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Volume 14, Chapter 2

Emergency Management Plan for Healthcare Facilities

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1.0 PURPOSE

The purpose of this Emergency Management (EM) Planning document is to describe the process which will guide entities in establishing a set of business-specific EM Plans. These EM Plans shall form part of the Entity's Emergency Operations Manual (EOM). Guidance contained herein is based on the contents of the EM Procedure and tailored to entities operating within the Healthcare sector.

An EM Plan is an Entity-specific document which describes the steps to be taken during Emergency Incidents such that the response to the Emergency Incident (EI) is predictable, and the likelihood of successfully navigating the EI is relatively higher than if no EM Plan is defined. EM Plans are one set of outputs arising from the Hazard Vulnerability Analysis (HVA) described in the EM Procedure (EOM-ZE0-PR-000001). Depending on the: sector in which the Entity operates, Entity's specific business practices, and outcomes of the HVA; individual EM Plans may be established to cover various EIs, including, but not limited to:

- Evacuation
- Flood/Hurricane
- Radiation incident
- Communications outage
- Snow/Sand storm
- Fire
- Chemical or biological incident
- Earthquake

Emergency exercises and drills established by the Entity shall be used to test Entity-specific EM Plans arising from guidance contained herein, and shall thereby increase the organization's level of Emergency Preparedness (EP). Each EM Plan shall be scalable dependent on the size of the Entity.

Contained within the Attachments is an Emergency Management Plan Template for Healthcare Facilities from which the Entity can derive its own EM Plans.

2.0 SCOPE

The EM Planning Document has been written specifically for senior ranking members of the organization accountable for Emergency Preparedness (EP); those who are most likely to form part of the Emergency Management Committee (EMC) – See EM Procedure. However, on the basis that EP is everyone's responsibility; all information contained herein should be accessible and understood by anyone working within the Entity, irrespective of their position.

3.0 DEFINITIONS

Term	Definition
CEO	Chief Executive Officer
COO	Chief Operations Officer
CT	Computerized Tomography
CUL	Communications Unit Leader
DOA	Dead-On-Arrival
EI	Emergency Incident
EM	Emergency Management
EMC	Emergency Management Committee
EMP	Emergency Management Plan
EOA	Emergency Operating Area
EOC	Emergency Operations Center
EOM	Emergency Operations Manual
EP	Emergency Preparedness
EPS	Emergency Preparedness Software

ESS	Emergency Support Services
EWS	Emergency Warning Signal
FM	Facilities Management
FSC	Finance Section Chief
FUL	Facility Unit Leader
Hazmat	Hazardous Materials
HSC	Hospital Surgical Capacity
HSS	Hazard Surveillance Survey
HTC	Hospital Treatment Capacity
HVA	Hazard Vulnerability Analysis
HVAC	Heating, Ventilation, and Air Conditioning
IC	Incident Commander
ICS	Incident Command Structure
IT	Information Technology
LSC	Logistics Section Chief
NFPA	National Fire Protection Association
NOA	Normal Operating Area
O&M	Operations and Maintenance
OAM	Operating Area Maps
PA System	Public Announcement System
PPE	Personal Protective Equipment
PUL	Procurement Unit Leader
RACI	Responsible, Accountable, Consulted, Informed
RPL	Resource Pool Leader
SLT	Senior Leadership Team
SME	Subject Matter Experts
SSO	Sanitation Systems Officer

4.0 REFERENCES

- World Health Organization (WHO). District Health Facilities: Guidelines for Development & Operations. Manila: WHO Regional Office for the Western Pacific, 1998
- Holder Y et al., eds. Injury surveillance guidelines. Geneva, World Health Organization, 2000
- WHO-RGUHS, IEMPRES Project – Model Hospital Contingency Plan for Mass Casualty Management
- National Disaster Management Guidelines (NDMA) – Medical Preparedness and Mass Casualty Management, GOI
- Guidelines for essential trauma care/Injuries and Violence Prevention Department, World Health Organization and the International Association for the Surgery of Trauma and Surgical Intensive Care (IATSIC), International Society of Surgery/Société Internationale de Chirurgie
- National Fire Protection Association (NFPA) 10:2018

