MINISTRY OF HEALTH & QUALITY OF LIFE

EPRCR Guidelines

MINISTRY OF HEALTH & QUALITY OF LIFE

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The complexity of our society today favours it in such a way that no national borders are immune against major emergencies, disasters and crises. These awful events are no respecters of human norms for whenever they strike their nature are completely different. Health Care Systems are more vulnerable than ever before to the volatility of our high – tech society and the escalation of national and international conflicts and disasters.

However, the magnitude of human sufferings caused by these events is huge and many aspects of people's lives are affected – health, security, housing, access to food, water and other life commodities to name just a few. That is why it is vital to have new concepts of managing emergencies and crises for the ultimate goal is to save lives and reduce sufferings.

Although most emergencies are often unpredictable yet much can be done to prevent and mitigate their effects as well as to strengthen the response capacity of communities at risk by providing urgent services, meet public basic needs, and of course securing the right to life.

By 2014, nobody can deny the fact that major emergencies, disasters and other crises need to emphasize on a multi sectorial comprehensive approach which has fostered by November 2011 a National Disaster Operations Coordinating Centre (NDOCC) replaced today by the National Disaster Risk Reduction Management Centre (NDRRMC) unifying all health and non-health clusters involved in natural and technological catastrophes in order to enhance the concept of innovated standardization, national resilience both structural and functional supported by regular documentations and research works pertaining to emergencies, crises and disasters. But the main motif remains its utmost functionability in time of needs.

Similarly, a national workshop under the aegis of MOH & QL, en partenariat with World Health Organisation conducted from 06 to 27 June 2011, pertaining to Disasters and Mass Casualty management were organized under the Patronage of the lead WHO Consultant Dr Mark Keim. Based on the above workshop a standard National Preparedness, Response, Communications and Recovery Strategic Guidelines was adopted after several important discussions amongst all stake partners to reach consensus on the objectives and key strategic directions. The guidelines encroach the responsibilities of each department in case of any crises, emergencies and disasters whether it be at the pre-hospital or intra-hospital level.

The implementations of the proactive strategies call for a more comprehensive approach in building national capabilities in Emergency Preparedness, Response, Communications and Recovery as well as risk reduction. While building-up capacity, for humanitarian response continues to be a priority for all countries, yet it is now widely believed that work should be done to reduce social, economic, and humanitarian consequences of any emergencies, disasters or crises. Practitioners are free to exercise their own will and professional judgement; however any alteration to the practice identified within these guidelines should be noted as a variance in the standard and established guidelines.

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Ministry of Health & Quality of Life

STANDARD OPERATING PROCEDURES: MASS CASUALTY/ DISASTER

HOSPITAL INCIDENT COMMAND SYSTEM

GENERAL PRINCIPLES: APPLIED TO ALL HOSPITALS.

1. In Mass Casualty or Disasters, Hospitals must operate in an Incident Command System. Upon activation of Mass Casualty or Disaster alert (Siren, SMS Broadcast), Pre- Hospital intervention by the SAMU & Other Well Equipped Ambulance Team report to site of Disaster or Mass Casualty (Casualty Processing Areas). Pre-Hospital and Hospital triage with the setting up of colour- coded Triage treatment zones are essential. Activation of Hospital Emergency Response Alarm Siren should be for 2 minutes. The alarm siren should be activated in the telephonist room by the Nursing Supervisor (Male or Female) and duly signed in an Entry Book.

2. Under instructions of Incident Commander (RHD, MS,DM who leads the Emergency Operation Co-ordination(EOC) meeting Consultant in charge of each unit, Regional Nursing Administrator, Nursing Administrator, Ward Managers, Charge Nurses (through Nursing Supervisors), *Hospital Administrators, Chief record officers, Hospital Executive Administrative Officer and other concerned head of department, distribute and assign roles of each staff in their units. Selected MHO's, Consultants/ Specialists, Nursing Officers, Hospital Care Attendants, Health Care Assistants and Hospital workers report to RED, YELLOW and GREEN Zones.

3. Hospital Units review their roles in the Emergency Operating Procedures (EOP)

4. Hospital signages and directional signs are placed to direct flow of patients.

5. HA/ HAA perform necessary structural rearrangements and supply required logistics at the site of A&E, OTs, ICU, Sorted and Unsorted OPDs , Wards for reception of casualties and other sensitive areas.

6. **The ECC should be attended preferably by RHSA but in case of unavailability HA or HAA is delegated.**

7. HA/HAA make adequate arrangements to set-up Information, Family Support, Media and Psychological Desks with all logistics.

8. Prioritized clinical examination and treatment of sick elderly, Paediatrics OPD patients until arrival of Mass Casualties.

9. In case of large scale Mass Casualties, postpone OPDs and Elective Surgery.

10. Rapid Patient Discharge (RPS) of stable patients from Wards is highly beneficial in case of large scale Mass Casualty/Disaster in order to accommodate more Casualties. Every Ward should have an emergency intubation Kit ready.

11. The unsorted and sorted OPDs should be organized and utilized as yellow and green zones in case of Mass Casualty/ Disaster. HA/ HAA should make arrangements for all logistics.

12. In large scale Mass Casualty/Disaster, arrangement should be done by IC (RHD/MS/DM) to have a parallel pool of medical and paramedical staff to attend emergencies and vital emergencies at hospital level also. Non emergency cases will not be undertaken at A & E (Red) and Unsorted OPD (Yellow) zones.

13. In large scale Mass Casualty/ Disaster, HA/HAA under instructions from IC (RHD, MS, DM) should organize to provide necessary materials (mattresses, blankets, bed sheets, pillows) to Yellow Zone patients, in case of an overflow OR failure to transfer to other receiving hospitals.

14. Emergency Physicians present at Red Zone.

15. Doctors assigned to Green Zone treat and discharge patients.

16. Pharmacist in charge ensures that additional supplies of drugs and consumables are readily available in Red Zone (A & E, ICU, OT, Resuscitation areas), and Yellow (Unsorted OPD) Zones.

17. NS ensures from WM/ CN that MOT is ready to accommodate casualties needing suturing, dressings and POPS.

18. HAA/HA readjust adequate number of couches, wheelchairs and trolleys for incoming casualties.

19. NS instructs WM to transfer few couches, wheelchairs and trolleys from wards to receive casualties at A & E (Red Zone) by Hospital Care Attendants if needs be.

20. Laboratory will triage specimen with priorities to ICU, OT, A & E and Resuscitation areas. All specimens should be labelled Red, Yellow OR Green.

21. Consultant- in - Charge Anaesthesia enquires and ensures about the availability of number of beds in Intensive Care Unit. Transfer of fairly stable patients (Downgrading) to Wards should be considered. Consultant-in-Charge Anaesthesia should also enquire from his/her colleague CIC of other nearest hospital about the number of beds available in the ICU. Such information should be transmitted to IC.

22. HAA/HA makes an immediate assessment of important logistics and man power as well as report to Incident Commander (RHD/MS/DM) during the co-ordination meeting.

23. Consultant-in-Charge Radiology makes an immediate assessment of critical equipment and supplies after which reports to Incident Commander (RHD, MS, DM) during the Emergency Operation Co-ordination meeting. This also applies to Chief Pharmacist concerning the availability of Emergency Drugs.

24. Emergency trolleys should be kept ready by Hospital Care Attendant in Red and Yellow zones.

25. Consultant Pathologist- in- Charge of Blood Bank should make immediate assessment and availability of blood and other blood products derivatives. He/ She should give a report to the Incident Commander (RHD/MS/DM) during the Emergency Operation Coordination meeting.

26. CIC Anaesthesia who is in charge of ICU, should inform IC (RHD, MS, DM after working hours) about bed availability in ICU. This important information should be transmitted to all CIC by the IC. Similarly, when ICU beds are not available in certain hospitals, it goes without saying that IC should be informed by the CIC Anaesthesia. This Manoeuvre will definitely help the IC to seek ICU bed from other Hospital in case of need. It is important to note also that in Mass Casualty/Disaster, the percentage of ICU occupancy should be communicated by IC to SAMU Control Room 114 in order to facilitate inter-hospital transfer or avoiding the transfer of vital emergencies by SAMU to a hospital where ICU beds are not available. Such mishaps happen due to lack of proper information and communications.

27. HAA/HA should ensure provision of tight security (Police, SMF, Security Guards) in hospital.

28. Doctors and Nurses involve in Mass Casualty/ Disaster should be well versed in Advanced Trauma Life Support (ATLS) and Advanced Paediatric Life Support (APLS) algorithm.

29. Use of Blood Pump & Warming Device in Red and Yellow zones always optimize the process of transfusion and decrease the adverse effects of hypothermia.

30. Fast and proper communications between A&E, ICU, Resuscitation unit, Radiology Department, Laboratory Services, and Operation theatres should be guaranteed by proper logistics and sufficient number of runners (Normally HCA).

31. Simulation Exercise/ Table top Exercise involving all departments and stake holders should be performed atleast yearly. Remember that one-off simulation exercise is useless.

32. Upon activation of Alarm Siren, all staff will be SMS broadcast by the telephonist whether on duty or not. Additional Back- up from Off Duty staff will be clearly specified in the SMS Broadcast if needs be. The SMS will read: **THE MASS CASUALTY EMERGENCY RESPONSE IS NOW ACTIVATED. THIS IS NOT A DRILL.**

33. Runners: Health Care Assistant or Hospital Care Attendant depending on circumstances. Essential In Case of Mass Casualty/Disaster to facilitate Communications, availability of urgent laboratory Investigations, Blood, Blood product derivatives, Radiological reports and also booking of early appointments for in-wards Rapid Patients Discharge (RPD). Runners are selected by Ward Managers.

34. In case of Mass Casualty/Disaster, under instruction of IC, Hospital Records should reserve one vehicle with all logistics at hand for Inter-hospital Carriage of Blood and Blood product derivatives.

35. Rapid Hospital Patient Discharge (RHPD) after assessment and Triage by specialist/ consultant is an efficient method to accommodate Mass Casualty/Disaster Patients when there is an unexpected increase in casualties' volume.

36. Social Medias (Twitter, Facebook, YouTube, etc) are valuable tools in Mass Casualty/Disaster Management.

37. A thorough analysis of Hospital Surge Capacity (HSC) should be done at each Regional and District hospital.

38. In order to reduce the risk of loss to life, the population should be well informed about the potential danger of after-shocks following a disaster (e.g.: cyclone, flooding)

STANDARD OPERATING PROCEDURES FOR EMERGENCY RESPONSE TO MASS CASUALTY/DISASTER

IC (RHD – MS IN CASE OF UNAVAILABILITY OF RHD) DURING OFFICE HOURS

1. Activation of the EPRCR guidelines and instruction to NS to activate the Alarm Siren by IC (RHD, MS).

↓

2. SMS Broadcast by telephonist to staff as per instruction of IC. In large scale Mass Casualty/ Disaster, IC instructs telephonist-in- charge to SMS Broadcast off-duty staff also. The decision for back up with more staff will be clearly stated in SMS Broadcast.

↓

3. RHD Informs SCE, DGHS & DHS Hospital Services.

↓

4. IC sets the EOC meeting in ICR (Normally in the RHD's Office) which comprises of MS, Consultants- In-Charge, Consultant Pathologist-In-Charge of Blood Bank, RNA, RHSA, HA, One Emergency Physician, Logistic Officer, Head Transport, Head Records, Police and Security Agents, ESD/Catering Officer-In-Charge, Biomedical Division In Charge, Hospital Executive Administrative Officer.

↓

5. IC gets feedback from SAMU Control Room 114 concerning magnitude of Mass Casualty/Disaster and accordingly respond as follows:
   (a) Despatch of additional equipped ambulance(s) to CPA (Usually done by CR 114 itself)
   (b) Activation of A&E, Intra hospital EPRCR plan (Colour Coded Zonings & Signages)
   (c) Mobilisation of existing staff to high acuity zones (A & E, Resuscitation Areas, OT).

↓

6. IC should co-ordinate with SAMU Control Room 114 regarding the latest information pertaining to estimate number of casualties at CPA, Flow of patients towards hospital and Particular arrangement to be done at hospital level with incoming casualties. He should also inform SAMU Control Room 114 about bed capacity in ICU, Wards, flow of patients at the Red Zone (A&E) in a particular hospital which however may need diversion of acute emergencies to other hospital after doing proper arrangements. Remember that lack of communications may lead to severe disruption in the application of the EPRCR plan.

7. IC keeps HQ inform about the latest development and the response initiated.

MASS CASUALTY - SAMU EMERGENCY PREPAREDNESS- RESPONSE & COMMUNICATIONS GUIDELINES

*Alert may be from any source.

NB: Remember
1st Information may not be correct – may need confirmation from 999, 115, Airport, Harbour, etc...

MASS CASUALTY / DISASTER ALERT *

- 114 CR
- MEDECIN REGULATEUR (IC)
- PERMANANCIERS

Inquire Types

- RTA – Air Crash
- Collapsed Building
- Technological, Chemical, etc.
- Alert Ministry of Environment

Inform through SMS Broadcasts

- Director SAMU
- RHD/ MS/DM, Police, Fire Rescue
- CEO – DGHS – DHS
- All Samu Staff (On & Off Duty)

HOSPITAL concerned

- ACTIVATION of Intra-Hospital EPRCR Plan by IC (RHD/MS/DM)

- Immediate RESPONSE by SAMU CONTROL ROOM

- HELICOPTER EVACUATION in certain specific conditions
- HA – RHD/MS/DM ensure that HELI PADs are functional

- AMBULANCE to be despatched from A & E with (Per Ambulance):
  1. Casualty Doctor x 2
  2. NO x 2
  3. Kit x 2

- Despatched nearest SAMU team
- Decision for Back up taken by MR as per feedback from CPA by emergency physician (IC)
- Mobilise Other SAMU Team
- Alert Private Clinics

- RHD/MS/DM/HA/HAA should ensure that all logistics to be sent on site by CPA

- SETTING UP of CPA (SAMU + HOSP Team + Private)

- MEDIA RELEASE by Director SAMU at 114
- At Hospital level by RHD

- CPA (Triage, Zoning, Treatment and Evacuation areas) - Emergency Physician IC.
- Police / SMF (Set up the "Cordon de Securite" , and set up tents if needs be according to zonings)- IC Police.
- Fire Rescue(Set up the security zones for intervention) – IC Fire Rescue- Ministry of Environment if applicable.

Red Zone

- Vital Emergencies
- HIGHEST PRIORITY
- Area Cordoned

Yellow Zone

- Extreme Emergencies
- Area Cordoned
- Tagging of Victims +++

Green Zone (low priority)

- Tagging of Victims +++

Black (Dead)

- Bodies Tagged and Evacuated to Mortuary by Police

ACCESS LIMITED ONLY TO:
- Fire-fighters – Police – Medical team and If no risk
- Treatment on site
- Tagging of victims +++

- Access to facilitate evacuation to hosp. by: SAMU – POLICE – FIRE – AMB NON MED - HELICO EVAC - Private clinic own means.
- ALWAYS ABIDE TO ZONING IN HOSP. Secondary Triage at Hospital essential.

