SOP 01: ACCIDENT AND EMERGENCY DEPARTMENT

1. Purpose

To provide high quality medical care to patients with life threatening, complex medical and surgical emergencies on account of accidents, illness, trauma, abuse, poisoning, burns, snake bites, dog bites, electric shocks etc and thus prevent loss of life & limb and initiate action for restoration of normal healthy life.

2. Scope :

2.1 Providing immediate and correct life saving medical care round the clock and under all situations.
2. To arrange prompt transfer of the patients to referral hospital for services not available after adequate emergency medication.
2.3 To liaison with the police dept. and court in medico-legal cases and with local administration and other medical service providers in case of disaster.
2.4 To deal under disaster situations by providing immediate medical care and interfacing with other organizations for support, as per need.
2.5 To deal with situations which involve mass casualty or an environmental/man-made emergency

3. Overall Responsibility: Emergency: Doctor on duty
Disaster : MS/HN, supported by all hospital staff and doctors

4. Procedure:

Sr. No.	Activity/ Description	Responsibility	Ref. Doc. / Record
4.1	**Facility Available for Emergency in the hospital** Emergency Department (ED) in the hospital offers comprehensive emergency care 24 hours a day. An attending Medical officer along with paramedical staffs in Emergency Department is on-duty in the ED 24 hours a day. The doctors are posted on Emergency duty in rotation. If a specialist consultation is required then the medical officer either refers the patient to Surgery, Orthopedics, Obstetrics /Gynecology etc. or arranges to call them according to patient condition. Ambulance services are available 24*7 for transfer of patients. Ramps are provided for patients. Stretchers and wheelchairs are stored in the area immediately adjacent to the ambulance entrance and do not obstruct this entry. A waiting area, with sufficient amount of chairs lavatories; drinking water and telephones (on need basis) are provided for patients, families and individuals accompanying them. Unauthorized individuals are prohibited from entering the ED treatment area. The ED design maintains patient privacy without compromising patient care.		Duty Chart

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4.2	**Receiving of Patients:** Patient is received by the staff or patient's un-holding from ambulance is done accompanied by the ward boy, emergency in-charge, Doctor. Service/support of wheel chair, stretcher etc shall be provided, as needed. The attending doctor/ paramedical staff quickly attend to the patient without loss of time to assess the condition and provide initial life support treatment. Initial treatment includes Evidence Based Medicine depending upon on the ABCDE (A: Airway B: Breath C: Circulation D: Drug/Disability/Deformity/Deficiency E: Environment of the patient's visible symptoms.	Ward in-charge, ward boy, paramedical staff, Doctor.	Emergency Register W.I.for handling/ transfer/ shifting of patients
4.3	**Initial Screening** a. The emergency department will provide, upon the request of the patient and within the capabilities of the hospital, an appropriate medical screening examination, stabilizing treatment and/or an appropriate refer, with an emergency medical condition. b. This initial screening exam will be completed by the attending Medical Officer/Doctor. On the basis of initial screening, it is determined whether patient needs admission or only preliminary medical care is adequate.	Doctor on duty	
4.3.1	**Triage** The most severe patients are treated and transported first, while those with lesser injuries are transported later. The following "Sorting Scheme" is used in the ED for prioritizing the emergency patient care according to the acuity/ severity of the patient's condition: 1. Immediate: Those patients whose injuries are critical but who will require minimal time or equipment to manage and who have a good progress for survival. E.g.:- patient with a compromised airway or massive external hemorrhage. 2. Delayed: Those patients whose injuries are debilitating but who do not need immediate management to salvage life or limb. E.g.:- Long Bone fracture 3. Expectant: - Whose injuries are so severe that they have only a minimal chance of survival. E.g.:- Patient with 90% full thickness, burns are thermal pulmonary injuries. 4. Minimal: - Who have minor injuries that can wait for treatment are who may even assist in the intern by comforting	CMO	