5.0 RESPONSIBILITIES

Responsible	Description
Charge Nurse	Senior ranking nurse responsible for supervision and leadership of all nursing staff
Chief Nurse	Most senior ranking nurse responsible for supervision and leadership of all charge nurses
Communications Unit Leader	Organizes and coordinates internal and external communications during an EI; and acts as custodian of all logged/documented communications
Consultant	Senior ranking doctor responsible for decision making regarding Patient care

Damage Assessment and Control Officer	Provides enough information regarding the operational status of the facility during an EI for the purpose of decision/policy making, including those regarding full or partial evacuation
Emergency Management Committee	Group of responsible and accountable people tasked with preparing the organization for an EI and successfully leading the organization through the EI, then capturing lessons learned as part of continuous improvement
Emergency Operating Area Supervisor	Person in charge of the Emergency Operating Area as assigned by the Resource Pool Leader. Responsible for the successful set up and management of the Emergency Operating Area (EOA)
Facility Unit Leader	Supports the Logistics Section Chief by maintaining the integrity of the physical facility to the best possible standard during an EI, ensuring quality and security of supply
Finance Section Chief	Responsible for all financial decision making during the EI, the Finance Section Chief (FSC) shall document and approve the acquisition of supplies and services necessary to successfully navigate the Entity through the Emergency Phase
First Aiders	First Aiders shall be trained and competent individuals with responsibility to render first aid to victims at the scene of the EI in support of Emergency Support Services (ESS)
FM Director	Responsible for overall management of the FM Department. Must coordinate and supervise FM staff such that quality and security of supply is maintained to the highest possible levels during the EI
Incident Commander	Chief decision maker responsible for organizing and directing the Emergency Operations Center (EOC). Incident Commander (IC) has overall accountability for safety of people and protection of assets during an EI. The IC shall act as EMC Chair
Information Technology (IT) Unit Leader	Develop and maintain the Entity's internal information network through monitoring and maintenance of the computer system, servers, and internet hardware
Liaison Officer	Liaise with parties external to the Entity based on direction from the Communications Unit Leader (CUL).
Line Manager	The person in the organization to whom one or more members of staff report. During an EI, this person may change dependent on whether the Incident Command Structure (ICS) differs from the Normal Command Structure
Logistics Section Chief	Directs maintenance operations, and ensures adequate levels of food, shelter and supplies during the EI
Maintenance Team	Those responsible for maintaining engineering systems
Medical Director	Most senior ranking doctor to whom all doctors and Chief Nurse shall report; is responsible for ultimate decision-making regarding Patient care
Operations Team	Those responsible for Operating Engineering Systems, or those responsible for aspects of business operations
Planning Section Chief	Effective monitoring and delivery of Emergency Plans. Gathers scenario/resource projections from all Section Chiefs, records deviations from Emergency Plans, and identifies constraints
Procurement Unit Leader	Maintains a record of the location of assets at all times; receiving requests for additional assets, and identifying the need for procurement
Resource Pool Leader	Rosters staff and volunteers as needed during the EI. Maintain adequate staff numbers in the Resource Pool
Safety and Security Officer	Person with overall responsibility for safety of personnel within the organization. Set up and maintain facility protection and traffic security
Sanitation Systems Officer	Reporting to the Facility Unit Leader, the Sanitation Systems Officer (SSO) monitors the usage of existing sewage and sanitation

	systems and establishes alternate methods of sanitation if necessary
Senior Leadership Team	Those responsible for defining organization policies and for successfully running the organization during normal operations
Subsistence Unit Leader	Organize food and water stores for preparation and rationing during the EI, against forecasted periods of shortage
Transportation Unit Leader	Organize and coordinate safe and timely transportation of all personnel and resources, as required. Manage the fleet of Entity-owned assets, and any vehicles donated to the Entity during an EI

In addition to those roles outlined within the Emergency Management Procedure, there are additional roles (detailed above) which are applicable to entities operating within the Healthcare sector. These include:

- Charge Nurse
- Chief Nurse
- Consultant
- Medical Director

5.1 Increased Requirements for Operators

Service requirements during an EI shall be suitably increased as specified within the EM Procedure (EOM-ZE0-PR-000001). Operators which may be affected by the EI and see an increased load upon their services may include:

- Cleaners (including garbage removal)
- Laundry staff
- Kitchen staff
- Maintenance staff
- Security Guards

As a minimum, each of the above; whether directly employed by the Entity, or sub-contracted shall prepare its own EM Plans based on the results of the organizational HVA. Department/contractor-specific EM Plans shall integrate with the overall organizational EM Plans. Additional requirements for operators during an Emergency are described throughout Volume 5.