Ministry of Health & Quality of Life

STANDARD OPERATING PROCEDURES FOR EMERGENCY RESPONSE TO MASS CASUALTY/DISASTER

(DUTY MANAGER (IC)/AFTER OFFICE HOURS & PUBLIC HOLIDAYS.

1. DM (IC) activates the EPRCR Guidelines and instructs NS to activate the Alarm Siren.SMS Broadcasts to staff by telephonist as per instruction of IC. Decision for back-up by off-duty staff will be clearly specified in SMS Broadcast. DM informs RHD and sets the EOC meeting which comprises of one Casualty Officer/ NS/ Officer-in-Charge Records/Officer-in-Charge Transport pending arrival of other Head of departments.

⬇

2. DM informs SCE, DGHS & DHS Hospital Services.

⬇

3. DM gets feedback from SAMU Control Room 114 concerning magnitude of Mass Casualty/ Disaster and responds accordingly as follows:

(a) Despatch of additional equipped ambulance/s to CPA (Usually done by CR 114 itself)
(b) Activation of A&E, Intra hospital EPRCR plan (Colour Coded Zonings & Signages)
(c) Mobilisation of existing staff to high acuity zones (A & E, Resuscitation Areas, OT).

⬇

4. DM should coordinate with SAMU Control Room 114 regarding the latest information pertaining to estimate number of casualties at CPA, Flow of patients towards hospital and Particular arrangement to be done at hospital level with incoming casualties. He/ She should also informs SAMU Control Room 114 about bed capacity in ICU, Wards, flow of patients at the Red Zone (A&E) in a particular hospital which however may need diversion of acute emergencies to other hospital after doing proper arrangements. Remember that lack of communications may lead to severe disruption in the application of the EPRCR plan.

⬇

5. DM should keep HQ informed about the latest development and the response initiated.

STANDARD OPERATING PROCEDURES FOR EMERGENCY RESPONSE TO MASS CASUALTY/DISASTER

REGIONAL NURSING ADMINISTRATOR (RNA) /NURSING ADMINISTRATOR (NA)

1. RHD activates the EPRCR Guidelines during working hours and instructs RNA/NA to activate Alarm Siren by NS. After working hours, public holidays, Sunday and Saturday afternoon, NS assumes duty of RNA/ NA pending his/her arrival and activates the Alarm Siren upon instruction from DM.

2. RNA/NA confirms as per instruction of Incident Commander (RHD,MS,DM after working hours) that SMS Broadcasts have been sent to all Staff by telephonists.

3. RNA attends EOC meeting with Incident Commander (RHD/MS/DM after working hours). While attending the EOC meeting, NA assumes the responsibility of RNA.

4. As per request from (RHD, MS, DM), RNA /NA confirms from NS that equipped Ambulances with Nursing Staff and Doctors have been sent to the Casualty Processing Area (CPA).

5. NA instructs all ward managers and Hospital Executive Administrative Officer (HEAO) to mobilize staff on duty for emergency response in an orderly way. **Do not gather in front of A & E**. Everyone should know his or her duty to avoid confusion.

6. RNA/ NA through NS inform all Wards to run with skeletal staff.

7. After EOC meeting, RNA provides feedback to NA and NS regarding further response depending upon extent and magnitude of the Mass Casualty/Disaster.

8. Upon instructions from IC (RHD, MS during working hours, DM after working hours), NA/ NS/ HA ensure that A & E, Unsorted and Sorted OPDs are ready with all logistics to receive Mass Casualty Patients. All signages and Desks should be properly placed to avoid confusion in orientation of incoming casualties. **Failure to do so, can lead to, malfunctioning of the EPRCR Guidelines.**

9. RNA /NA ensures adequate staffing at the following spots:
   - Red, Yellow, and Green zones,
   - Desk areas,
   - Operation Theatres, Resuscitations Areas, ICU & Wards

10. RNA/ NA/ HA ensure from Catering Officer-in-Charge that all Staff and admitted patients are provided with materials, food and water supply.

11. RNA coordinates activities in all wards through NA and NS .He/ She collects and provides all data and feedback to RHD for onward transmission to Headquarters MOH & QL.

12. **In Hospital Incident Command System, Hierarchy should be the Rule. Information, data, feedback should reach RNA through NA and any breach in the chain of communications can have severe adverse effects.**

Ministry of Health & Quality of Life

STANDARD OPERATING PROCEDURES FOR EMERGENCY RESPONSE TO MASS CASUALTY/DISASTER

NURSING SUPERVISOR (FEMALE & MALE)

1. Alarm Siren for alert to Mass Casualty/Disaster activated by NS. SMS Broadcast by telephonist to all Staff whether on duty or not as instructed by IC. Decision for back up with more staff will be clearly stated in SMS Broadcast.

2. NS through respective Ward Managers/CN informs A & E staff, Nursing Officers, HOCA, HCA, Unsorted and Sorted OPDs (Whenever applicable) about Mass Casualty/ Disaster. He/She with HA/ HAA sees to it that proper signages and zonings (Red, Yellow, Green), Desk Areas (Media, Information, Psychological and family) are being properly placed. During working hours, he/she along with HEAO/HAA makes arrangement to convert unsorted and sorted OPDs into yellow and green zones if needs be.

3. NS verifies from Ward manager A & E and Health Records- In- Charge about the despatch of equipped ambulances with Ear- Marked Staff to the Casualty Processing Area (CPA) according to established guidelines.

4. NS identifies 2 or 3 Senior Charge Nurses to be in charge of Red, Yellow & Green zones.

5. In large scale Mass Casualty/Disaster arrangement should be done by IC (RHD, MS, DM) to have a pool of medical and Paramedical staff not concerned with Mass Casualty/Disaster to attend routine vital emergencies at Hospital Level only. Non Emergency cases will not be entertained at A & E (Red) and unsorted (Yellow) Zones. Sick elderly and Paediatric patients are seen on a Priority basis.

6. Upon instruction from RNA and whenever feasible, Male Nursing Supervisor Male and Female gives instruction to appropriate WMs to evacuate one Male and one Female ward (whenever feasible and is hospital dependent) to accommodate Mass Casualty patients. Evacuated patients are temporarily shifted to other wards after being assisted by a specialist. NS makes necessary arrangement to provide staff for the two wards receiving Mass Casualty/Disaster patients.

7. NS informs WM/ CN Main OT (Operation Theatres) to prepare for receiving Surgical Emergency Patients.

8. In large scale Mass Casualty/ Disaster, upon instruction from IC (RHD, MS, DM) and in agreement to CIC Anaesthesia, NS instructs WM/CN Main OTs to convert selected Recovery Rooms into Resuscitation Area for vital emergencies.

9. At the Nursing Staff Meeting point (**Normally Nurses Mess**) designated properly by each hospital, NS allocate duties of incoming Nursing staff to various units/ Receiving Centres/ Hospital Triage Zones.

STANDARD OPERATING PROCEDURES FOR EMERGENCY RESPONSE TO MASS CASUALTY/DISASTER

HOSPITAL TELEPHONIST: DURING & AFTER WORKING HOURS

As soon as the Alarm Siren is heard or information received regarding Mass Casualty/Disaster, under Instruction of Incident Commander (RHD, MS during Working Hours and DM after hours) the hospital telephonists inform the following staff on-duty:
The SMS Reads: **THE MASS CASUALTY EMERGENCY RESPONSE IS NOW ACTIVATED. THIS IS NOT A DRILL.**

- RNA – NA – NS
- WM – CN (A&E, ICU & OT)
- RHSA – HA- HAA
- All Consultant in Charge- Consultant-Specialists
- Chief Police Medical Officer
- Medical and Health officers – Pre-registration House Officers
- Consultant Pathologist in Charge of Blood Bank & Transfusion Services
- Police Post – Security Guards
- ESD
- Head Records Department
- Catering Department
- Hospital Executive Administrative Officer
- Hospital Drivers
- Head Biomedical Department

↓

Depending on the magnitude of Mass Casualty/Disaster, Incident Commander (RHD, MS) instructs Hospital Telephonists to SMS Broadcast all staff. Needs for off- duty staff to attend hospital will be clearly stated in SMS Broadcast.

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After Working hours, DM assumes function of RHD/MS and should instruct Hospital Telephonists on the same line in the event of Mass Casualty/ Disaster.

Ministry of Health & Quality of Life

STANDARD OPERATING PROCEDURES FOR EMERGENCY RESPONSE TO MASS CASUALTY/DISASTER

ACCIDENT & EMERGENCY DEPARTMENT

As per Instruction from IC (RHD,MS, DM after Working Hours), alarm siren for alert to Mass Casualty activated by NS. SMS Broadcasts by telephonists to staff .Needs for off duty staff to attend hospital will be clearly stated in SMS Broadcast.

1. CIC, RNA, NS, HA/HAA,HEAO, Head Records, Head Transport, ESD, Bio Medical Division, Catering Unit ,etc.. have the Intra-hospital EPRCR Plan activated.

2. Consultant-In-Charge Anaesthesia, Surgery, Neurosurgery, Medical, Orthopaedics, Paediatrics, Gynaecology-Obstetrics and Cardiology sends one Specialist with two MHO's to A & E. MS ensures that enough Casualty officers are physically present at A & E.

3. WM, CN and HEAO assigned responsibilities quickly to Nursing Staff, Health Care Assistants and Hospital Care Attendants in A & E, Sorted and Unsorted OPD's (Red, Yellow & Green Zones).

4. HA/ HAA sees to it that enough couches, Wheel Chairs and trolleys are available to accommodate incoming casualties to various Zones (Red, Yellow, Green). Incoming patients should be properly oriented according to tagging and zonings (Colour Coded Zones: Red, Yellow, and Green). Hospital Triage should imperatively be done for Non- tagged patients.

5. Good Resuscitation "BAY" with essential equipment, Multi parameters monitor with Defibrillator and External Pacer, Blood Warming device and pump, emergency drugs, IV Fluids, treatment materials and staff to resuscitate incoming casualties are essential. Intra osseous needles (Adults and Paediatrics) should be kept in Red and Yellow Zones.

6. One or more equipped ambulance/s staffed with one A & E doctor and two Nursing officers per ambulance should proceed to the Casualty Processing Area (CPA) at the same time with the SAMU Team.

7. Records Department and Hospital Transport Services should ensure that sufficient ambulances and transport vehicles are available. Vagrant Depot (through Head Transport) and other hospitals (through RHD/MS) should be contacted for Back up if needs be.

8. Police and Security Guards posted in front of A & E should take appropriate measures to facilitate access of vehicles/ambulances with casualties. Flow of vehicles should be Uni – Directional and the alighted areas should be a drop-off place in order to avoid staggering of vehicles or ambulances.

9. All Blood Sample should be labelled according to urgency: Red, Yellow, and Green. Laboratory services should prioritize such an order in a Mass Casualty/ Disaster.

10. Hands on (Point of Care) Echography and Portable X- Ray should be done in unstable patients at A & E (Red Zone). In X- Ray Department, the rule is to prioritize Emergencies based on Colour Coded System. Hence all patients should be **TAGGED** (Red, Yellow, Green).

11. At A & E (Red Zone), Unsorted OPD (Yellow Zone) and Sorted OPD (Green Zone) Health Records Officers should be present to register all casualties.

12. Patients requiring admissions are admitted in Earmarked Wards properly identified by Records Clerk for transmission of information to relatives, IC, HQ, Media, Information, Family support desk.

13. Information concerning availability of Blood and Blood Product Derivatives from Consultant Pathologist-in-Charge of Blood Bank & Transfusion services should imperatively be communicated to A & E (Medical Officer-in-Charge), SAMU Control Room 114,CIC Anaesthesia, Surgery, Neurosurgery, Paediatrics, Medical, Orthopaedics, OBS-GYNAE and ICU. Such information should be relayed from Consultant Pathologist in charge of Blood Bank to Incident Commander (RHD, MS, DM) during the EOC meeting for further transmission to the above mentioned department and CIC. Any Shortage concerning the availability of Blood and Blood Products derivatives should be immediately sorted out from Blood Bank of other hospitals by the Incident Commander (RHD, DM, MS).

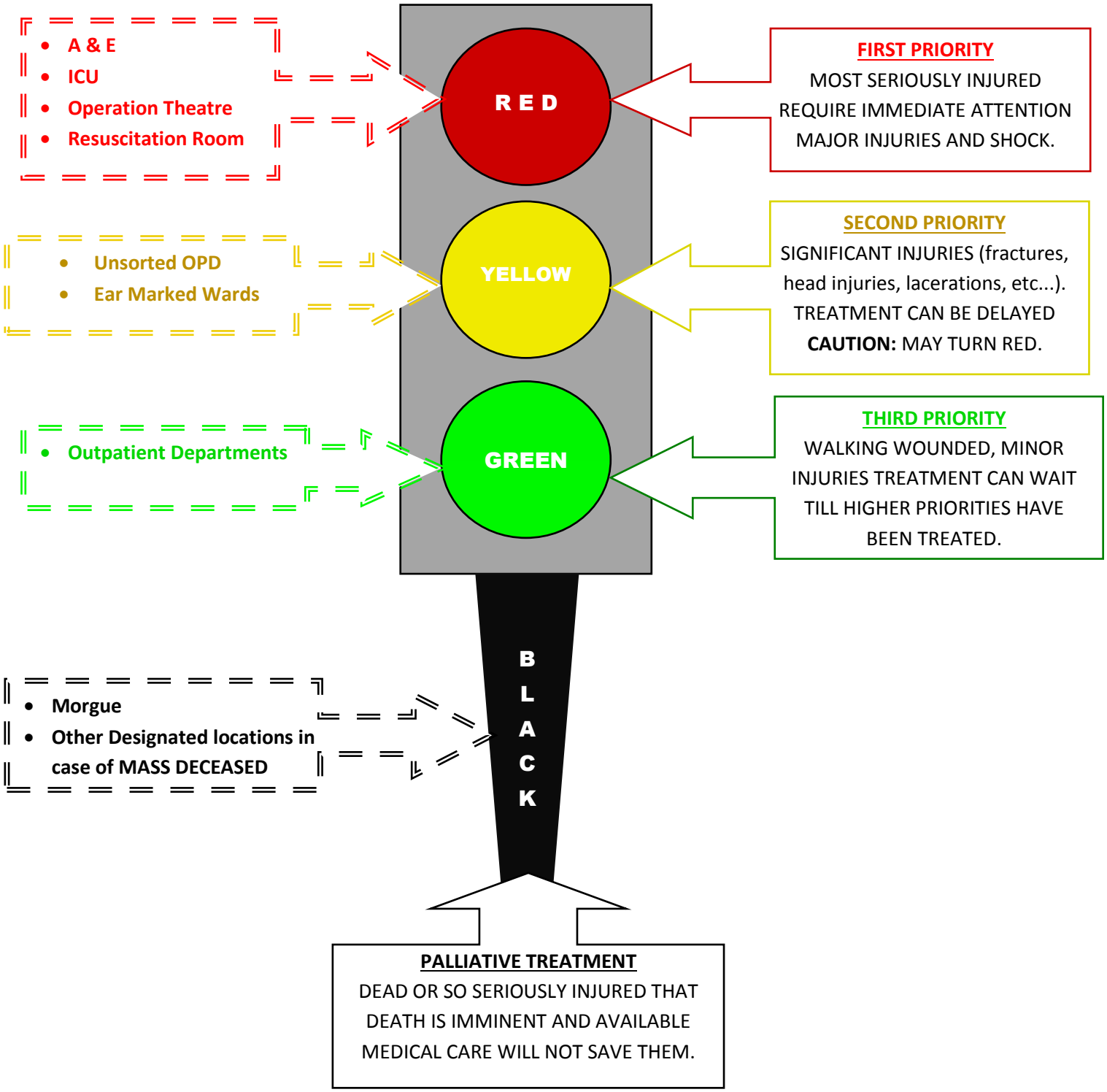
14. Sufficient Number of Runners (Health Care Assistants) should be present at A & E.