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	other patients. 5. Dead: - Who is unresponsive, pulse less, Breathless, in a disaster, resources rarely allow for attempted resuscitation. The registration process of the patient is also initiated in the ED if the patient condition permits. In case of limb and life threatening situations the registration and consent process are postponed so as to facilitate the initiation of appropriate emergency care		
4.3.2	**Consent for Treatment** The Hospital requires consent for all invasive or therapeutic procedures. The general consent form is filled and signed either by the patient if possible or the patient representative if the patient is not is a state to give his consent. In case of a patient incapable of giving consent, it is taken from the patient representative or guardian. Life-sustaining measures are not withheld for lack of formal consent if there is no time to obtain the consent for urgent procedures. The consent process is postponed and treatment is started immediately in such Consent is required for elective blood transfusions that are not life threatening	Nursing Staff	
4.4	**Nursing Process in Emergency department** The ED nursing staff is the responsible person to oversee the functioning of the ED. The nursing staff provides all the medical and logistic support for patient care. As per the advice of the attending doctor, medication/dressing, condition monitoring is carried out. As per the need, and availability of the service, specialist may also be called for to attend to the patient.	Nursing Staff	
4.4	**Treatment** The patient in the emergency is provided treatment by the doctor on duty as per the prevailing condition. When needed, dressing/stitching is undertaken for treating the wound.		
4.5	**Discharge/Admission:** In case the patient condition stabilizes after the first aid is provided, patient is discharged The patients are admitted on the basis of recommendation of doctor based on the patients condition and need. The patient/attendants provide information regarding name, age, sex, date & time of arrival and informed consent is taken by the in-charge. Emergency registration no. is allotted to the patient in emergency department & entry is made in the emergency	Emergency in-charge	

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	register. On transfer to the ward, the ER no. is entered in the IP register. At times, patient is not keen for further treatment. The patient/attendants shall be fully explained the consequences and their consent recorded before discharging. Entry shall be made in the emergency register as LAMA		Emergency Register
4.6	**Transfer to the ward:** a) Patient's condition is observed in the observation room and life support treatment is provided to them. b) In case of cardiac patients, patients are transferred in the resuscitation room to handle the cardiac emergency. The room is equipped with the crash cart containing essential and emergency drugs, defibrillator, pulse oximeter, cardiac monitor, ECG machine etc. c) Patients requiring minor surgical procedure is shifted to the procedure room (minor OT) for carrying out plaster, X-Ray and pathological investigation. After providing the life support treatment and stabilizing patient's condition, the patient is shifted to the ward and entry is made in the Indoor Patient register. d) In case the services essential for the treatment of the patient are not available in the hospital, patient is provided with the required first aid and condition explained to the attendant. Patient is referred to the alternate hospital and required support through ambulance for transfer of patient, is provided.	Doctor/ ward in-charge	W.I. for handling/ transfer/ shifting of patients Indoor Register Procedure for Referral Management
4.7	**Handling Medico-legal cases:** a) For MLC cases (such as assault, violence, accident, poisoning, criminal abortion, industrial violence etc), police is informed after starting the treatment & entry is made in Police information book. Medico-legal record is maintained for cases under that category. b) In case the patient dies, or is received as dead, appropriate action is initiated towards conducting the autopsy. c) The evidence so available such as blood stained clothes, foreign bodies, gastric lavage etc shall be preserved in a cover and handed over to police through a document. In addition, a medical report be prepared giving complete details of the patient, nature & type of injury, reasons of death date, time etc. The document and report shall be prepared in duplicate and one copy retained in records of the	D.S.	Police Information Book, MLC Register, Death Management