5.2 Role of Healthcare Facilities during Emergency Incidents

Healthcare Facilities differ from other entities during an EI, given that their primary function is to preserve life. While other entities shall adopt preservation of life as their primary function during an EI, Healthcare Facilities are depended upon by Emergency Support Services (ESS) to provide diagnosis, treatment, and after-care for both physical and psychological illness. When one Entity is experiencing an EI, not necessarily all other Entities will be experiencing an EI. However, during this time, Healthcare Facilities, especially those situated nearest to the Entity are also experiencing the impact of an EI which manifests as additional Patient load.

6.0 PROCESS

Emergency Management Plans shall be prepared according to the following Process:

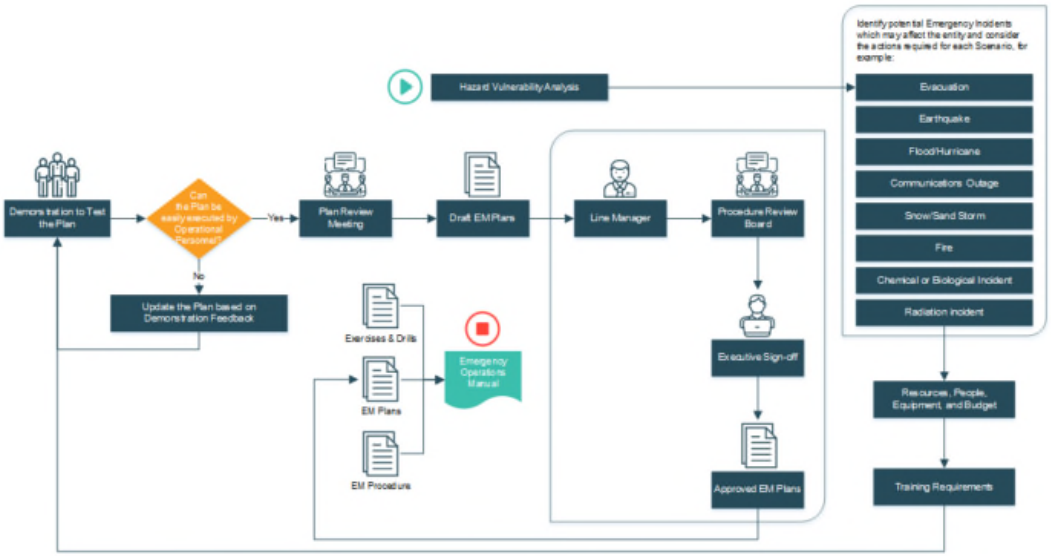

Figure 1: Process for Preparing Emergency Management Plans

6.1 Emergency Management Planning Template

The HVA (and associated Workshop) as described in the EM Procedure will result in a set of EIs which are most likely to occur, and the subsequent production of EM Plans. An EM Plan Template has been provided in the Attachment which contains the Structure of an EM Plan. There is also guidance contained within each section to support the Plan Writer in producing EM Plans.

The EM Plan should include, as a minimum, the following items:

1. Introduction
2. Objective
3. Responsibilities
4. Definitions
5. Emergency Incidents
6. Responsible, Accountable, Consulted, Informed (RACI) Matrix
7. Equipment
8. Emergency Operating Area Maps
9. Evacuation Plans
10. Monitoring and Reporting
11. Appendices

6.2 Requirements of the Plan Writer

The Plan Writer shall be competent to lead the process of writing an entity-specific EMP or updating an existing plan based on guidance contained herein. Specific tasks include, but are not limited to:

- Research Emergency Management best practice and its relationship to latest standards in the healthcare sector.
- Compare best practice to existing practices; look for areas of improvement and added value.
- Create Emergency Operating Area Maps and Evacuation Plans based upon as-built schematic drawings of each building under the EM Plan.