15. Role of each and everyone should be well defined.

16. **Always remember that A & E (Red Zone) forms a primordial part of the survival chain. Hence DISCIPLINE should prevail at A & E. Unnecessary discussions should be avoided.**

17. **REMEMBER also that Paediatrics Vital Emergencies can deteriorate very fast. Hence Paediatric Bay should have staff who are well versed in Paediatric Resuscitation.**

THINK OF A TRAFFIC LIGHT! And you will be able to remember the order of priority for treatment in Mass Casualty Or Disaster.



☐ SAMU

☐ A & E

☐ OTHERS

MASS CASUALTY PATIENT CARD

No:

Date: ..... **Time:** .....AM/PM

Site: .....

EXAMINE BY: **E. Physician** ☐ **DR** ☐ **N.O** ☐

PATIENT IDENTITY

Name: ..... **Surname:** ..... **Sex: F** ☐ **M** ☐

NATIONALITY: ..... **TEL:** .....

ADDRESS: .....**COUNTRY:** .....

LESIONS: **GLASCOW:** **P.A** ☐

	HEAD	FACE	NECK	SPINE	CHEST	ABD	RUE	LUE	RUE	LLE
FRACTURE										
CONTUSION										
WOUND										
BURN										
BLEED										

Triage (CPA)	Emergency	Cath/Drain	Splint
Venous Cath	**Breathing**	Thoracic ☐	Cervical ☐
☐ Peripheral: ☐ Cemral	Spont ☐ Assisted ☐	Gastric ☐ Urinary ☐	Attelle ☐ Mat Coquille ☐
OPR	**Others**	**Investigations**	**X - Ray**
☐ **Cardiac Massage**		U/S (ABD): ☐ Scan Brain/Chest/ABD ☐	Skull/Cervical ☐ Chest ☐ Pelvis/Extremities ☐
Fluids I/V	**Injections (IV/IM)**		**IVG**
R/L D/S N/S ☐ Colloids* ☐ D 50% ☐	1. 2. 3.		Hb-X-Matching ☐ UE'S ☐
Evacuation	**Central Room 114 Dr:**	**Hosp. Dr:**	
Hospital	**Time:**		
SAMU ☐	**Ambulance** ☐	**Other Means** ☐	

CPA: Casualty Processing Area**; PA:** Passed Away ; * To use with caution.

COMMENT:

ANNEX 2: ITEMS TO BE INCLUDED IN THE EMERGENCY KIT BAG UPON DESPATCH OF EACH AMBULANCE IN CASE OF MASS CASUALTY FOR PRE HOSPITAL INTERVENTIONS FROM A & E

A. Sac – a – Dos (Shoulder Bags)	**(i)** Items for the emergency kits will be available in shoulder – bags for ease of carrying during emergency. **(ii)** Approximate size: 60 x 33 x 18 cm **(iii)** Should have purse like openings in 4 – 5 compartments **(iv)** Each compartment should be labelled as follows: 1. INTUBATION – compartment for intubation materials 2. INFUSION – for infusion materials 3. EMERGENCY DRUGS 4. DRESSING & SUTURING – for dressing and suturing materials 5. SPLINTS 6. TAGS & 'FICHES D'INTERVENTION'	
B. Emergency Drugs	**(a) Adrenaline/ Nor-adrenaline**	5 ampoules each
	(b) Atropine	5 ampoules
	(c) Dobutamine	2 ampoules
	(d) Isoprenaline	2 ampoules
	(e) Lasix inj	2 ampoules
	(f) Risordan	2 ampoules
	(g) Cordarone	2 ampoules
	(h) Piriton	4 ampoules
	(i) Natispray	1
	(j) Vogalene Ampoules	4
	(k) Perfalgan	4 vials of 500 mg
	(l) Uterine contractant	**Oxytocine/Ergometrine** 2 ampoules of each
	(m) Solumedrol	2 ampoules of 125 mg
	(n) Morphine/ Hypnovel	3 ampoules Each
C. Intravenous Fluids	**(i) Voluven***	3 pints
	(ii) Ringer Lactate	2 pints
	(iii) 50% Dextrose	2 vials
	(iv) Normal Saline	2 pints
	(v) Dextrose Saline	2 pints
	(vi) Dextrose 50%	2 pints
D. I.V. Cannulae	**(i) 16 gauge**	5 units
	(ii) 18 gauge	5 units
	(iii) 20 gauge	5 units
	(iv) 22 gauge	5 units
	(v) 24 gauge	5 units
	(vi) Intraosseous needle with adjustable flange	(i) 14G (ii) 16G (iii) 18G (Lancet, Trocard or Pencil type)
E. Central Venous Catheters	**(i) Adult size**	2 units
	(ii) Paediatric Size	2 units
F. Intubation Sets	**(i) Adult size**	1 set assorted sizes
	(ii) Paediatric size	1 set assorted sizes
	(iii) Neonatal size	1 set assorted sizes
G. Endotracheal Tubes	**(i) Adult size**	1 set assorted sizes
	(ii) Paediatric size	1 set assorted sizes
	(iii) Neonatal size	1 set assorted sizes

H. Ambu Bag Kit with assorted masks	Adult cum Paediatric	
I. Airway (Guedel) – assorted	White, Green, Yellow, Red and Blue: *2 units each size.*	
J. Anaesthetic Drugs (to be kept in Cool Bags)	**(i)** Penthothal /Etomidate **(ii)** Ketalar **(iii)** Scoline **(iv)** Norcuron **(v)** Tracium/ Limbex	
K. Dressing and Suturing	**(i) Suturing set – with suturing material**	1 set
	(ii) Local Anaesthesia	1 vial
	(iii) Local anaesthetic spray	1
	(iv) Crepe bandage – assorted sizes	(i) 3 in (ii) 4 in (iii) 6 in
	(v) Elastoplast/Mircropore	2 rolls
	(vi) Betadine	1 canister
	(vii) Hemostatic Surgical dressing	2 packs
	(viii) Sofratuille	4 sheets
	(ix) Flamazine	4 tubes
L. Splints	**(i) Cervical Collar –Flexible assorted**	1 each
	(ii) Limb Splints – assorted	1 pair each
M. Disaster Tags	**(i)** 10 tags green colour **(ii)** 10 tags yellow colour **(iii)** 10 tags red colour **(iv)** 10 tags black colour	
N. 'Fiches D'intervention – Mass Casualty Patient card	**(a)** 10 cards – Green **(b)** 10 cards – Yellow **(c)** 10 cards – Red **(d)** 10 cards – Black	
O. Miscellaneous	**(i) Scissors**	2 pairs of different sizes
	(ii) Tourniquet	2 units
	(iii) Gloves	Sterile & Non Sterile: different sizes
	(iv) Nasogastric tubes – assorted sizes	
	(v) Urine catheter	2 units
	(vi) Syringes	(a) 1 ml : 2 units (b) 2 ml : 2 units (c) 5 ml : 2 units (d) 10 ml: 2 units
	(vii) Blood pressure apparatus	**Aneroid type** 1 unit
	(viii) Stethoscope	1 unit
	(ix) Glucometer	1 unit
	(x) Face mask	
O. Physiological Apparatus (Multi parameters Monitor)	**(i)** Cardiac Monitor with Defibrillator **(ii)** NIBP **(iii)** SPO_2 **(iv)** CO_2 **(v)** Temporary External Surface Pacing	

***Voluven**: To be use with caution. New papers does not recommend colloids in certain clinical conditions.

STANDARD OPERATING PROCEDURES FOR EMERGENCY RESPONSE TO MASS CASUALTY/DISASTER

DUTY OF POLICE

1. Hospital Police Post is informed about Mass Casualty/Disaster by OPS Room 999 OR SAMU 114.

2. Police Post informs IC (RHD/ MS/ DM after Working Hours) or vice versa. Police-In- Charge at the Hospital Police Station attends EOC meeting set up by IC.

3. Request for reinforcement of additional Police Officers is made through OPS Room by Police Officer In Charge/On Duty.

4. Posting of Police Officers are as follow:
   i. One Police officer is posted at Hospital main entrance to control and guide traffic to & from Hospital. Traffic flow should always be Uni - directional. Vehicles should not stagnate in front of A&E, instead it should be a drop - off area.
   ii. One Police Officer and One security agent at Hospital Administrative block.
   iii. One Police Officer and Two Security Agents are posted at Hospital Red, Yellow and Green Alighted areas.
   iv. Two Police Officers are posted in A & E and ICU (Red Zones), Unsorted OPDs (Yellow Zones), Sorted OPD (Green Zones).
   v. Two Police Constables are posted in Mortuary.

*Police Officer- In – Charge (Inspector) of Police Station at hospital should request back-up from IR if needs be.

5. Two Security Agents assure parking for incoming vehicles. In case of non availability of parking, police instructs drivers to park outside Hospital.

6. Deployments of SMF are essential in Large Scale Mass Casualty/Disaster.

7. Police/ SMF should ensure Law and Order during such a situation.

STANDARD OPERATING PROCEDURES FOR EMERGENCY RESPONSE TO MASS CASUALTY/ DISASTER

TRANSPORT UNIT

1. As per instruction from IC, alarm siren for alert to Mass Casualty activated by NS. SMS Broadcast by Telephonist to staff. Needs for off-duty staff to attend hospital will be clearly stated in SMS Broadcast.

2. Upon instructions from Incident Commander (RHD/ MS/DM after Working Hours), Senior Health Records Clerk-In-Charge on duty at A & E ensures that one or more equipped ambulance(s) are ready to be sent to CPA . Arrangements should be made rapidly to prepare other ambulances in case of needs at Casualty Processing Areas (CPA).

3. Senior Health Record's Officer-in-Charge allocates specific responsibilities to Health Record Clerk e.g.: Redeployment of ambulances/transport vehicles, recording of Particulars of incoming Mass Casualties in Red, Yellow and Green Zone. In Large scale Mass Casualty/ Disaster, Senior Health Record Officer liaise with Head Transport (VAGRANT DEPOT) of MOH & QL and Records Section of Other Hospitals to reinforce ambulance/vehicle fleet if needs be.

4. In case of Mass Casualty/ Disaster, SMS Broadcasts are sent to all Hospital DRIVERS irrespective whether On Duty or not. However if back up of more drivers are needed, it will be specifically mentioned through the SMS Broadcast.

5. Transfer of Patients to other Hospitals for whatever reasons should be properly recorded by Health Records Clerk in order to avoid confusion and Unnecessary hassles to relatives and families.

6. Proper recording of ambulance plate number and trips should be kept by Hospital Records Clerk in Charge of Transport.

STANDARD OPERATING PROCEDURES FOR EMERGENCY RESPONSE TO MASS CASUALTY/DISASTER

OUTPATIENT DEPARTMENT: UNSORTED OPD /SORTED OPD (WORKING HOURS)

As per instruction from IC (RHD, MS), alarm siren for alert to Mass Casualty activated by NS. SMS Broadcasts by telephonists to staff. Needs for off duty staff to attend hospital will be clearly stated in SMS Broadcast.

1. Under instruction of NS, CN of respective Unsorted and sorted OPD's assembles earmarked staff on duty (Meeting point for Nursing Officers and HCA is Nurses Mess and for Hospital Care Attendant is Attendants Mess) .With help of HA/HAA and HAEO, procedures to convert unsorted and sorted OPD's into Yellow and Green Zones are respectively activated.

2. In Large Scale Mass Casualty/Disaster arrangement should be made by IC (RHD, MS,DM) to have a pool of Medical and Paramedical Staff (not concerned with mass casualty/disaster) to attend Vital Emergencies at Hospital Level Only. Non Emergency cases will not be entertained at A & E (Red) and Unsorted (Yellow) Zones. Sick Elderly and Paediatric Patients are seen on priority basis.

3. NS/HAEO ensures that Unsorted and Sorted OPD's are staffed adequately and organised to receive Mass Casualties Patients.

4. NS ,HAA and HAEO ensure setting-up of appropriate Mass Casualty signages and directional signs.

5. In Large scale (Extensive) Mass Casualty/Disaster, Yellow Zone (Unsorted OPD) which is converted into Medical Receiving Centre should be provided with the following logistics: Trolleys, Foldable stretchers, Drip Stands, Medical Equipment/Apparatus e.g.: suction apparatus, Intubation kits, oxygen cylinders, oxygen mask with tubings, disposables, bandages, splints, IV Cannulae, BP apparatus, Glucometer, IV Fluids, Multi parameters monitor with defibrillator and external surface pacer, essential emergency drugs, Stationeries, X-Ray, cross matching, Request forms and Blood collection sample tubes. All X- Ray forms and sample tubes should be Colour Coded or clearly labelled: Red, Yellow & Green. Clinical findings of every patient should be recorded on MASS CASUALTY CARD. Note that Green Zone will see Non Emergency/ Walk through Patients/ Minor Injuries – hence needs less logistic. Runners (HCA) should always be present at Yellow and Red Zones.

6. HAA/ NS and HAEO make arrangement to setup information, Family Support, Media and Psychological Desks in appropriate places.

7. Information Desk should be easily accessible.

8. Victims at Red, Yellow and Green Zones are registered by Health Record Clerks.

9. Casualties requiring admissions are accompanied by Hospital Care Attendant and Health Care Assistant to respective wards.

10. Proper and updated hourly information regarding Casualties at Red, Yellow and Green Zones, number of admissions to wards, ICU, Surgical Interventions, Paediatric cases, Hospital Transfer, Dead bodies, etc. are transmitted to IC (RHD, MS, DM) by **HEAD RECORD CLERK**. IC will then relay all relevant information to Information DESK through RNA. **As far as possible Parents/ Relatives of Mass Casualty/Disaster patients should have proper and not misguided information.**

11. The Decision for Media release is solely DEPENDANT ON IC (RHD, MS (before working hours) DM (after working Hours). In an Incident Command System (ICS) HIERRACHY IS THE RULE. Any Breach in the chain of the system may have severe repercussion.

