arrangement if system fails in disaster : Nil
- k) <u>Water Supply</u>
 - i. Source : Delhi Jal Board
 - ii. Capacity for reserve stock :- Three interlinked tanks of 1Lakh ltr capacity each.
 - iii. Alternate source : <u>1 x Bore well, water tankers from local vendors.</u>
- 22. Mock Drills

Periodicity : <u>Six Monthly</u> Last Drill held : <u>September 2017</u>

23. Media management:

PRO/ Spokesperson : <u>Dr U C Ojha</u> Media/Press release room : <u>Nil</u>

- 24. Whether hospital has linkage with other hospitals : Cooperation/-Collaboration
 - a. Private Hospitals : Yes
 - b. Army : <u>No</u>
 - c. Railways : <u>No</u>
 - d. Others : <u>Nil</u>

25. Management of the Dead :-

- a. Temporary mortuary : <u>Yes</u>
- b. Body preservation modalities : Nil
- c. Identification : <u>Tags</u>

26. Supplementary information

(Comprising history of prior emergencies and disasters the hospital had to cope with):

NIL

signature

(Chairperson/Head of Hospital Emergency/Disaster Management Committee)

Annexure C

Hazards Vulnerability and level of the hospital Preparednes

Hazard	Haz	ard L	evel		Should the hospital be	Remarks
	No Hazard	Low	Average	High	prepared for it?	
1 Geological hazards	I			1	1	
Earthquakes			\checkmark			Yes
Dry mass movement – landslides	✓ 					
Supplementary geological hazards (e.g. rockfalls, debris and mudflows	~					
Tsunamis	✓					
Volcanic activity and eruption 2.0 Hydro-meteorological l	√ nazards					
Meteorological						
hazards						
Cyclones/hurrican es/typhoons	√					
Tornadoes	\checkmark					
Local storms		~				Yes
Supplementary met hazards (e.g. sand-storms, wind gusts) (specify) Dust Strom 2.2 Hydrological hazards		~				Yes
River floods		\checkmark				Yes
Flash floods	✓					
Wet mass movements – landslides	✓					
Supplementary hydrological hazards (e.g. high tides, avalanches, coastal floods) NIL	~					

Annexure C (contd)

		Ha	azard Le	evel		Should	
3.0 Climatological hazard		No Hazard	Low	Average	High	the hospital be prepared for it?	Remarks
3.1 Extremely high/ low temp wave or cold wave)	eratures (e.g. heat		 ✓ 			✓	yes
3.2 Wildfires (e.g. forests, cro areas)	plands, populated	✓					
3.3 Drought		\checkmark					
3.4 Supplementary climatologica	al hazards (specify)	· 🗸					
3.5 Biological hazards		I	1	1			
3.6 Epidemics, pandemics and	emerging diseases		✓			✓	yes
3.7 Foodborne outbreaks				✓		✓	yes
3.8 Pest attacks (e.g. infestation	as)	 ✓ 					
3.9 Other biological hazards		 ✓ 					
4.0 Human-made hazards							
4.1 Industrial hazards (e.g. chem	ical, radiological)		 ✓ 			✓	yes
4.2 Fires (e.g. building)				\checkmark		\checkmark	yes
4.3 Hazardous materials	Chemical			✓		\checkmark	yes
materials	Biological	✓					
	Radiological	 ✓ 					
4.4 Transportation Accidents (e	.g. air, road, rail)			✓		✓	yes
4.5 Supplementary technological pollution, structural collapt contamination) (specify) structural collapte contamination 5.0 Societal hazards				✓ 		✓ 	yes
	111 1 . 00	- [T	-		T
5.1 Security threat to hospital bu	maing and staff		~			\checkmark	yes
5.2 Armed conflicts		✓					
5.3 Civil unrest (including dem	onstrations)		 ✓ 			\checkmark	yes
5.4 Mass gathering events			✓			✓	yes
5.5 Other societal hazards (e.g.	explosions, terrorism)		✓			✓	yes

Annexure D

Safe Hospitals Checklist

Nonstructural safety

2.0	A mahita atumal aafatu	Safe	ty level	Observations	
2.0	Architectural safety	Low	Average	High	
2.1	Safety and Condition of doors, entrances and exits			 ✓ 	
2.2	Safety and Condition of windows and shutters		 ✓ 		
2.3	Safety and Condition of other elements of the building envelope (e.g. outside walls, facings)			~	
2.4	Any damage or repair of nonstructural elements				NA
2.5	Safety and Condition of roofing			✓	
2.6	Safety and Condition of railings and parapets			✓	
2.7	Safety and Condition of perimeter walls and fencing		✓		
2.8	Safety and Condition of other architectural elements (e.g. cornices, ornaments, chimneys, signs)		√		
2.9	Safety in movement outside the hospital buildings	 ✓ 			
2.10	Safety in movement inside the building (e.g. stairs, corridors)		✓		
2.11	Safety and Condition of internal walls and partitions		✓		
2.12	Safety and Condition of false or suspended ceilings		✓		
2.13	Safety and Condition of the elevator system			✓	
2.14	Safety and Condition of stairways and ramps	✓			Ramp NA Construction is on
2.15	Safety and Condition of floor coverings			✓	
3.0	Infrastructure protection, access and physical secu	urity	1		
3.1	Site of hospital's critical services and equipment in the hospital with likely occurrence of local hazards		√		
3.2	Hospital entry routes		✓		
3.3	Alternative exits and evacuation routes	 ✓ 			
3.4	Plan of physically securing the building, equipment, staff and patients	~			