- Work closely with Subject Matter Experts (SME) to gather necessary information for the development of each EM Plan, and to test/verify the accuracy of the work by executing emergency exercises and drills.
- Suitably address comments and integrate feedback to the betterment of the EM Plan.
- Facilitate as a minimum: EM Plan Kick-off Workshop; and EM Plan Review Meeting.
- Manage EM Plan development within timelines set by the EMC.
- Conduct quality checks, including the use of style guides, and adherence to templates as appropriate.
- Collaborate with training coordinators and other members of the EMC as required to ensure that EM Plans are integrated into training, exercise, and drill materials developed for organization staff.

6.3 Emergency Incidents for Healthcare Facilities

The definition for an EI presented within the EM Procedure holds true for healthcare facilities. However, there are other important factors, particularly applicable to hospitals, which must be considered when deciding what constitutes an EI, and the thresholds which govern the process.

Particularly for hospitals, an EI is determined based on number of causalities, and type of casualties.

6.3.1 Types of Emergency Incidents Experienced by Healthcare Facilities

Unlike other entities, healthcare facilities are affected by EIs regardless of whether the EI occurred within the Facility's grounds or not. Therefore, the EI (which requires implementation of EM Plans) can either be internal, or external to the healthcare facility:

- **External –** Any EI either natural or man-made, which occurs away from the site of the healthcare facility such as hurricane, plane crash, multi-vehicle collision, chemical spill, factory explosion.
- **Internal –** Any event, such as a fire, flood, or hostage situation, either natural or man-made, which occurs inside or on the campus of the healthcare facility

6.3.2 Number of Casualties

Number of casualties as a contributing factor to indicate hospital capacity can be assessed by using either:

- **Hospital Treatment Capacity (HTC) –** The number of casualties that can be treated in the hospital in an hour and is usually calculated as 3% of total number of beds
- **Hospital Surgical Capacity (HSC) –** The number of seriously injured Patients that can be operated upon within a 12-hour period (HSC = Number of operation rooms x 7 x 0.25 operations/12hrs)

Best practice dictates that the healthcare facility categorizes its number of casualties to set thresholds against which actions should be taken. For example, in a 1000-bed hospital, the thresholds could be set to the following limits:

- **Code Green:** Up to thirty casualties involved in a single accident or emergency arriving at the hospital at one time
- **Code Amber:** Thirty to fifty patients involved in a single accident or emergency arriving at the hospital at one time
- **Code Red:** More than fifty patients involved in a single accident or emergency arriving at the hospital at one time

Setting of thresholds requires in-depth knowledge regarding the operations of the Healthcare Facility. It is, therefore, an Entity-specific task which depends on several factors such as: number of beds, number of staff including doctors, nurses and auxiliaries, and previous experience.

6.3.3 Type of Casualties

Type of casualties as a contributing factor to indicate hospital capacity can be categorized as follows:

- **Critical –** Including head injuries, thoracic injuries, abdominal injuries, fractures of major bones, profuse bleeding, non-responsiveness and other similar conditions. These patients require immediate resuscitation and supportive measures.
- **Serious –** Including cases of a non-critical nature such as limb fracture and crush injuries without major blood loss, facial injuries, hip injuries and spinal injuries.
- **Walking Wounded –** Including all minor and treatable injuries such as limb fractures and muscular torsions.
- **Dead –** To be processed through the Mortuary

Carrying out patient observations during triage and using mechanisms such as the Glasgow Coma Scale are suitable ways to support categorization of casualties.

6.3.4 Implementing Classes of Emergency Management Plan

Examples of emergency incidents which may be considered relevant to the Entity following completion of HVA, are provided in Section 1.0. Following identification of relevant EIs, the Entity shall categorize and classify each EI.