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	hospital. All such documents shall be duly signed by the attending doctor.		
4.8	**Maintenance of Medical Records (Registers and Documents maintained)** The following records are maintained in the ED: 1. List of Doctors on Duty and on call 2. Emergency register 3. Case files of patients attended in the ED 4. MLC register for medico legal cases 5. Drug Inventory Register 6. Controlled Drugs and Psychotropic Drugs Inventory 7. Brought Dead form 8. Death form 9. Death Register All the registers/records are identified and numbed separately. The facility provides safe and adequate storage of medical records for easy retrieval. All the MLC bed head tickets and MLC diagnostic reports will be stored separately and handover to Medical records department for safe storage and easy retrieval	EMO/ Nurse on Duty Head nurse/ED nursing staff Medical Superintendent Medical Record officer	Bed head tickets MRD Register
	Handling Brought In Dead Patient: The Emergency Medical officer examines the patient thoroughly and declares the patient dead. The details are entered as Medico Legal case. The relatives are explained the cause of death and Brought Dead certificate is issued after confirming the cause of death. The local police station to be informed immediately.	Emergency medical officer	MLC register
	Storage,Handling of Death & Release of Dead Body Death of a patient is handled carefully with concern without complacency. Counseling of next of kin with empathy is importance. All help in shifting the body from the hospital is extended to the next of kin. The dead body is released as soon as possible after completion of all formalities. Acknowledgement for receipt of the body and the Death Certificate is obtained from Next of Kin/Legal representative and Handing-over of the body to patient"s relatives" .it is ensured that hospital staff takes due care and		

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	concern in this respect. Due arrangements are made if preserving the body in the mortuary is found necessary. A security staff of the hospital is present till the departure of the deceased and ensures orderliness in handing over the body to the next of kin		
	Storage of Medicines in Emergency: All Emergency medications will be available 24 hrs in the ER. Medication inventory / Crash cart will be checked by the nurse on duty with each shift change, to detect shortage. Nursing staff are held responsible in identifying high alert drugs (Potassium,Chloride,Muscular Blocking agent, Antithrombolytic agent, Insulin, Warfarin, Heparin, Adrenergic agonist etc) in the department. Value for maximum dose of high alert drugs are defined as per age ,weight and diagnosis should be available in the nursing station and communicated to the doctor. Staff nurses must practice a standard system in identifying the error prone abbreviations during the medicine prescription and also independent double check before administration of High alert drugs. Every Medical advice and Medicine orders written by the medical officers must be adequate, legibly and accompanied with date , time and Signature. Nursing staff are held responsible in continuous checking of drugs for expiry and other inconsistency before administration Single dose vials are used only for single usage only .If found any remaining dose in the vial after using the vial must be discarded. Separate Sterile needle is used every time for multi dose vials usage. Already used needle must not be left in the septum.	Emergency Nurses Nurses on duty	Drug stock register Drug stock register
4.8	**Death of Patient**	Doctor on	Death

Sr. No.	Activity/ Description	Responsibility	Ref. Doc. / Record
	In case the patient is received as dead or dies during the course of treatment, the dead body is handed over to the attendant and certificate to this effect is issued indicating reasons.	duty	certificate,
4.09	**Discharge of Patient** The patients are discharged once their condition stabilises or are referred to higher facility if the treatment cannot be provided in the hospital.	Doctor	Procedure for Discharge Management
4.10	**Equipments and Medicines:** a) ED contains essential equipment, support systems and medicines such as Oxygen cylinders, , Portable defibrillators and ECG. , Respiratory aids e.g. ambu bag, vent-mask, nebuliser, Cardiac monitor and defibrillators slit lamp, adequate no. of trolleys and wheel chairs. Special medications, intravenous equipments and liquids, Sufficient bandages, drugs and plasters. b) A check of availability of the essential drugs & functioning of the equipments is carried out every day by the ward in-charge. Shortages, if any, are arranged immediately from stores through indent. c) Action is initiated in consultation with doctor on duty for repair of defective equipments, complain is given to DS/Hospital manger if any. Alternative arrangements, where possible are made.	Ward in-charge	List of emergency Medicines Indent
4.11	**Equipment maintenance:** Considering the sensitivity of functioning of emergency department the operation & maintenance of equipments is done at :		
4.11.1	1st level - by in-house staff. The primary purpose is to ensure that the available equipments are functional and have the required accessories, as needed.	Ward in charge	
4.11.2	2nd level – by manufacturer, biomedical engineers or by third party. Break down shall be attended to by the appointed agency. In addition, preventive maintenance shall be carried out at prescribed interval and documented in the machine/instrument file/log book. Periodic checking for every 6 months should be carried out.	by third party	Procedure for Equipments Maintenance