STANDARD OPERATING PROCEDURES FOR EMERGENCY RESPONSE TO MASS CASUALTY/DISASTER.

OUTPATIENT DEPARTMENT: UNSORTED OPD /SORTED OPD (AFTER WORKING HOURS)

As per instruction from IC (DM after Working Hours), alarm siren for alert to Mass Casualty activated by NS. SMS Broadcasts by telephonists to Staff. Needs for off duty staff to attend hospital will be clearly stated in SMS Broadcast.

1. DM sets EOC meeting and facilitate posting of Doctor to Red, Yellow and Green Zones. NS, through WM of different wards select few on-duty staff for immediate deployment to Red, Yellow and Green Zones. NS guides HOCA to set Hospital Mass Casualty Signages Colour Coded Zonings and signages.

2. Upon instruction from SAMU 114 Control Room, DM directs one doctor, two Nursing Officers to Mass Casualty Site (CPA) in an equipped ambulance. Decision to send more equipped and staffed ambulances will depend on feedback from SAMU Control Room 114. Each ambulance should have its Medical Kit Bag and other logistics.

3. In Large scale Mass Casualty/Disaster arrangement should be made by IC to have a pool of medical and paramedical staff to attend Hospital Vital Emergency Cases not related to Mass Casualty/ Disaster. However Non – Emergency Cases will not be entertained at A & E (Red) and Unsorted (Yellow) Zones. Geriatrics and Paediatric cases are seen on Priority basis.

4. In Extensive Mass Casualty/Disaster unsorted OPD is converted into Yellow Zone (Urgent) with the following logistics: Trolleys, Foldable stretchers, Drip Stands, Medical Equipment/Apparatus, Multi parameters monitor with Defibrillator and External Pacer, suction apparatus, oxygen cylinders, oxygen mask with tubings, Glucometer, IV Fluids, IV Cannulae, Intubation kits, Disposables, Bandages, BP apparatus, Splints and Vital Emergency Drugs should be available in addition to stationeries, X- Ray, Cross matching and request forms. Blood Collection Samples tubes should be kept ready for use. All collecting tube should be colour coded or labelled (Red, Yellow) when sent to Laboratory. Clinical findings of every patient should be recorded on MASS CASUALTY CARD. Sufficient runners should be present in Yellow Zone. Note that Green Zone will see only Non- Emergency/ Walking through Patients or minor injuries – Hence necessitates less logistics.

5. Patients requiring admissions are accompanied by Hospital Care Attendants and Health Care Assistants to respective Wards.

6. NS makes arrangement with HAA, HAEO (upon their arrival) to set-up information, Family Support, Media, and Psychological Desks in appropriate places. **Information Desk should be easily accessible.**

7. Proper and updated hourly information regarding casualties at Red, Yellow and Green Zones for e.g.: number of admissions to ICU, Wards, Surgical Interventions, admitted Paediatric Cases, Hospital Transfer, Dead Victims are recorded by Record Clerk and transmitted to IC by **Head Record Clerk**. IC then relays necessary information to "Information Desk" through RNA. Parents/Relatives of Mass Casualty/Disaster patients should have proper and not misguided information.

8. The decision for media release depends solely on IC. In an Incident Command System (ICS) HIERRACHY is the Rule. Any Breach in the chain of the system may have severe repercussion.

9. **Note that after working hours, DM assumes the function of Incident Commander (RHD, MS in the absence of RHD). It also applies to NS till arrival of RNA and NA.**

STANDARD OPERATING PROCEDURES FOR EMERGENCY RESPONSE TO MASS CASUALTY/DISASTER

INTENSIVE CARE UNIT

As per instruction from IC, alarm siren for alert to Mass Casualty activated by NS. SMS Broadcasts by telephonists to staff .Needs for off duty staff to attend hospital will be clearly stated in SMS Broadcast.

1. Consultant-in-charge/Consultants/ Specialists in Anaesthesia with other specialists treating patients in ICU reassess patients so as to shift fairly stable patients to their respective wards (downgrading) in order to provide beds for more serious incoming casualties. The number of beds available should be communicated to the Emergency Physicians on call at SAMU Control Room 114 by the Consultant- in- Charge Anaesthesia.

2. Before attending EOC meeting, CIC Anaesthesia posts one anaesthetist and one Medical officer trained in Anaesthesia in ICU. ICU Ward Manager/ Charge Nurse verifies and prepare available ventilators, multi parameters monitor with defibrillators and external surface pacer, Ambu-bags, E-T tubes, emergency drugs, essential equipments, disposables, Portable dialysis machine, Intubation sets (Adult & Paediatric), IV Fluids, IV Cannulae, Intra-osseous needles, Central Venous Catheter, Laryngeal Mask, Guide wire Colour Coded Blood Sample tubes. Stationeries such as X- Ray, Scan, Request and Cross matching forms should be readily available. Emergency Drugs and Inotropes should be checked regularly and immediate replaced in case of use. ICU which is a Red Zone Area should have sufficient number of runners (HOCA's and HCA's). Fluid communications (Good Extension Telephone Line & mobile) between IC, Pharmacy, OT, A & E, Resuscitation Areas, SAMU 114 and Blood Bank are essential.

3. As per instruction of Consultant-in-Charge Anaesthesia, one Anaesthetist and one Medical Officer, trained in anaesthesia be posted in:
   (a) Red Zone(A&E) and Yellow Zone (Unsorted OPD)*
   (b) Operation Theatres and Resuscitation Areas *

* **Depending on the availability of Anaesthetists**

4. Additional incoming ICU staff report to Ward Manager. WM/CN selects few ICU Staff for back up to Red Zone (A&E) and Resuscitation Area (Recovery Room OT) as requested by NS.

5. Ward Manager discuss briefly and quickly with his team regarding the broadlines of immediate management in ICU.

6. Charge Nurse receives emergencies and promptly starts management as directed by Consultant-in- Charge /Specialists/Consultants/ Medical Officers posted in ICU. As far as possible all patients should be clerked on a Mass Casualty Card prior to their admission in ICU.

7. Consultant pathologist in charge of Blood Bank should imperatively liaise with IC who in turns informs all CIC during the EOC meeting regarding the availability of Blood and Blood Product Derivatives. Any shortage of Blood and Blood product derivatives should be immediately sorted out from other hospitals by IC after proper arrangement being done by the Consultant Pathologist- In- Charge of Blood Bank & Transfusion Services. In Mass Casualty/Disaster Hospital Records Section should have a vehicle (car) reserve for Inter hospital transport of Blood and Blood Product Derivatives in case of Urgent need.

8. The quantity of Blood and Blood Product derivatives used (In terms of Pints) should be clearly written on ICU Board by WM/CN.

9. HA/HAA initiate security measures as appropriate, e.g. call for additional security guards, police constables (Normally two) to control & prohibit visitors in ICU.

10. ICU doctor provides necessary information to relatives in a waiting area. As far as possible, parents/relatives of Mass Casualty/Disaster should have proper and not misguided information at the Information Desk.

11. Ward Manager ICU gives necessary information to NS regarding number and types of admissions (Adult, paediatrics), number of Casualties under mechanical ventilation, ICU bed occupancy which is transmitted to RNA/NA and ultimately to IC. The clinical conditions of patient in ICU should be communicated to IC by the Consultant-in-Charge Anaesthesia in conjunction with other specialists/ Consultant-in-Charge/Consultants attending ICU.

12. SCE, DGHS, DHS from MOH & QL are kept informed regularly by IC (RHD, MS, DM).

13. **The Decision for Media Release depends solely on the IC. Breach of certain rules In the ICS may lead to severe repercussion.**

STANDARD OPERATING PROCEDURES FOR EMERGENCY RESPONSE TO MASS CASUALTY/DISASTER

BLOOD BANK & TRANSFUSION SERVICES

As per instruction from IC (RHD, MS, DM after Working Hours), alarm siren for alert to Mass Casualty activated by NS. SMS Broadcasts by telephonists to staff. Needs for off duty staff to attend hospital will be clearly stated in SMS Broadcast.

1. Before attending EOC meeting, Consultant-in-Charge will immediately inform Consultant Pathologist-in-charge of blood bank and transfusion services as well as allocate specific tasks to Consultant/Specialist and Medical Laboratory

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2. Consultant Pathologist-in-Charge of Blood Bank and transfusion services assigned adequate medical laboratory technologists in the Blood transfusion services including cross matching section.

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3. HAEO assign sufficient staff to serve as Runners (HOCA).

↓

4. In Extensive Mass Casualty/Disaster, after being informed by Telephonist OR SMS Broadcast to attend hospital if needs be, off-duty Laboratory Staff report to the designated meeting point of the Department. Hence Blood Bank has to designate its own meeting point.

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5. Medical Laboratory technologists assure that samples triaged as RED are first prioritized followed by Yellow and Green.

↓

6. Medical Laboratory Technologists assure that results are dispatched to specific areas (e.g. Wards/ICU/Operation theatres) according to triage category. This underlines the importance of Runners in all essential departments.

↓

7. Consultant Pathologist-in-Charge of Blood Bank and other Blood Donor Co-ordinator initiate volunteer blood drive if needed.

↓

8. Consultant Pathologist-in-Charge of Blood Bank and Transfusion Services assures that sufficient quantity of O^{-VE} Blood group and other blood product derivatives are available.

9. Storage of blood group O Rh^{-VE} Packed Red blood cells can help to save life.

10. In case of Mass Casualty /Disaster, Consultant Pathologist- in- Charge of Central Blood Bank and Transfusion Services (Victoria Hospital) should be able to provide information whenever contacted about the availability of blood and blood product derivatives in case of need from other Regional Hospital. All information should be transmitted to IC (RHD, MS & DM after Working Hours).

11. Consultant Pathologist-in-Charge of Blood Bank and Blood Transfusion Services / Medical Laboratory Technologists of respective hospital involved should always give proper information to IC (RHD, MS,DM) about the stock of Blood and Blood product derivatives once Mass Casualty Siren is being activated.

12. IC should instruct Records Department to have a vehicle always available with all logistics provided for Inter hospital transport of Blood & Blood product derivatives if needs be in case of vital emergencies in extensive Mass Casualty/Disaster.

STANDARD OPERATING PROCEDURES FOR EMERGENCY RESPONSE TO MASS CASUALTY/DISASTER

RADIOLOGY DEPARTMENT

As per instruction from IC (RHD, MS, DM after Working Hours), alarm siren for alert to Mass Casualty activated by NS. SMS Broadcasts by Telephonists to staff. Needs for off duty staff to attend hospital will be clearly stated in SMS Broadcast.

1. Before attending EOC meeting, Consultant-in- Charge Radiology allocates specific task to consultants and specialists Radiologist.

2. Radiology Department gets prepared to receive influx of patients. Colour Coded prioritization is the Rule (Red, Yellow, Green).

3. Consultant- in-Charge Radiology instructs Chief/Principal Imaging Technicians to turn on all X – Ray machines and check equipment.

4. Chief/ Principal Imaging Technician ensures that all portable machines are fully charged.

5. Consultant in Charge sends one Radiologist and Radiologist technician to the Red Zone: A & E. ICU with one portable machine.

6. Chief/ Principal Imaging Technician ensures stock film bins and other supplies.

7. Chief/ Principal Imaging Technician sees to it that Chemical Processors are replenish.

8. Chief/ Principal Imaging Technician find and place all grids in accessible area.

9. Radiographic Assistant maintain tracking log for all patients.

10. Consultant in Charge Radiology organizes work flow of all referred cases in his/her department.

11. Priorities are for patients with Red tags followed by Yellow and Green.

12. CIC Radiology should privilege point of care Ultrasound/Hands-on Echography should be utilised in Mass Casualty at the Red Zones (A & E, ICU, and Resuscitation Unit).

13. Consultant-in-Charge posts One Radiologist and Radiology Technician to Scan Department for Urgent C-T.

STANDARD OPERATING PROCEDURES FOR EMERGENCY RESPONSE TO MASS CASUALTY/DISASTER

ANAESTHESIOLOGY UNIT

As per instruction from IC (RHD, MS, DM), alarm siren for alert to Mass Casualty activated by NS. SMS Broadcasts by telephonists to staff. Needs for off duty staff to attend hospital will be clearly stated in SMS Broadcast.

1. Prior to attending EOC meeting (Usually RHD's Office) CIC posts One Consultant OR One Specialist with One MHO to the following areas: (a) Main Operation Theatre/s (b) ICU (c) A & E (Red Zone).

2. CIC sees to it that the Operation Theatre/s and ICU are on alert and entirely operational. He ensures that there are additional staffs, sufficient equipment including ventilators and drugs. He should get informed during EOC meeting about the availability of blood and blood product derivatives from Consultant-In-Charge Blood Bank and transfusion services. Adequate number of runners (usually HCA) should always be present.

3. In conjunction with surgeons, routine surgery cases are cancelled and selected patients may be discharged home in order to have beds for Mass Casualty patients.

4. In extensive Mass Casualty/Disaster, Part of the Recovery Room of Operation Theatres can be converted into Resuscitation Areas for vital emergencies. Adequate nursing staff with one Consultant OR One Specialist with one MHO can be posted in these areas whenever feasible.

5. The number of casualties requiring assisted ventilation should be well defined. In case of non – availability of bed in ICU, CIC Anaesthesia should make proper arrangement with his colleague CIC Anaesthesia in the nearest regional Hospital. **Ventilator rationing is essential in Mass Casualty**.

6. Depending on the magnitude of the catastrophe and number of casualties, CIC can seek help from Anaesthetists of other Regional Hospitals through IC (RHD).

7. **Proper Information should reach IC at regular Intervals by RNA and CIC for further transmission to MOH & QL, Media, Family Support and Information Desks. The Decision for Media release depends solely on IC in order to avoid confusing information.**

STANDARD OPERATING PROCEDURES FOR EMERGENCY RESPONSE TO MASS CASUALTY/DISASTER

OPERATION THEATRE(S) DURING & AFTER WORKING HOURS

Upon instruction from IC (RHD, MS, DM after Working Hours), alarm siren for alert to Mass Casualty activated by NS. SMS Broadcasts by telephonists to staff. Needs for off duty staff to attend hospital will be clearly stated in SMS Broadcast.

1. Incident Commander (RHD, MS, DM) sets the Emergency Operation Co-ordination (EOC) meeting.

2. Incident Commander (RHD, MS, DM) instructs RNA to ensure that operation theatres are entirely functional.

3. Consultant- in- Charge/ Surgery/Orthopaedics/ Neurosurgery/ Anaesthesia/OBS & Gynae /Ward Managers OT ensure that adequate staffs are available to handle influx of casualties needing Surgical Interventions.