- Emergency Incident Category is the **'type'** of EI
- Emergency Incident Class is the '**intensity**' of the EI

EI Category	Category	Class
1	Evacuation	A
		B
		C
2	Flood/Hurricane	A
		B
		C
3	Radiation incident	A
		B
		C
3	Communications outage	A
		B
		C
4	Snow/Sand storm	A
		B
		C
5	Fire	A
		B
		C
6	Chemical or Biological incident	A
		B
		C
7	Earthquake	A
		B
		C

Table 1: Example Emergency Incident Categories

Each category of EI shall correlate to an EM Plan. The EM Plan for each category shall then be placed into classes as follows:

- Class A (i.e. Light)
- Class B (i.e. Medium)
- Class C (i.e. Heavy)

Class A: The EM Plan can be implemented with minimal disruption to the Healthcare Facility's normal operations.

Class B: The EM Plan can be implemented with specific adjustments to be made to the Healthcare Facility's operations. The plan may be upgraded to C if thresholds are breached.

Class C: Implementation of the EM Plan requires major re-organization of the Healthcare Facility and has a high risk of affecting continuity of operations. Back-up systems and resources shall be required given that several critical systems and resources have either, reached their design limits, or failed completely.

6.4 Hospital Networking

Preparation of EM Plans is likely to determine that there are circumstances under which the Healthcare Facility will be unable to suitably address the EI. In such circumstances, spare capacity, equipment, staff, and resources within other facilities should be used to enable successful navigation of the EI.

Setting up a network of hospitals within a district as part of establishing EM Plans shall be enabled by:

- **Analysis of Existing Resources** – The EMC must be certain of Healthcare Facility's design limits and have visibility of the inventory (assets and people). This should then be compared against potential requirements of an EI. The gap is where other neighboring facilities will be required to form part of EM Plans
- **Resource Sharing Database** – Sharing inventory data between Healthcare Facilities will enable a database to be established within the district featuring all available resources. This will facilitate a strong network for use during normal operations, and during EIs. Equipment, staff, and resources can be optimized as required through establishment of the database. In addition to inventory items, consider that training requirements should also be shared

Hospital networking shall be led by a District Area Board featuring representatives from each Healthcare Facility within the network. Private Healthcare Facilities should also be included within the database. The district/regional medical authority shall establish and manage the health delivery system of the district. EM Plans established by each Healthcare Facility within the district should be aligned with district EM Plans.

6.5 Healthcare-specific Emergency Operating Areas

6.5.1 First Aid Posts

The Entity may be required to establish first aid posts to treat walking wounded (i.e. those who do not require immediate hospital attention). First Aid Posts may be static or mobile.

Each First Aid Post shall consist of: Triage; Treatment Area; and Waiting Area. They should be in close proximity to the scene of the EI, other First Aid Posts, and the nearest hospital such that no casualty shall travel a long distance to receive emergency medical attention during an EI. Location of First Aid Posts should be planned during the Pre-Emergency Phase and should be mentioned within EM Plans.

First Aid Posts shall be manned by qualified, competent first aiders.

6.5.2 Reception and Triage Area

This area is the first area of contact between hospital personnel and the incoming Patients. This area should be manned by:

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

6.5.3 Decontamination Area

In cases of Radiation Incidents (and some Chemical or Biological Incidents), the Entity shall be required to set up a quarantined Decontamination Area in which to treat Patients who are suffering effects of exposure. A Decontamination Team shall include:

- Doctors
- Nurses
- Hazardous Materials (Hazmat) Officer

Outside of the Decontamination Area, there shall be representation from administration and security.

6.5.4 Essential Ancillary Services

Specifically regarding Healthcare Facilities, there are EOAs which are necessary to maintain and operate throughout an EI. These EOAs may increase or decrease in size from Normal Operating Areas (NOAs) but their function shall largely remain the same. The EOAs are detailed herein:

6.5.4.1 Laboratory Services

Essential for processing tests carried out by medical staff with a turnaround time based on patient priority. The lab shall coordinate with nearby labs as required in order to meet its service requirements during the EI.

6.5.4.2 Radiology Services

Ability to perform X-ray, Computerized Tomography (CT) scans, and ultrasounds shall be limited by several factors including availability of Power and availability of staff. The Radiology Department shall coordinate with nearby Healthcare Facilities as required in order to meet its service requirements during the EI.

6.5.4.3 Blood Bank

Essential for maintaining stock levels of blood required by casualties which depend on transfusions. The Blood Bank shall continuously seek donors and set lower stock limits during normal operations, and during Emergency Incidents. It shall coordinate with other Blood Banks as required to maintain stock levels during the EI.