Sr. No.	Activity/ Description	Responsibility	Ref. Doc. / Record
4.12	**Disaster Management:** **a) Off Site Emergency** Disaster is an emergency situation involving large number of people who may suffer on account of burn, drowning, food poisoning, accident, natural disaster etc. In the event of disaster taking place in the area, the hospital shall provide all necessary medical support to the affected. On receipt of call (from any person or staff of the hospital) or patients affected by the disaster, immediate intimation shall be sent to the CMS/MS/MOIC. In the meanwhile Ambulance service shall be pressed in service to bring the patients to the hospital. Services of ambulance shall also be requested from the other hospitals in the vicinity, on need basis and district administration shall be informed. CMS/MS/MOIC in the mean while will arrange to call the entire medical & support staff to the hospital for treatment. Based on the nature of disaster, if needed, the doctors & staff may also be sent to the site along with essential drugs & equipment. Considering the nature of the disaster (accident, burn, food poisoning etc), services of the specialist shall be arranged and request shall also be sent to other hospitals based on the magnitude of the problem. Medicines, blood shall be arranged from all possible sources to meet the requirements. Emergency services shall be pressed in service to meet any exigency. Intimation shall be sent to Police to arrange security and manage crowd. Patients to be evaluated for their condition and action taken accordingly (surgery, limited medical attention, first aid etc.). The patients shall be moved to the concerned area/location for attention. Those received dead or may have died during procedure are kept in a separate room, duly monitored. Patients are discharged after the details are recorded in the register death is recorded in the death register **b) On Site Disaster Management** In the event of disaster happening within the hospital, all available employees take prompt actions to evacuate the patients outside the hospital to a safe location. While leaving the place, where feasible, attention is paid to close the	Doctor on duty	List of emergency nos. displayed in the hospital Procedure for Ambulance service Discharge register/death register Hospital Lay Out Plan

Sr. No.	Activity/ Description	Responsibility	Ref. Doc. / Record
	equipments, cap the chemicals etc so as to minimize any chances of further trigger.		