4. In large Scale Mass Casualty/ Disaster, back up of staff who are off duty may be called to Hospital through SMS Broadcasts by Telephonist.

5. WM/ CN (After working hours, Saturday afternoon, Public holidays, Sundays) of Operating theatres ensure that adequate equipments and supplies are available to meet Operating Room's need.

6. MHO under guidance of a Specialist postpones elective Surgeries whenever feasible. Patients are sent home and return back on a later date on appointment. All patients must be explained clearly the reasons for their discharge.

7. In Extensive Mass Casualty/Disaster, Ward Manager under guidance of Consultant in Charge Surgery/ Orthopaedics/Anaesthesia/OBS & Gynae, Convert Recovery Rooms of the Operation theatres into Resuscitation Areas where Vital Emergencies can be stabilized.

8. IC (RHD, MS, DM) should have all information concerning availability of Bed in ICU (From CIC Anaesthesia).

9. In case of non- availability of beds in ICU, Incident Commander (RHD, MS, DM) should contact RHD/MS of nearest hospital and shift stable patients needing ICU care but Vital Emergencies should avoid being transferred for they can decompensate rapidly on way.

10. Consultant Pathologist- in-Charge of Blood Bank and Blood Transfusion services should inform IC (RHD, MS,DM) about availability of Blood and Blood Product Derivatives. All CIC should be informed (CIC surgery, Orthopaedics, Neurosurgeon, Anaesthesia, OBS & Gynae) during the EOC meeting. In case of Shortage, Consultant Pathologist -in -Charge should take appropriate measures by contacting Blood Transfusion Services of other Regional Hospitals. IC should be informed and intervened.

11. O^{-VE} blood group and other blood products derivatives should be made available – e.g.: Platelets, Fresh frozen plasma, pack cells, Fresh whole blood.

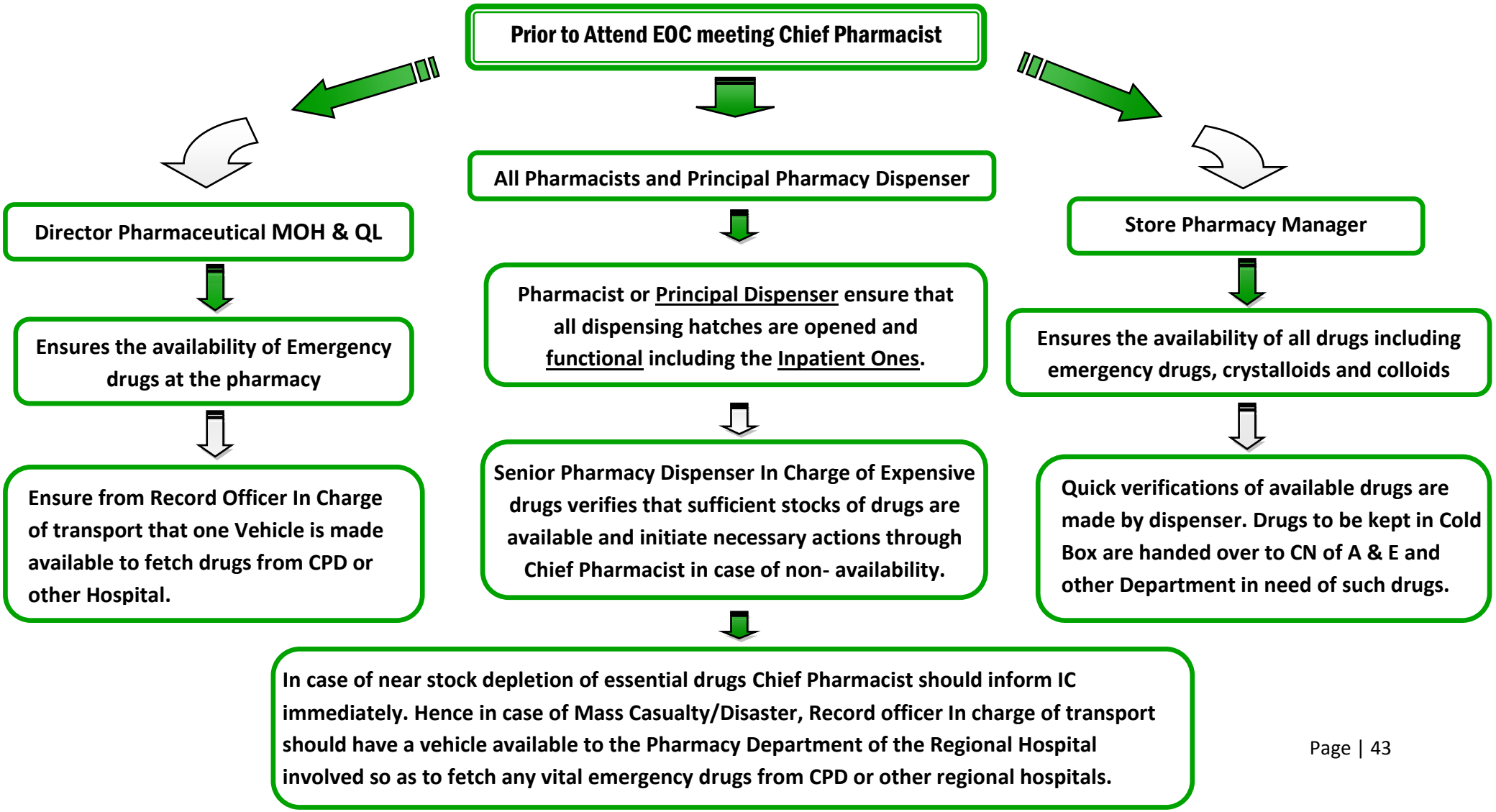
12. Ward Manager OT should appoint Two Hospital Care Attendants, Two Health Care Attendant as runners in each Operation Theatre.

13. Note that after working hours, DM assures function of IC (RHD, MS)

STANDARD OPERATING PROCEDURES FOR EMERGENCY RESPONSE TO MASS CASUALTY/DISASTER

PHARMACY - DAY DUTY

As per Instruction from IC (RHD, MS), alarm Siren for alert to Mass Casualty activated by NS. SMS Broadcasts by telephonists to staff. Needs for off duty staff to attend hospital will be clearly stated in SMS Broadcast.



STANDARD OPERATING PROCEDURES FOR EMERGENCY RESPONSE TO MASS CASUALTY/DISASTER

PHARMACY - NIGHT DUTY, PUBLIC HOLIDAYS & SUNDAYS

Upon instruction from IC (DM after Working Hours), alarm siren for alert to Mass Casualty activated by NS. SMS Broadcasts by telephonists to staff. Needs for off duty staff to attend hospital will be clearly stated in SMS Broadcast.

Most Senior Pharmacy dispenser on duty informs Chief Pharmacists, Pharmacists, Principal Pharmacy Dispenser and Store.

Chief Pharmacist informs Director Pharmaceutical Services MOH & QL

Store Manager ensures availability of emergency drugs, crystalloids, colloids and other life savings essential drugs. Drugs to be kept in cold box handed over to CN of A & E (Red Zone) and other department in need of such drugs.

Chief Pharmacist ensures that all emergency drugs are available, before attending EOC meeting. Any shortage of vital drugs should be referred in EOC meeting to IC.

Pharmacy Dispenser on duty opens store to verify availability of sufficient quantity of Emergency drugs. Items to be kept in cold box are handed to CN of A & E and other Department in need of such drugs.

All hatches including the inpatient ones should be operational.

STANDARD OPERATING PROCEDURES FOR EMERGENCY RESPONSE TO MASS CASUALTY/DISASTER

SURGICAL WARD (MALE & FEMALE)

Alarm Siren for alert to Mass Casualty activated by NS. SMS Broadcasts to staff by telephonists. Needs for off duty staff to attend hospital will be clearly stated in SMS Broadcast.

1. WM or CN assembles earmarked Nursing Staff, HCA, and HOCA on duty at nursing station.

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2. WM or CN identified few staff who are sent to Red, Yellow and Green Zones as required and requested by NS.

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3. Sufficient staff kept in ward to provide treatment and prepare Emergency trolleys with required Emergency drugs. Admitted patients are seen within reasonable time frame and prescribed treatments continued or initiated as per prescribing Doctor. **Remember that we are operating in Mass Casualty/ Disaster situations.**

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4. WM or CN informs patients in ward about Mass Casualty/Disaster and reassures them so as to have their co-operation.

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5. NO/CN accompanies Doctors for ward rounds so as to transfer (to other ward) OR discharge patients who can be allowed home.

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6. One Nursing Officer contacts relatives about discharged patients, reassures them that they will be contacted within the nearest delay and requests them to attend hospital as soon as possible to fetch their parents. **The reasons for discharge should be well explained to parents and patients.**

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7. WM / CN ensures that: (a) All surgical equipment and essential apparatus are functioning (e.g. suction apparatus, chest drain, Multi parameters patients monitor with defibrillator and external pacer, Pulse oxymeter, sphygmomanometer, O2 cylinder with adequate supply of O2) and intubating sets . (b) Surgical Materials and disposables are readily available. (c) Emergency Drugs and IV Fluids are at hand (d) The stock (In terms of pints) of Blood and Blood Product Derivatives which should be written clearly by WM on a Notice Board with the name of Medical Laboratory Technologists who has relayed the information. All balance stock concerning blood and blood product derivatives, should be communicated at regular intervals (Every Two Hours) to NS for further communications to WM. (e) Sufficient Number of HOCA/HCA as Runners should be present.

8. HCA prepare available bed to receive Male/Female Surgical patients.

9. HAA/WM ensure availability of sufficient bed sheets, blankets, pillows, etc.

10. After working hours, DM assumes the function of IC (RHD, MS). He /She sets the EOC meeting pending the arrival of RHD/MS. Similarly NS assumes the function of RNA/NA pending their arrival.

STANDARD OPERATING PROCEDURES FOR EMERGENCY RESPONSE TO MASS CASUALTY/DISASTER

SURGICAL UNIT DURING & AFTER WORKING HOURS

As per instruction of IC (RHD, MS, DM after Working Hours), alarm siren for alert to Mass Casualty activated by NS. SMS Broadcasts by telephonists to staff. Needs for off duty staff to attend hospital will be clearly stated in SMS Broadcast.

1. During working hours, prior to attending EOC meeting, Consultant in Charge Surgery delegates:
(a) One Surgeon (Normally the one on call) & One MHO to proceed to A & E (Red Zone). They also cater for admission in ICU.
(b) One Surgeon & One MHO to proceed to Yellow Zone.
(c) One Surgeon & One MHO to do Ward rounds and transfer (to other ward)/discharge patients who can be allowed home (Rapid Patient Discharge).

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2. Consultant in Charge Surgery is informed by Ward Managers about (a) the availability of beds in Surgical Wards and ICU. IC (RHD/MS,DM) and CIC Surgery is informed by Consultant Pathologist In Charge of Blood Bank and Transfusion Services/Senior Medical Laboratory Technologies, during the EOC meeting about the availability of Blood and Blood Product Derivatives. Correct information should flow to ICU/ OT/ A & E/ Yellow Zones/ Paediatric Wards/ Labour Ward and Resuscitation Areas. In case of shortage of Blood and Blood Product Derivatives appropriate measures should be taken by IC and CIC Pathologist of Blood Bank and Blood Transfusion Services to contact other Regional Hospitals. WM sees to it that sufficient numbers of runners are present.

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3. WM / CN Surgical wards ensures that: (a) All surgical and essential apparatus, equipments are functioning (e.g. suction apparatus, chest drain, Nebuliser, Multi parameters patients monitor with defibrillator and External Pacer , Pulse oxymeter, sphygmomanometer, Intubating kits, O2 cylinder with adequate supply of O2); (b) Surgical Material & Disposables are readily available; (c) Emergency Drugs and IV Fluids are at hand; (d) Information regarding availability of Blood and Blood Product Derivatives should be clearly written by WM on NOTICE BOARD with the name of Medical Laboratory Technologist who has revealed the information ;(e) All balance stock concerning blood and blood product derivatives should be communicated at regular intervals (Every two Hours to NS for further communications to WM); (f) Sufficient number (HCA and HOCA) of Runners are present.

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4. **Consultant in Charge General Surgery:**

(a) Supervisers Surgeons and MHOs of his/her Unit

(b) Coordinates activities of Surgical Unit

(c) Instructs to cancel all routine surgical operations whenever feasible

(d) Arranges for emergency operations

5. **Consultant in Charge General Surgery:**

- Gives Technical report to IC (RHD, MS,DM)

6. **Consultant in Charge General Surgery & Team:**

- Continue the follow-up of casualties till return to normal activity.

7. **After Working Hours, DM assumes the function of IC (RHD, MS). He/ She sets the EOC meeting pending the arrival of the RHD/MS.**

STANDARD OPERATING PROCEDURES FOR EMERGENCY RESPONSE TO MASS CASUALTY/DISASTER

NEUROSURGERY WARD (MALE & FEMALE)

As per instruction from IC (RHD, MS, DM after Working Hours), alarm siren for alert to Mass Casualty activated by NS. SMS Broadcasts by telephonists to staff. Needs for off duty staff to attend hospital will be clearly stated in SMS Broadcast.

1. WM or CN assembles earmarked Nursing Staff, HCA, and HOCA on duty at nursing station.

2. WM or CN identified few staff who are sent to Red and Yellow Zones as required and requested by NS

3. Sufficient staff kept in ward to provide treatment and prepare Emergency trolleys with required Emergency drugs. Admitted patients are seen within reasonable time frame and prescribed treatments continued or initiated as per prescribing doctor. **Remember that we are operating in Mass Casualty/ Disaster situation.**

4. CN informs patients in ward about Mass Casualty/Disaster and reassures them so as to have their co-operation.

5. NO accompanies Doctors for Ward Round so as to transfer (to other ward)/ discharge patients who can be allowed home (Rapid Patient's Discharge).

6. One NO contacts relatives of discharged patients, reassures them that they will be contacted within the nearest delay and requests them to attend hospital as soon as possible to fetch their parents. The reasons for discharged should be well explained to parents and patients.

7. WM / CN Neurosurgical wards ensures that: (a) All apparatus/equipments are functioning (e.g. suction apparatus, Multi parameters monitor with defibrillator and external pacer, Pulse oxymeter, sphygmomanometer, O2 cylinder with adequate supply of O2); (b) Neurosurgical Material & Disposables are readily available; (c) Emergency Drugs and IV Fluids are at hand; (d) Information regarding availability and balance stock (Two Hourly) of Blood and Blood Product Derivatives should be clearly written by WM on a NOTICE BOARD with name of medical laboratory technologists who has relayed the information from Blood Transfusion services;**(e) Sufficient number (HCA and HOCA) of Runners are present because request for brain scan inpatients with Head injury may increase in such situation.**

8. HCA prepares available bed to accommodate Neurosurgical casualties.

9. HAA/WM ensure availability of sufficient bed sheets, blankets and pillows.

10. Detail report sent to IC (RHD, MS, DM) by CIC and RNA/NA for further transmission to MOH & QL, Information, Family support, and Media Desks. **Note that Media Release depends solely on IC.**

11. **After Working hours, DM assumes function of IC and NS that of RNA/NA pending their arrival.**

STANDARD OPERATING PROCEDURES FOR EMERGENCY RESPONSE TO MASS CASUALTY/DISASTER

NEUROSURGICAL UNIT DURING & AFTER WORKING HOURS

As per instruction from IC (RHD, MS, DM after Working Hours), alarm siren for alert to Mass Casualty activated by NS. SMS Broadcasts by telephonists to staff. Needs for off duty staff to attend hospital will be clearly stated in SMS Broadcast.