4.1	Electrical systems				
4.2	Capability of alternate sources of electricity			\checkmark	
	(e.g. generators)				
4.3	Testing frquency of alternate sources of			\checkmark	
	electricity in critical areas				
4.4	Safety and Condition of alternate source(s) of			✓	
	electricity				
4.5	Safety and Condition of electrical equipment,		✓		
	cables and cable ducts		•		
4.6	Redundancy for the local electric power			✓	
	supply			•	
4.7	Safety and Condition of control panels,			✓	
T. /	overload breaker switches and cables			•	
4.8	Illumination system for critical areas of the			✓	
	hospital			•	
4.9	Safety and Condition of internal and external			✓	
r.)	lighting systems			ľ	
4.10	Exterior electrical systems installed for			✓	
4.10	hospital usage			v	
4.11	Alternate maintenance and restoration of			✓	
4.11	electric power supply and alternate sources			v	
5.0	Telecommunications systems				
5.0	relecontinum cations systems				
5.1	Safety and Condition of low- and extra-low-		\checkmark		
	voltage systems				
5.2	Safety and Condition of antennas if any				NA
5.3	Alternate communication systems	\checkmark			
5.5	Anternate communication systems	v			
5.4	Safety and Condition of telecommunications	\checkmark			
	equipment and cables	•			
5.5	Effect of disruption in external	\checkmark			
0.0	telecommunications systems on hospital com-	•			
	munications				
5.6	Location safety of site for telecommunication	✓			
5.0	systems	•			
5.7	Safety and Condition of internal	\checkmark			
	communications systems	•			
5.8	Backup and restoration of standard and	\checkmark			
5.0	alternate communications systems	•			
6.0	Water supply system				
6.1	Reserve storage & Location			\checkmark	
6.2	Complementary pumping system			✓	
6.3	Safety and Condition of the water distribution			\checkmark	
	system				
6.4	Substitute water supply to the regular water			\checkmark	
	supply			1	

Annexure D (contd)

6.6	Alternative maintenance and restoration of water supply systems			~	
7.0 F	ire protection system				
7.1	Safety and Condition of the fire protection (passive) system		\checkmark		
7.2	Smoke detection systems		\checkmark		
7.3	Fire suppression systems (automatic and manual)	✓			
7.4	Water supply for fire suppression		✓		
7.5	Emergency maintenance and restoration of the fire protection system		~		
8.0 V	Vaste management systems	1			
8.1	Safe disposal of nonhazardous waste water systems	✓			
8.2	Safe disposal of hazardous waste water and liquid		✓		
8.3	Safe disposal of nonhazardous solid waste system		✓		
8.4	Safe disposal of hazardous solid waste system		\checkmark		
8.5	Alternate maintenance and restoration of all types of hospital waste management systems		~		
9.0 M	Iedical gases systems	I			
9.1	Site and condition of storage areas for medical gases			\checkmark	
9.2	Security and safety of storage areas for medical gas tanks/or cylinders		\checkmark		
9.3	State of and safety of medical gas distribution system (e.g. valves, pipes, connections)			✓	
9.4	State of and safety of medical gas cylinders and related equipment in the hospital		~		
9.5	Accessibility of alternative sources of medical gases		\checkmark		
9.6	Emergency maintenance and restoration of medical gas systems				
10.0	Heating, ventilation, and air-conditioning (HVAC)	systen	ns		
10.1	Adequate space for HVAC equipment	 ✓ 			
10.2	Safety of enclosures for HVAC equipment	~			
10.3	Safety and ops of HVAC equipment (e.g. boiler etc)		~		
10.4	Adequate supports for ducts and piping that cross expansion joints		~		
10.5	Condition and safety of connections and valves		✓		
10.6	Condition and safety of air-conditioning equipment		~		
10.7	Operation of air-conditioning system (including negative pressure areas)		~		