5. Work Instructions (W.I.)

A) Work Instructions for Emergency department

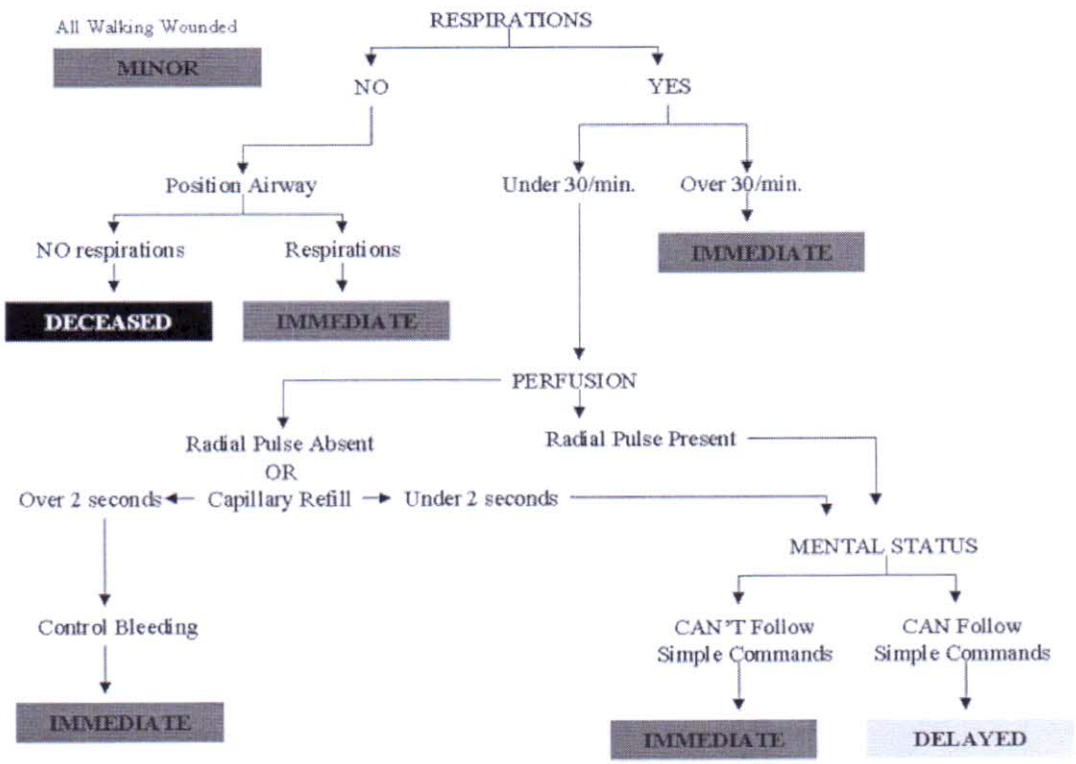
Sl. No.	Activity Instructions	Responsibility
01	Ensure the continuous availability of wheelchairs and stretchers at the identified locations.	Ward in-charge
02	Check the wheel chairs & stretchers with respect to broken parts (wheels),rest pads, handles etc	
03	Ensure the replenishment of emergency crash-cart, availability of filled cylinders and maintenance of equipments.	Ward in-charge
04	Doctor shall attend the patients immediately in the emergency	Doctor/D.S.
05	Those patients requiring specialty care or in case of non-availability of facility should be provided with first aid and arrangement made to refer the patient to higher center.	D.S.
06	Ensure the cleaning of ED and adequate management of BMW.	Ward in-charge
07	Ensure regular training of all staff to deal with cardiac emergency and disaster situation.	D.S.
08	Ensure the utilization of triage area flow chart for the segregation of patients based on the severity of their condition.	D.S.
09	Provision to be made to call the off-duty staff during emergency and supply of drugs and equipment on JIT (Just In Time) basis.	D.S.

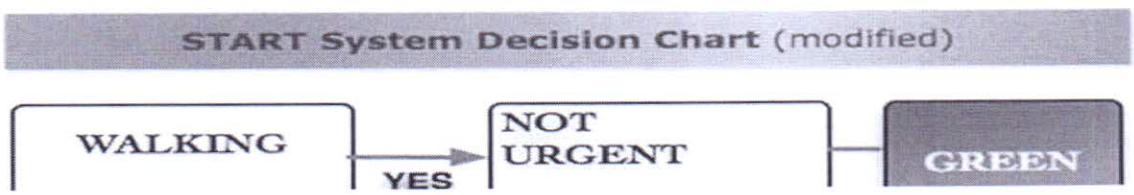
B) Work Instructions for handling/ transfer/shifting of patients

Sl. No.	Activity Instructions
1.	To ensure the availability of wheel chairs and stretcher.
2.	Hold the patient with a transfer belt around the waist Avoid trunk twisting during transfer.
3.	Avoid unnecessary bending.
4.	Avoid unnecessary lifting.
5.	When lifting, face the object you are moving.
6.	When changing direction of movement, turn your whole body.
7.	Use your thighs and hips by bending knees when lifting.
8.	Use both arms to lift.
9.	Move smoothly, avoid jerky movements.
10.	Get assistance if the person or object is too heavy.
11.	For patients who cannot bear weight on their lower extremities, use two person lift.
12.	For patients who are too heavy to be lifted manually, use Hydraulic lift techniques.
13.	Caring for a patient with IV bottles:

	➢ It is recommended that the IV bottle be kept 18 to 20 in above the level of the vein. ➢ If the bottle is too high, the pressure of the IV fluid can cause it to pass through the vein into surrounding tissues, causing a painful and potentially harmful condition. ➢ If the IV bottle is (too low), the blood may return through the needle into the tubing, form a clot, and obstruct the flow of IV fluid.
14.	Watch the patient for signs of an emergency state, and immediately take precautions to minimize its effects
15.	**Use of Wheel Chair**
15.1	Position the wheelchair at a 45 degree angle to the patient's table
15.2	Move the wheelchair footrest out of the way.
15.3	Be sure the wheelchair is locked and then instruct the patient to sit on the edge of the wheelchair seat.