***Depending on Availability of Neurosurgeon**

1. Prior to attending ECC, Consultant-in-Charge Neurosurgery delegates:
   (a) One Neurosurgeon (Normally the one on call) & One MHO to proceed to A & E (Red Zone) and monitors admission to ICU.
   (b) One Neurosurgeon & One MHO to proceed to OT.
   (c) One Neurosurgeon* & One MHO to do Ward round and transfer (to other ward)/discharge patients who can be allowed home (Rapid Patients Discharge).

It should be noted that in Neurosurgical unit with only two Neurosurgeons, the CIC attends EOC meeting for a brief period and proceeds to OT with one MHO while instructing the other Neurosurgeon to attend A & E with one MHO.

2. All information pertaining to the availability of Blood and Blood product derivatives should be automatically transmitted to the IC (RHD, MS, DM) and to all CIC during EOC meeting by the Consultant Pathologist- in- Charge of Blood Bank and Blood transfusion services OR by Senior Medical Laboratory Technologist once Mass Casualty Plan is activated. WM always sees to it that sufficient number of runners are present. Stock balance of Blood and Blood Product Derivatives are clearly written by WM on Notice Board with name of CIC Pathologist- in- Charge of Blood Bank/Medical Laboratory Technologist giving such information. Information should be given at regular interval (Every 2 Hours).

3. Consultant in Charge is informed by WM about the availability of beds in Neurosurgical Ward and ICU.

4. CIC ensures from respective Ward Managers that:
   (a) All equipments/apparatus/ and Neurosurgical Instrument are functioning properly in OT.
   (b) In Neurosurgical Wards (e.g. suction apparatus, Multi parameters monitor with defibrillator and external pacer, Pulse oxymeter, sphygmomanometer, O2 cylinder with adequate supply of O2).
   (c) Emergency and Resuscitation Trolleys are kept ready with essential equipment and materials for e.g.: Ambu – bags, E-T Tubes, sufficient quantity of absorbent gauze, cotton wool, Syringes, disposable gloves, Intra osseous needles, IV fluids, etc. Drip stand should also be made available in sufficient quantity. CIC ensures that emergency drugs are readily available, e.g. adrenaline, atropine, Scoline, Etomidate, pentothal, piriton, vogalene, vitamin K, Norcuron, Limbex and other life saving drugs. In case of non- availability of any drugs, request can be made from pharmacy by order of CIC. All items used should be replaced from general store.
   (d) Intubation kits should always be made available in Neurosurgical ward(s).

5. In case of several vital head injury patients needing Neurosurgical Interventions, back up of Neurosurgeons from other hospitals (Either Victoria or SSRNH) may be requested by IC (RHD, MS, DM).But Inter-hospital transfer of Head injury patients may be done after proper arrangement with the receiving hospital if urgent Neurosurgical interventions are indicated and existing OT are taken up with other Neurosurgical Emergencies. **And it should be noted that transfer of non vital emergencies in such a situation will not be entertained by the SAMU.**

6. **Consultant in Charge Neurosurgery:**
   (a) Supervises Neurosurgeons and MHOs in his/her Unit and at A & E and ICU.
   (b) Coordinates activities of Neurosurgical Unit.
   (c) Instructs to cancel all routine Neurosurgical operations
   (d) Ensures that Neurosurgical Wards and OT are functioning properly (Staffing, Equipment, Apparatus, drugs, etc.)

7. **Consultant in Charge Neurosurgery:**
   - Gives Technical report to IC (RHD, MS, DM) for further transmission to MOH & QL, Family Support, Information and Media Desks.

8. **After Working Hours, DM assumes the function of IC (RHD, MS). He/ She sets the EOC meeting pending the arrival of the RHD/MS**.

STANDARD OPERATING PROCEDURES FOR EMERGENCY RESPONSE TO MASS CASUALTY/DISASTER

PAEDIATRIC, NURSERY & NEO- NATAL UNIT

As per instruction from IC (RHD, MS, DM after Working Hours), alarm siren for alert to Mass Casualty activated by NS. SMS Broadcasts by telephonists to staff. Needs for off duty staff to attend hospital will be clearly stated in SMS Broadcast.

1. WM or CN assembles earmarked staff on duty (Nursing Staff, Health Care Assistant & Hospital Care Attendant) at Nursing Station.

2. WM or CN identify staff to be sent immediately to Red, Yellow and Green Zones to cater for paediatric casualties.

3. NO keeps Emergency trolley ready with required emergency drugs.

4. CN checks Emergency Trolleys and ensures that all equipments and apparatus are functioning well (e.g. suction apparatus, Nebuliser, Multi parameter monitor with Defibrillator and External pacer, Pulse oxymeter, sphygmomanometer, O2 cylinder with adequate supply of O2). Vital Emergency drugs (Adrenaline, Atropine, Isoprenaline), Sedative (Hypnovel, Valium), Anaesthetic Drugs (Penthothal,Etomdate,Scoline, limbex, Norcuron), Inotropes (Noradrenaline,dobutamine), IV fluids, intra osseous needles, Portable Ventilators (if possible) and paediatric intubation set including Laryngeal mask should be made available.

5. WM/ CN informs parents in ward about Mass Casualty/ Disaster and reassures them so as to have their co-operation.

6. Before attending EOC meeting, CIC ensures the following postings:
   (a) One Paediatrician with one MHO to A & E (Red Zone) – the same caters for admission to ICU
   (b) One Paediatrician with one MHO to Unsorted OPD (Yellow Zone)
   (c) One Paediatrician ensures the smooth running of NICU – Nursery and Operation theatres as concerns new born.
   (d) (i) One Paediatrician with One MHO goes for Ward Round (Including Post-Natal Ward in conjunction with Gynae and OBS specialist) to see how Mass Casualty patients can be accommodated e.g.: Discharge/transfer of stable patients to other earmarked wards.
   (ii) Similarly bed occupancy in Neonatal Unit, ICU, Nursery and Paediatric Ward should be known by IC in the EOC through the CIC.

7. CN/HAA ensures sufficient bed sheets, blankets and pillows are made available.

8. HCA prepare beds to receive Mass casualty/Disaster Patient.

9. Paediatric Ward will accommodate children of Mass Casualty/ Disaster from Red, Yellow Zones and OT (Post-Operative not in need of ICU care and Mechanical Ventilation).

10. CN ensures that admitted patients are immediately seen and their prescribed treatment started/continued.

11. Consultant in Charge supervises the clinical duties of all Paediatric Consultants/ Specialists and MHO's in the Hospital Receiving Zones (Red, Yellow, Green), ICU, Paediatric ward(s), Nursery and Neonatal ward.

12. Patients' condition are regularly monitored and feedback given by CIC and RNA/NA to RHD(IC) for further transmission to MOH & QL, Media, Information and Family Support Desks.

13. Note that after Working Hours, Public Holidays, Sundays and Saturdays afternoon. DM assumes the function of IC. In a similar way paediatric MHOs and Paediatrician on call assumes function of CIC prior to his/her arrival.

STANDARD OPERATING PROCEDURES FOR EMERGENCY RESPONSE TO MASS CASUALTY/DISASTER

LABOUR WARD

As per instruction from IC (RHD, MS, DM after Working Hours), alarm siren for alert to Mass Casualty activated by NS. SMS Broadcasts by telephonists to staff. Needs for off duty staff to attend hospital will be clearly stated in SMS Broadcast.

1. WM assembles earmarked staff on duty at Nurses Station (Nursing Staff, HCA, and HOCA).

2. WM identifies few staff to be sent immediately to Red, Yellow Zones as requested by NS.

3. Sufficient staff kept in ward, however close observation of patients especially those in labour are maintained.

4. Emergency trolleys kept ready to any receive any victims of Mass Casualty/Disaster requiring close monitoring.

5. W.M. ensures that all equipments/apparatus are functioning well (e.g. suction apparatus, Nebuliser, Multi parameters monitor with defibrillator and external pacer , Doppler's Ultrasound, Cardiotocography Machine, Pulse oxymeter, sphygmomanometer, O2 cylinder with adequate supply of O2 with masks and tubings, Intubation kits, E-T Tubes and Laryngeal Mask. Vital Emergency drugs (Adrenaline, Atropine, Dobutamine, Nor-adrenaline), Sedatives (Hynovel, Valium), IV fluids and intra osseous needles should be made available. Stock balance of Blood and Blood product derivatives should be written clearly on Notice Board by WM.

6. Patients in ward are informed about the real situation concerning Mass Casualty/Disaster and they are being reassured.

7. CN assumes functions of WM in her absence.

8. IC (RHD, MS,DM) is informed by CIC (Gynae & OBS) about the number of pregnant patients injured in Mass Casualty/Disaster attending Labour Ward. IC is being informed about the number of new born. (alive or dead)

9. IC is the sole one to release information to (a) MOH & QL (b) Information (c) Media (d) Family Support Desks.

STANDARD OPERATING PROCEDURES FOR EMERGENCY RESPONSE TO MASS CASUALTY/DISASTER

GYNAECOLOGY WARD

As per instruction from IC (RHD, MS, DM after Working Hours), alarm siren for alert to Mass Casualty activated by NS. SMS Broadcasts by telephonists to staff. Needs for off duty staff to attend hospital will be clearly stated in SMS Broadcast.

1. WM assembles earmarked NOs, HCA and HOCA on duty at Nurses Station.

2. WM identifies few staff to be sent to Red, Yellow Zones as per request of NS.

3. Sufficient staff kept in ward to provide treatment and prepare Emergency trolleys with required Emergency drugs. Admitted patients are seen within reasonable time frame and prescribed treatments started/ continued.

4. CN informs patients in ward about Mass Casualty/Disaster, reassures them and at the same time have their co-operations.

5. In large scale Mass Casualty/Disaster, NO accompanies Doctors for Ward round and whenever feasible discharge patients who can be allowed home. The reason of all discharge should be clearly explained by NOs to parents and relatives and early appointment should be given to all patients.

6. One Nursing Officer contacts relatives of discharged patients and requests them to attend hospital as soon as possible to fetch their parents.

7. W.M. ensures that all equipments/apparatus are functioning well (e.g. suction apparatus, Nebuliser, Multi parameter monitor with Defibrillator and external pacer, Doppler's Ultrasound, Cardiotocography Machine, Pulse oxymeter, sphygmomanometer, O2 cylinder with adequate supply of O2 (O2 Masks, tubings). Vital Emergency drugs, Intubation kits, IV fluids and intra osseous needles should be made available. WM ensures that balance stock of Blood and Blood product derivatives are clearly written on Notice Board.

8. HCA prepares available bed to receive emergency patients.

9. WM gives regular report to NS for onwards transmission to RHD/MS/DM through NA.

10. **After Working Hours DM assumes functioning of IC (RHD, MS). CN assumes functions of NA/RNA till their arrival.**

STANDARD OPERATING PROCEDURES FOR EMERGENCY RESPONSE TO MASS CASUALTY/DISASTER

GYNAECOLOGY & OBSTETRICS UNIT DURING & AFTER WORKING HOURS

As per instruction from IC (RHD, MS, DM after Working Hours), alarm siren for alert to Mass Casualty activated by NS. SMS Broadcasts by telephonists to staff. Needs for off duty staff to attend hospital will be clearly stated in SMS Broadcast.

1. Consultant- in- Charge ensures that:

(a) One Specialist/Consultant/ and One MHO are sent to A & E (Red Zone), who caters also for ICU admissions.

(b) One Specialist/Consultant/ and One MHO to operation theatre.

(c) One Specialist/ Consultant and One MHO to take over Labour Ward.

(d) One Specialist/Consultant and One MHO to do Ward round (Antenatal and Postnatal Ward inclusive) for clinical assessment of patients and to consider Rapid Patient's Discharge (RPD).

2. CIC attends EOC meeting and provides technical support with proper information concerning number of admissions/casualties pertaining to OBS & Gynae to IC (RHD, MS).

3. Consultant- in- Charge OBS & Gynae informs Ward Manager OT to cancel all routine operation lists once alert to Mass Casualty/Disaster plan activated. Availability of blood and Blood product derivatives should always be confirmed. Actually all information pertaining to the availability of Blood and Blood product derivatives should be automatically transmitted to the IC (RHD, MS) by the Consultant Pathologist-in-Charge of Blood Bank and Blood Transfusion Services once Mass Casualty/Disaster alarm is activated. Ward Manager always sees to it that sufficient Number of Runners are present.

4. CIC through WM/CN ensures proper functioning of:

(a) OT (Staffing, equipments, materials, apparatus, etc.)

(b) Labour Ward and Wards.

(c) Current balance status of Blood and Blood product derivative.

5. CIC through WM / CN ensures that all equipments/apparatus are functioning (e.g. suction apparatus, Doppler's Ultrasound, Cardiotocography Machine, Multi parameter monitor with defibrillator and External Pacer, Pulse oxymeter, cardiac monitor, sphygmomanometer, O2 cylinder with adequate supply of O2(O2 Masks, Tubings). Vital Emergency drugs, IV fluids, Intubation kits and intra osseous needles should be made available. This applies also to surgical instrument and autoclaved machine. In case of any short comings CIC should inform IC and immediate action should be initiated.

6. (i) WM ICU should be able to give information at anytime concerning ICU bed occupancy.
(ii) Prior to any transfer to ICU, CIC/Consultants/Specialists Anaesthesia-in-Charge of ICU should be informed by the treating doctor.

7. In case of Mass influx (Extensive Mass Casualty/Disaster) where many pregnant women are involved, Recovery Room of operation theatres (Gynae & OBS) can be temporarily converted into Resuscitation Areas.

8. Sufficient Number of Runners (Normally HCA, HOCA) should be present in Red, Yellow Zones and Operation theatres.

9. CIC provides technical report and information to IC (RHD, MS, DM).

10. WM submits appropriate report to NS concerning number of admissions/casualties pertaining to OBS & Gynae. Such Report are transmitted to IC (RHD, MS, DM) by NA.

11. Based on proper information from CIC, RNA, NA, IC (RHD, MS, DM) is the only one to communicate to MOH & QL, and relay information to Media, Family Support and Information Desks.