10.8	Emergency maintenance and		\checkmark		
	restoration of HVAC systems				
10.9	Equipment and supplies				
10.10	Safety of computers and printers	✓			
10.11	Medical and lab equipment and supplies treatment	used for d	iagnosis	and	
10.12	Safety of medical equipment in operating theatres and recovery rooms			\checkmark	
10.13	Condition and safety of radiology and imaging equipment			\checkmark	
10.14	Condition and safety of laboratory equipment and supplies			\checkmark	
10.15	Condition and safety of medical equipment in emergency care services unit			~	
10.16	Condition and safety of medical equipment in intensive or intermediate care unit			✓	
10.17	Condition and safety of equipment and furnishings in the pharmacy	~			
10.18	Condition and safety of equipment and supplies in the sterilization services			~	
10.19	Condition and safety of medical equipment for obstetric emergencies and neonatal care			✓	
10.20	Condition and safety of medical equipment and supplies for emergency care for burns				NA
10.21	Condition and safety of medical equipment for nuclear medicine and radiation therapy				NA
10.22	Condition and safety of medical equipment in other services			\checkmark	
10.23	Medicines and supplies			\checkmark	
10.24	Sterilized instruments and other materials			√	
10.25	Medical equipment specifically used in emergencies and disasters			\checkmark	
10.26	Supply of medical gases			\checkmark	
10.27	Mechanical volume ventilators			\checkmark	
10.28	Electromedical equipment			\checkmark	
10.29	Life-support equipment			\checkmark	
10.30	Supplies, equipment or crash carts for cardiopulmonary arrest				NA in A & E

Annexure D (contd)

11.0	Coordination of emergency and	Saf	ety level		Observations		
	disaster management activities						
		Low	Average	High			
11 .1	Hospital Emergency/Disaster	\checkmark					
	Committee						
11.2	Committee member responsibilities	\checkmark					
	and training						
11.3	Designated emergency and disaster		\checkmark				
	management coordinator						
11.4	Preparedness programme for	\checkmark					
	strengthening emergency and disas-						
11.5	ter response and recovery						
11.5	Hospital incident management	\checkmark					
11.6	system Emergency Operations Centre						
11.0	(EOC)	v					
11.7	Coordination mechanisms and	\checkmark					
	cooperative arrangements with						
	local emergency/disaster						
	management agencies						
11.8	Coordination mechanisms and	\checkmark					
	cooperative arrangements with the						
	health-care network		<u> </u>	<u> </u>	l		
12.0	Hospital emergency and disaster re	esponse	and recove	ery plan	ning		
12.1	Hospital emergency or disaster		\checkmark				
	response plan						
12.2	Hospital hazard-specific sub plans	\checkmark					
12.3	Hospital emergency and disaster	\checkmark					
	response and recovery planning						
12.4	Hospital emergency and disaster	\checkmark					
	response plan exercises, evaluation						
	and corrective actions						
12.5	Hospital recovery plan	\checkmark					
13.0	Communication and information n	nanagei	nent	1	<u> </u>		
13.1	Emergency internal and external	\checkmark					
	communication						
13.2	External stakeholder directory	\checkmark					
13.3	Procedures for communicating with	\checkmark					
10.0	the public and media	v					
13.4	Management of patient information	✓					
14.0	Human resources						
14.1	Staff contact list & availability	\checkmark					
17.1	Starr contact list & availability	v					

Emergency and disaster management

			1		
14.3	Mobilization and recruitment of	\checkmark			
	personnel during an emergency				
	or disaster				
14.4	Duties assigned to personnel for	√			
	emergency or disaster response	•			
	and recovery				
445					
14.5	Well-being of hospital personnel	\checkmark			
	during an emergency or disaster				
15.0	Logistics and finance				
15.1	Agreements with local suppliers				
10.1		v			
	and vendors for emergencies and				
45.0	disasters				
15.2	Transportation during an	\checkmark			
	emergency				
15.3	Food and drinking-water during		\checkmark		
	an emergency				
15.4	Financial resources for		\checkmark		
	emergencies and disasters				
16.0	Patient care and support services	1		1	
16.1	Continuity of emergency and		\checkmark		
	critical care services				
16.2	Continuity of essential clinical		\checkmark		
	support services				
16.3	Expansion of usable space for		\checkmark		
	mass casualty incidents		•		
16.4	Triage for major emergencies and				
	disasters			•	
16.5	Triage tags and other logistical			\checkmark	
	supplies for mass casualty				
	incidents				
16.6	System for referral, transfer and		\checkmark		
	reception of patients		•		
16.7	· · ·				
10.7	Infection surveillance, prevention	V			
	and control procedures				
16.8	Psychosocial services	\checkmark			
10.0					
16.9	Post-mortem procedures in a	✓			
	mass fatality incident				
17.0	Evacuation, decontamination and sec	urity			
17.1	Evacuation plan	✓			
17.2	Decontamination for chemical	./			
	and radiological hazards				
17.3					
17.5	Personal protection equipment	✓			
	and isolation for infectious dis-				
	eases and epidemics				
17.4	Emergency security procedures	\checkmark			
17.5	Computer system network		\checkmark		
	security				
		-			