C). WI for Triage area classification





Triage Categories

T1 = Red = Immediate

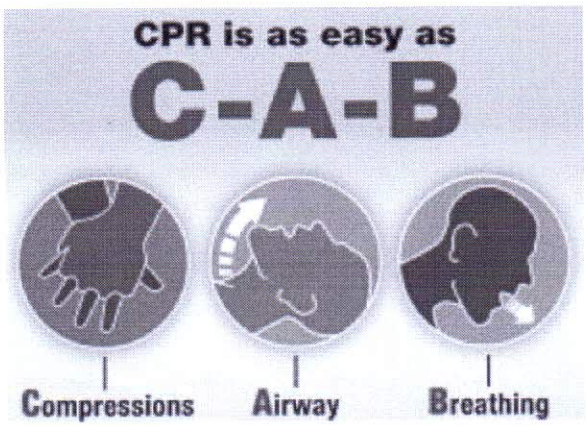
T2 = Yellow = Delayed / expectant

T3 = Green = Minor injuries

T4 = Black = Dead

D) WI for CPR

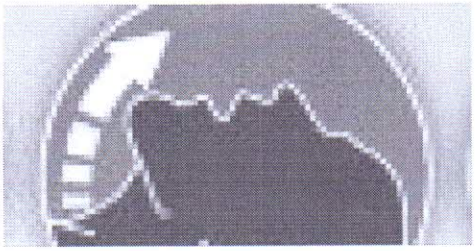
CPR is easy as C-A-B



CPR has changed! We got use to the ABC's of CPR.

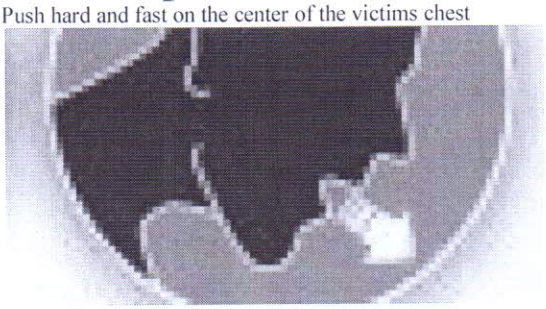
Compressions

Push hard and fast on the center of the victims chest



AIRWAY

Tilt the victim's head back and lift the chin to open the airway



BREATHING

Give mouth-to-mouth rescue breaths.

6. Process Efficiency Criteria:

Sl.	Activity	Activity	Efficiency Criteria

Sl. No.	Activity Sr. No.	Activity	Efficiency Criteria
02	4.7	Medico Legal Case	In case of Medico Legal Case, police shall be informed within 10 minutes after receipt of patient.
03	4.10	Emergency Medicines	It shall be ensured that, emergency medicines shall be available in adequate nos. at all times, for this alternate day review of stock of emergency drugs in hospital shall be done.
04	4.12 (b)	Conducting Mock drill	Mock drill shall be conducted at least once in a year.

5.0 Formats: ***(Enclose in appendix)***

S. No.	Format No.	Format Name	Type
1.	AH/TKL/ER/F-01	Brought Dead Certificate	Forms
2.	AH/TKL/ER/F-02	Incident Reporting Form	Forms

6.0 Records:

S. No.	Record Number	Record Name	Type	Retention Period
1.	AH/TKL/ER/R-01	Emergency register	Register	3 years
2.	AH/TKL/ER/R-02	MLC register	Register	3 years
3.	AH/TKL/ER/R-03	Police information register	Register	3 years
4.	AH/TKL/ER/R-04	Brought in dead register	Register	3 years
5.	AH/TKL/ER/R-05	Stock register	Register	3 years

7. Reference Documents

Hospital layout Plan

Prepared & Reviewed By: **Approved by:**

RMO **Medical Superintendent**