12. After Working Hours DM assumes the function of RHD/ MS.

STANDARD OPERATING PROCEDURES FOR EMERGENCY RESPONSE TO MASS CASUALTY/DISASTER

ANTENATAL WARD / POSTNATAL WARD

As per instruction from IC (RHD, MS, DM after Working Hours), alarm siren for alert to Mass Casualty activated by NS. SMS Broadcasts by telephonists to staff. Needs for off duty staff to attend hospital will be clearly stated in SMS Broadcast.

1. WM or CN assembles earmarked Nursing Staff, HCA and HOCA on duty at Nurses Station.

2. WM identifies few staff to be sent to Red, Yellow Zones as requested by NS

3. Sufficient staff kept in Ward to prepare emergency trolleys, equipment and for proper nursing care of incoming patients.

4. WM informs patients in Antenatal and Postnatal ward about the event (Mass Casualty, Disaster) and reassure them so as to have their cooperation.

5. NO accompanies Doctors (Gynaecologist, Obstetricians & Paediatricians) for Ward Round to consider Rapid Patient Discharge (RPD).

6. WM ensures that all equipments/apparatus are functioning well (e.g. suction apparatus, Nebuliser, Multi parameter monitor with Defibrillator and External Pacer , Pulse oxymeter, sphygmomanometer, O2 cylinder with adequate supply of O2 with Oxygen Masks and tubings). Vital Emergency drugs, Intubation kits and intra osseous needles should be made available.

7. HCA prepare available bed to receive emergency patients.

8. WM / HAA ensures that sufficient bed sheets, blankets, pillows and other ward accessories are available.

9. Admitted patients are seen within reasonable time frame and their prescribed treatment started/ continued.

10. WM submit regular report to NS for onwards transmission to RHD/MS/DM through NA.

11. CIC Paediatrics, OBS & GYNAE gives technical report and information to IC (RHD, MS, DM).

12. IC (RHD, MS, DM) is the sole one to give information to MOH & QL, Information, Media and Family Support Desks.

13. **After Working Hours DM assumes functioning of IC (RHD, MS). CN assumes functions of NA/RNA till their arrival.**

STANDARD OPERATING PROCEDURES FOR EMERGENCY RESPONSE TO MASS CASUALTY/DISASTER

ORTHOPAEDICS UNIT DURING WORKING HOURS

As per instruction from IC (RHD, MS, DM after Working Hours), alarm siren for alert to Mass Casualty activated by NS. SMS Broadcasts by telephonists to staff. Needs for off duty staff to attend hospital will be clearly stated in SMS Broadcast.

1. Prior to attend the EOC with IC (RHD, MS), Consultant –in- Charge attends Red zone, Plaster Room and Minor Operation Theatre with Two MHO's (also caters for ICU admission). CIC then posts: (a) One Consultant/ Specialist with Two MHO's to yellow zone (b) One Consultant/Specialist & One MHO to OT (c) Two MHO's in Green Zone.

2. Consultant- in-Charge sends one Consultant/ Specialist with one MHO for Ward round and discharge stable patients (Whenever possible) so as to make beds available for incoming patients of Mass Casualties. Proper records of all discharged patients should be kept. Reasons for discharged should be clearly explained to patients and parents by One Nursing Officer. All discharged patients should be given an early appointment.

3. In case where level 2 or level 3 response is required, i.e. when magnitude of catastrophe requires the involvement of other regional hospitals, Incident Commander (RHD, MS) liaises with other hospitals for a quick back-up of Orthopaedic Surgeons and Anaesthetists.

4. Consultant-in-Charge Orthopaedics informs WM to cancel all routine operation list. Availability of blood and Blood product derivatives should always be confirmed. Actually all information pertaining to the availability of Blood and Blood product derivatives should be automatically transmitted to IC (RHD, MS) by the Consultant Pathologist-in- Charge of Blood Bank and Blood Transfusion Services in EOC meeting once Mass Casualty Alarm is activated. Ward Manager always sees to it that sufficient Number of Runners (HCA, HOCA) are present. Stock balance of Blood and Blood Product derivatives should be clearly written on Notice Board in OT by WM.

5. CIC through WM / CN ensures proper functioning of the following:
   (a) Orthopaedics Surgical Instruments in OT including autoclaved machine.
   (b) Suction apparatus, Multi parameter monitor with Defibrillator and External Pacer, Pulse oxymeter, sphygmomanometer, O2 cylinder with adequate supply of O2 with Oxygen Masks and Tubings in Orthopaedic Wards. CIC ensures that Minor Operation Theatre and Plaster Room are functioning properly to accommodate Influx of patient in Mass Casualty.
   (c) Main Operation Theatre (staffing including Runners – HCA, HOCA)

6. Priority is to transfer seriously injured patients from CPA to nearest Hospitals after stabilization – Hospital Colour- Coded zonings should be respected (Red –Yellow- Green). In case of hospital overload only stable and non vital emergencies should be transferred to other hospitals. As far as possible avoid transferring unstable patients. Secondary triage should also be performed at hospital level (Non –Tagged patients, deterioration from Yellow to Red)

7. Technical report from consultant- in – charge to be given to IC (RHD,MS) for onwards transmission to MOH & QL, Information, Media and Family Support Desks.

8. After Working Hours, DM assumes the responsibility of Incident Commander (RHD, MS). Specialist on call that of CIC and NS assumes responsibility of NA/RNA pending their arrival.

STANDARD OPERATING PROCEDURES FOR EMERGENCY RESPONSE TO MASS CASUALTY/DISASTER

CARDIOLOGY WARD (MALE & FEMALE)

As per instruction from IC (RHD, MS, DM after Working Hours), alarm siren for alert to Mass Casualty activated by NS. SMS Broadcasts by telephonists to staff. Needs for off duty staff to attend hospital will be clearly stated in SMS Broadcast.

1. WM assembles earmarked Nursing Staff, HCA, and HOCA on duty at nursing station.

2. WM identified few staff who are sent to Red (A & E) and Yellow Zones as required and requested by NS

3. Sufficient staff kept in ward to provide treatment and prepare Emergency trolleys with required Emergency drugs. Admitted patients are seen within reasonable time frame and prescribed treatments continued/initiated as per treating doctor.

4. CN informs patients in ward about Mass Casualty/Disaster and reassures them so as to have their co-operation.

5. NO accompanies Cardiologist & MHO for Ward round so as to discharge stable patients (Whenever possible) in order to accommodate Mass Casualty/ Disaster Casualties. Reasons for discharged should be clearly explained to patients and parents by One Nursing Officer. All discharged patients should be given early appointment to specialist. WM should see to it that appointment for all discharge Patients are booked by a Runner (HCA) at Records Section.

6. Nursing Officer contact relatives concerning discharged patients and requests them to attend hospital as soon as possible to fetch their parents**. In such an event, it should be clear that no ambulances will be provided to convey discharged patients to their Residence till Mass Casualty/ Disaster Alert is maintained**. WM should explain to relative/parents the motif of such discharge in order to avoid confusion and unnecessary panic.

7. WM ensures that :
   (a) All apparatus/equipments are functioning well (e.g. suction apparatus, ECG apparatus, Multi parameter monitor with Defibrillator and External pacer, Pulse oxymeter, O2 cylinder with adequate supply of O2 with oxygen mask and tubings).
   (b) All Cardiac Emergency drugs are arranged in Emergency trolleys.
   (c) Materials such as: Ambu – bags, Intubation Sets, ET -Tubes (different sizes) for Cardiopulmonary Resuscitation.
   (d) Intra osseous needles, IV fluids, etc. Drip stand should also be made available in sufficient quantity.
   (e) Thrombolytic and other adjunct therapy for myocardial infarct should be at hand.

8. HAA ensures availability of sufficient bed to accommodate Casualties. In case of unavailability of Bed, IC should be informed immediately to arrange for Inter-Hospital transfer.

9. WM/ HAA ensure availability of sufficient bed sheets, blankets and Pillows.

10. WM gives regularly report to NS for submission to IC through NA.

11. **After working hours, NS assumes function of NA/ RNA**

STANDARD OPERATING PROCEDURES FOR EMERGENCY RESPONSE TO MASS CASUALTY/DISASTER

CARDIOLOGY UNIT DURING & AFTER WORKING HOURS

As per instruction from IC (RHD, MS, DM after Working Hours), alarm siren for alert to Mass Casualty activated by NS. SMS Broadcasts by telephonists to staff. Needs for off duty staff to attend hospital will be clearly stated in SMS Broadcast.

1. Prior to attending ECC, CIC Cardiology delegates:
   (a) One Cardiologist (Normally the one on call) & One MHO to proceed to A & E (Red Zone) and also monitors admission to ICU.
   (b) One Cardiologist & One MHO to proceed to Yellow Zone.
   (c) One Cardiologist & One MHO to do Ward & ICU rounds and discharge OR downgrade stable ICU patients to ward whenever possible.

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2. CIC through Ward Manager ensures that:
   (a) All Apparatus & Equipments are functioning properly for e.g.: Multi parameter monitor with Defibrillator and External Pacer, ECG Apparatus, Pulse oxymeter.
   (b) All Emergency Cardiac drugs including inotropes are available in wards and ICU on Emergency trolleys.
   (c) Availability of Thrombolytic and adjunct therapy for myocardial infarction.
   (d) Materials and drugs for Cardiopulmonary Resuscitation including Ambu-bags, ET-Tubes, Laryngeal Mask, Sedatives (Hypnovel, Valium), Analgesics (Morphine).
   (e) IV fluids, intra osseous needles and Drip stand in sufficient quantity.
   (f) Oxygen cylinders with face mask and tubings.

⇩

3. Consultant-in- Charge then:
   (a) Supervises Cardiologist and MHOs at A & E (Red), Unsorted OPD (Yellow) Zones and ICU.
   (b) Coordinates activities of all Cardiologists in Unit.
   (c) Instruct Cardiologists to postpone Routine Angiography.
   (d) Arrange for Emergency Angio if needs be.

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4. **Consultant –in- Charge Cardiology:**
   - Submit technical report to IC (RHD, MS, DM) for further transmission to MOH & QL, Information, Media and Family Support Desks.

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5. **After Working Hours, DM assumes the function of IC (RHD, MS).**

STANDARD OPERATING PROCEDURES FOR EMERGENCY RESPONSE TO MASS CASUALTY/DISASTER

MEDICAL WARD (MALE & FEMALE)

As per instruction from IC (RHD, MS, DM after Working Hours), alarm siren for alert to Mass Casualty activated by NS. SMS Broadcasts by telephonists to staff. Needs for off duty staff to attend hospital will be clearly stated in SMS Broadcast.

1. WM assembles earmarked Nursing Staff, HCA and HOCA on duty at Nurses Station.

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2. WM identified few staff to be sent to Red, Yellow and Green Zones as requested by NS.

⇩

3. Sufficient staff to be kept in Ward to provide ongoing treatment, prepare Emergency trolleys with required drugs. Admitted patients are seen within reasonable time frame and prescribed treatment continued/initiated as per treating doctor.

⇩

4. CN informs patients in Ward about the event (Mass Casualty, Disaster) and reassures them so as to have their cooperation.

⇩

5. NO accompanies Doctors for Ward round so as to consider Hospital Patient's Discharge (HPD) in Mass Casualty/Disaster in order to accommodate incoming casualties. Discharged patients should be given early appointment to specialist. WM should ensure that all appointments are booked by a Runner (HCA) at Record's Section and at the same time gives relevant information to Relatives/Parents concerning the motif of such discharge so as to avoid confusion and unnecessary PANIC.

⇩

6. WM ensures that all equipments are functioning properly (e.g. suction apparatus, Nebuliser, Multi parameter monitor Defibrillator with External pacer, Pulse oxymeter, sphygmomanometer, O2 cylinder with adequate supply of O2 with oxygen masks and tubings). Emergency Vital drugs, Intravenous Analgesics (Morphine, Paracetamol), Sedative (Hypnovel, Valium), Intubation Sets with Ambu-bags, E-T Tubes, Laryngeal Mask, IV Fluids and intra osseous needles, Drip stand should be made available. WM ensures that balance stock of Blood and Blood product derivatives are clearly written on Notice Board.

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7. HCA prepare available bed to receive casualties.

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8. WM and HAA ensure that sufficient bed sheets, blankets, pillows are available.

9. Patients' clinical conditions are regularly monitored and feedback given by WM to NS for transmission to IC and subsequently to MOH & QL, Information, Media and Family Support Desks.

10. After Working Hours DM assumes functioning of IC (RHD, MS). CN assumes functions of NA/RNA till their arrival.

STANDARD OPERATING PROCEDURES FOR EMERGENCY TO MASS CASUALTY/DISASTER

MEDICAL UNIT (MALE & FEMALE): DURING & AFTER WORKING HOURS

As per instruction from IC (RHD, MS, DM after Working Hours), alarm siren for alert to Mass Casualty activated by NS. SMS Broadcasts by telephonists to staff. Needs for off duty staff to attend hospital will be clearly stated in SMS Broadcast.

1. Before attending EOC meeting, CIC ensures that one Consultant/Specialist and Two MHOs (if possible more) are posted in the following areas:
   (a) Red Zone: (A & E and ICU) – usually the Consultant/ Specialist on call
   (b) Yellow Zone: (Unsorted OPD)

After attending EOC meeting, CIC should intermittently be present at A & E and ICU in order to provide guidance and monitors management of casualties.

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2. Two Medical Specialist/Consultant with two MHOs to do ward round and discharge stable patients (wherever possible) after informing their relatives to attend Hospital. After Ward Round and Rapid Patient Discharge, One Specialist/ Consultant with two MHO's should be delegated by CIC to monitor admission and treatment in Medical Wards. Downgrading of stable patients from ICU to Ward should be considered in order to prepare beds for vital Emergencies. Identifications of patients who have been discharged/ transferred should be properly recorded by WM, in order not to create PANIC amongst parents or relatives. Discharged patients should be given early appointment. Clear explanation should be given to patients/relatives concerning their motif for discharge by NO.

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3. WM ensures that all equipments are functioning properly (e.g. suction apparatus, Nebuliser, Multi parameter monitor with Defibrillator and External pace, Pulse oxymeter, sphygmomanometer, O2 cylinder with adequate supply of O2 with face masks and tubings . Vital Emergency drugs, Intravenous Analgesics (Morphine, Paracetamol), Sedative (Hypnovel, Valium), Intubation Sets with Ambu-bags, E-T Tubes, Laryngeal Mask, IV Fluids and intra osseous needles, should be made available.

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4. CIC should be informed about the stock of Blood and Blood product derivatives by the Consultant Pathologist –In Charge of Blood Bank and Transfusion Services during EOC meeting.

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5. All Blood Specimen should be sent to laboratory according to degree of urgency Labelled as: (a) Red (b) Yellow (c) Green.

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6. CIC instructs WM to ensure that sufficient Runners (normally HCA, HOCA), Nursing Staff including Health Care Assistant and Hospital Care Attendant are present. Similarly all disposables and materials used are replaced within reasonable time frame after making necessary arrangement from the concerned sections.

7. Consultant- in- Charge provides feedback and daily technical report concerning number of casualties, admissions to ICU & Wards, death report, etc... to IC (RHD, MS) for onwards transmission to MOH &QL, Information ,Media, and Family Support Desks.

8. After Working Hours, DM assumes the duty of RHD/MS. Similarly pending the arrival of the Consultant-in- Charge, the Consultant/Specialist arriving first (normally the one on call) at Hospital assumes the duty of the CIC.

Ministry of Health & Quality of Life

STANDARD OPERATING PROCEDURES FOR EMERGENCY RESPONSE TO MASS CASUALTY/DISASTER

EVACUATION OF ONE MALE & ONE FEMALE WARD TO ACCOMMODATE MASS CASUALTY TRAUMA PATIENTS NOT REQUIRING INSTANT ASSISTED VENTILATION OR ICU CARE.

As per instruction from IC (RHD, MS, DM after Working Hours), alarm siren for alert to Mass Casualty activated by NS. SMS Broadcasts by telephonists to staff. Needs for off duty staff to attend hospital will be clearly stated in SMS Broadcast.

1. This decision is hospital- based and may not be applicable to all hospitals. But whenever feasible under instructions of IC (RHD, MS, DM after working hours), CIC of the earmarked wards to be evacuated delegates one specialist/ and one MHO to do ward round for the process of ward evacuation. Meanwhile, WM & CN (In absence of WM) identifies NO's, HCA's, HOCA's for ward evacuation process in order to accommodate trauma patients of Mass Casualty/Disaster not requiring immediate assisted ventilation OR ICU Care.

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2. WM ensures that all apparatus are functioning properly (e.g. suction apparatus, Nebuliser, Multi parameter monitor with Defibrillator and External Pacer, Pulse oxymeter, sphygmomanometer, O2 cylinders with adequate supply of O2 with face masks and tubings.)

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3. Emergency and Resuscitation Trolleys are kept ready with essential equipment and materials for e.g.: Ambu – bags, Intubation kits, Chest drain, basics Surgical and Orthopaedics Instruments, sufficient quantity of absorbent gauze, cotton wool, Syringes, Disposable gloves, Intra osseous needles, IV fluids, etc. Drip stand should also be made available in sufficient quantity. WM ensures that emergency drugs are readily available, e.g. Adrenaline, Isoprenaline, Risordan, Hydrocortisone, Atropine, Scoline, Etomidate, pentothal, piriton, vogalene, vitamin K, Norcuron, Limbex and other life saving drugs. In case of non- availability of any drugs, request can be made from pharmacy by order of CIC.

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4. During EOC meeting, all CIC, Ward Managers ICU, OT, A & E and Resuscitation areas should be informed about the stock of Blood and Blood Product Derivatives by Consultant Pathologist- in-Charge of Blood Bank and Blood Transfusion Services Or by Senior Medical Laboratory Technologists. New entry pertaining to stock of blood and blood product derivatives should be done every two hours once Mass Casualty/ Disaster Alarm is activated. All entry should be written on notice board by WM. WMs always sees to it that sufficient Number of Runners (HCA or HOCA) are present in case patient needs urgent transfusion.

5. HCA prepares available beds to receive Emergency male and female trauma patients.

6. WM through HAA ensure availability of sufficient bed sheets, blankets, pillows and pillow cases.

7. Patients are seen within reasonable time frame and other treatment continues/started as per treating doctor.

8. Patients' clinical conditions are regularly monitored and technical reports submitted to RHD by CIC for transmission to MOH & QL, Media, Information and Family Support Desks .Reports should also be submitted to IC by NS through NA.

9. After working hours, DM and NS assumes duty of IC (RHD, MS) and RNA/NA respectively till their arrival.

Ministry of Health & Quality of Life

STANDARD OPERATING PROCEDURES FOR EMERGENCY RESPONSE TO MASS CASUALTY/DISASTER

EVACUATION BY HELICOPTER

1. Decision for Helico - Evacuation of patients will be in agreement with all Incident Commander (Medical, Police and Fire Rescue) in the CPA.

2. Priorities of Evacuation to respective hospitals will be established by EP in Charge (IC) of the CPA after consultation with MR "Medecin Regulateur" of the SAMU Control Room 114.

3. Hence, the Incident Commander of each Hospital (RHD, MS, DM) should check the functional state of the Helipad of their respective Hospital.

Ministry of Health & Quality of Life

STANDARD OPERATING PROCEDURES FOR EMERGENCY RESPONSE TO MASS CASUALTY/DISASTER

STORES & PROCUREMENT UNIT

As per instruction from IC (RHD, MS, DM after Working Hours), alarm siren for alert to Mass Casualty activated by NS. SMS Broadcasts by telephonists to staff. Needs for off duty staff to attend hospital will be clearly stated in SMS Broadcast. The following procedures are followed:

1. AMPS assembles all staff on duty in his office, allocates responsibilities and proceed to EOC meetingto give preliminary detail of various Stocks available in general stores to Incident Commander (RHD, MS, DM).

2. If needs be, upon arrival at Hospital, Off Duty Staff proceed to store directly.

3. AMPS ensures availability of adequate disposables and other materials/ equipment from General/ Surgical Stores.

4. In case of shortage or unavailability of any essential items (materials, equipments or disposables) AMPS of a particular Hospital should liaise with AMPS of other Hospitals in order to recover these items. In such circumstance HA/ HAA should ensure a rapid delivery of these items by having one vehicle stand for inter-hospital use. IC should intervene at any moment if needs be.

5. After working hours, AMPS and staff working at stores and procurement unit should imperatively attend hospital once informed by DM or through SMS Broadcast.

STANDARD OPERATING PROCEDURES FOR EMERGENCY RESPONSE TO MASS CASUALTY/DISASTER.

CATERING UNIT

Under Instruction of IC (RHD, MS, DM after working hours), once alarm siren is activated by NS and Catering Officer- in- Charge is being informed about Mass Casualty through Hospital Telephonist/ SMS Broadcasts, the following procedures are followed:

1. Catering Officer- In -Charge assembles all catering unit staff on duty in his office.

2. Off Duty Staff proceed directly to catering unit if being informed to attend hospital.

3. Catering Officer- in- Charge allocated responsibilities to various staff.

4. Catering Officer in Charge ensures availability of adequate provisions from General Store.

5. Catering Officer- in- Charge attends EOC meeting to provide all information pertaining to Catering Services.

6. Meals, Snacks and water should be provided to all staff working during Mass Casualty/Disaster including those at the:
   - Media Desk
   - Psychological Desk
   - Information Desk
   - Family Support Desk

7. After working hours and public holidays, Catering Officer -In- Charge and staff working at the Catering Unit should imperatively attend hospital once informed by DM OR through SMS Broadcast.

STANDARD OPERATING PROCEDURES FOR EMERGENCY RESPONSE TO MASS CASUALTY/DISASTER

MORTUARY SERVICES

As per instruction from IC (RHD, MS, DM after Working Hours), alarm siren for alert to Mass Casualty/Disaster activated by NS. SMS Broadcast by telephonists to Chief Police Medical Officer and staff working in the Mortuary. Needs for off-duty staff to attend hospital mortuary will be clearly stated in SMS Broadcast. The following procedures are then followed:

1. IC (RHD, MS, DM) ensure that the Morgue is properly staffed by atleast: 2 or more Mortuary attendants and 2 Police officers. Chief Police Medical Officer delegates appropriate and adequate Police Medical Officers to respective hospital involved in Mass Casualty/Disaster OR where dead victims will be directed for autopsy.

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2. HAA ensures that Morgue is entirely Operational.

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3. HAA ensure availability of appropriate equipment and supplies to accommodate deceased Victims.

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4. HAA approves requests of necessary items from Morgue cold storage area.

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5. IC ensures that dead bodies are tagged for identifications.

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6. Dead bodies with tags are transported directly to Morgue by Police from CPA.

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7. Incident Commander may request assistance to ensure additional space for cold storage from NDRRMC.

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8. HAA ensures that Morgue is under high security by more than two Policemen/ SMF (Preferably).

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9. In case of MASS DECEASED proper and safe place should be identified to keep dead bodies prior to transfer to morgue. **RELIGIOUS RITES SHOULD ALWAYS BE RESPECTED.**

10. Each Hospital should have its guidelines pertaining to response in case of MASS DECEASED.

11. **After working hours the Duty Manager assumes the role of Incident Commander (RHD, MS) pending their arrival.**

STANDARD OPERATING PROCEDURES FOR EMERGENCY RESPONSE TO MASS CASUALTY/DISASTER

HOSPITAL EXECUTIVE ADMINISTRATIVE OFFICER (HEAO)

As per instruction from IC, alarm siren for alert to Mass Casualty activated by NS. SMS Broadcasts by telephonists to staff. Needs for off duty staff to attend hospital will be clearly stated in SMS Broadcast.

1. Before attending EOC meeting , HEAO ensures that HOCA are adequately posted in the following areas:
   - Red Zone (A & E)
   - ICU
   - OT and MOT
   - Yellow Zone (Unsorted OPD)/ Green Zone (Sorted OPD)
   - Wards
   - Laboratory Services
   - Blood Bank and Transfusion Services
   - Pharmacy
   - Administrative Block

2. Each Hospital should designate an assembly point for HOCA (Normally Attendants Mess).

3. Off Duty Staff meets at the assembly point prior to their postings by HEAO.

4. HEAO and HAA ensure that proper cleaning of all departments involved in Mass Casualty/Disaster are performed by HOCA.

5. In Mass Casualty/Disaster, discipline amongst all staff should prevail. Unnecessary gathering in front of A & E (Red Zone), Green and Yellow Zones should be avoided.

6. HOCA present at Red, Yellow and Green Zones should evacuate incoming casualties on trolleys or wheel chairs (Green Zone) in a fluid way in order not to cause PANIC and congestion in these areas.

7. After working hours, and public holidays, HEAO and off-duty HOCA should attend hospital once informed by DM or through SMS Broadcast.

8. Regular report is relayed by HEAO to IC during EOC meeting.

STANDARD OPERATING PROCEDURES FOR EMERGENCY RESPONSE TO MASS CASUALTY/DISASTER.

ELECTRICAL SERVICE DIVISION (ESD)

As per instruction from IC, alarm siren for alert to Mass Casualty activated by NS. SMS Broadcasts by telephonists to ESD staff. Needs for off duty staff to attend hospital will be clearly stated in SMS Broadcast.

1. Prior to attending EOC meeting, Electrical Service Division-in- Charge instruct and allocates responsibilities to earmarked staff in order to check the following apparatus and equipments in the hospital:
   (a) Uninterrupted Power Supply (UPS).
   (b) Generators.
   (c) Air Condition Systems.
   (d) Refrigeration System in Kitchen.
   (e) Electrical supply to Mortuary and Refrigeration Rooms.
   (f) Main Electrical Supply point in: A & E; Minor Operation Theatres; Main Operation Theatres; ICU; Resuscitation Areas; Blood Bank and Transfusion Services; Laboratory Services; Dialysis Unit; Wards; Assembly Points; ECC Room; Doctors, Nurses, HOCA Mess and other vital spots.

2. Any technical problems should be reported to ESD in charge for necessary actions.

3. ESD in Charge should imperatively attend EOC meeting to give updated status report and meanwhile discuss technical problems to IC with appropriate measures being taken within reasonable time frame.

4. After working hours and public holidays, ESD - in - Charge and off duty ESD Staff should attend hospital once informed by DM OR through SMS Broadcast.

5. Technical Report should always be submitted by ESD in Charge to IC (While attending EOC meeting) during and after Mass Casualty/Disaster.

STANDARD OPERATING PROCEDURES FOR EMERGENCY RESPONSE TO MASS CASUALTY/DISASTER

BIOMEDICAL DIVISION

As per instruction from IC, alarm siren for alert to Mass Casualty activated by NS. SMS Broadcasts by telephonists to Biomedical staff. Needs for off duty staff to attend hospital will be clearly stated in SMS Broadcast.

1. Prior to attending EOC meeting, Biomedical Division-in- Charge earmarked Staff of the department to have the following apparatus verified with priorities at Red Zones (A & E, ICU, Resuscitations Areas), OTs & MOTs, Wards, NICU, Nursery, Labour Wards and Yellow Zones:
   - Multi parameter monitor
   - Ventilators
   - Electric Syringe
   - ECG Apparatus
   - Suction Apparatus
   - Defibrillation and External Surface Pacer
   - Electronic BP Apparatus

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2. Biomedical Division-in- Charge attends EOC meeting and any technical defects of essential apparatus/equipments are reported to IC for immediate actions.

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3. After Working Hours and public holidays, Biomedical division – In –Charge and off duty staff should attend hospital once informed by DM or through SMS Broadcast.

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4. Technical Report should be submitted to IC during and after Mass Casualty/Disaster.

GLOSSARY

Legends:	Definition:
A & E	Accident & Emergency
AMPS	Assistant Manager Procurement Services
C.O	Catering Officer
CEO	Chief Executive Officer
CIC	Consultant- In-Charge
CN	Charge Nurse
CPA	Casualty Processing Area
CPD	Central Pharmacy Division
CPMO	Chief Police Medical Officer
CR	Control Room
DGHS	Director General Health Services
DHS	Director Health Services
DM	Duty Manager
ECC	Emergency Coordinating Committee
EMS	Emergency Medical Service (SAMU)
ENO	Emergency Nursing Officer (SAMU)
EP	Emergency Physician
EPR	Emergency Preparedness & Response
EPRCR	Emergency Preparedness, Response, Communication & Recovery
ESD	Electrical Service Division
HA	Hospital Administrator
HAA	Hospital Administrative Assistant
HCA	Health Care Assistant
HEAO	Hospital Executive Administrative Officer
HOCA	Hospital Care Attendant
HQ	Head Quarters
HSC	Hospital Surge Capacity
HSP	Hospital
IC	Incident Commander
ICR	Incident Commander Room
ICS	Incident Command System
ICU	Intensive Care Unit
IR	Information Report
MHO	Medical and Health Officer
MOH & QL	Ministry of Health & Quality of Life
MOT	Minor Operation Theatre
MR	Medecin Regulateur 114
MS	Medical Superintendent
NA	Nursing Administrator
NDOCC	National Disaster Operations Coordinating Centre

NDRRMC	National Disaster Risk Reduction Management Centre
NICU	Neonatal Intensive Care Unit
NS	Nursing Supervisor
OPD	Outpatient Department
OPS	Operations Room
OT	Operation Theatre
PMO	Police Medical Officer
RHD	Regional Health Director
RHPD	Rapid Hospital Patient Discharge
RHSA	Regional Health Services Administrator
RNA	Regional Nursing Administrator
SAMU	Service d'Aide Medicale d'Urgence
SCE	Senior Chief Executive
SMHO	Senior Medical and Health Officer
Triage	To Sort
WM	Ward Manager