6.5.4.4 Mortuary Services

Mortuary should be situated away from the main entrance of the hospital. It should be adequately staffed with a Senior Forensic Specialist. Patients pronounced Dead-On-Arrival (DOA) should be tagged as such and body sent to the Mortuary. The Emergency Services and Incident Command Center shall keep a tally of deaths and seek to identify all the bodies as quickly as possible.

During certain EIs, the number of dead may be higher than the Mortuary's capacity. In such situations, the Mortuary shall coordinate with other Mortuaries for the safe storage of bodies.

6.5.4.5 Hospital Laundry Services

The on-site launderette shall ensure adequate supply of clean linen to areas where medical procedures are being executed. The launderette shall maintain adequate stock levels of linen and shall coordinate with laundry services located within the district to meet its service requirements.

7.0 ATTACHMENTS

1. Attachment 1 – EOM-ZE0-TP-000013–Emergency Management Plan Template for Healthcare Facilities

Attachment 1 – EOM-ZE0-TP-000013 – EM Plan Template for Healthcare Facilities

Introduction

This document contains Emergency Management (EM) Plans to be actioned in case of an Emergency Incident (EI). Each EM Plan contains the steps which should be taken (and by whom) in order to successfully navigate the EI.

Based on Hazard Vulnerability Analysis (HVA), the following EIs are most likely to affect the Entity:

- Evacuation
- Flood/Hurricane
- Radiation incident
- Communications outage
- Snow/Sand storm
- Fire
- Chemical or biological incident
- Earthquake

Objective

The primary objective of EM Plans is to increase the likelihood that the Entity can suitably address the EI to the extent that:

- Limited harm is caused to people and the environment
- Limited damage is caused to assets
- Critical operations can continue relatively unaffected, and normal operations can be returned as soon as possible

The above objective shall be met whilst maintaining a level of agility such that the Entity can respond to circumstances which were unforeseen during the HVA.

Responsibilities

The following individuals shall be assigned roles dependent on the category and classification of the EI:

Responsible	Description
Charge Nurse	Senior ranking nurse responsible for supervision and leadership of all nursing staff
Chief Nurse	Most senior ranking nurse responsible for supervision and leadership of all charge nurses
Communications Unit Leader	Organizes and coordinates internal and external communications during an EI; and acts as custodian of all logged/documented communications
Consultant	Senior ranking doctor responsible for decision making regarding Patient care
Damage Assessment and Control Officer	Provides enough information regarding the operational status of the facility during an EI for the purpose of decision/policy making, including those regarding full or partial evacuation
Emergency Management Committee	Group of responsible and accountable people tasked with preparing the organization for an EI and successfully leading the organization through the EI, then capturing lessons learned as part of continuous improvement
Emergency Operating Area Supervisor	Person in charge of the Emergency Operating Area as assigned by the Resource Pool Leader. Responsible for the successful set up and management of the Emergency Operating Area (EOA)

Facility Unit Leader	Supports the Logistics Section Chief by maintaining the integrity of the physical facility to the best possible standard during an EI, ensuring quality and security of supply
Finance Section Chief	Responsible for all financial decision making during the EI, the Finance Section Chief (FSC) shall document and approve the acquisition of supplies and services necessary to successfully navigate the Entity through the Emergency Phase
First Aiders	First Aiders shall be trained and competent individuals with responsibility to render first aid to victims at the scene of the EI in support of Emergency Support Services (ESS)
FM Director	Responsible for overall management of the FM Department. Must coordinate and supervise FM staff such that quality and security of supply is maintained to the highest possible levels during the EI
Incident Commander	Chief decision maker responsible for organizing and directing the Emergency Operations Center (EOC). Incident Commander (IC) has overall accountability for safety of people and protection of assets during an EI. The IC shall act as EMC Chair
Information Technology (IT) Unit Leader	Develop and maintain the Entity's internal information network through monitoring and maintenance of the computer system, servers, and internet hardware
Liaison Officer	Liaise with parties external to the Entity based on direction from the Communications Unit Leader (CUL).
Line Manager	The person in the organization to whom one or more members of staff report. During an EI, this person may change dependent on whether the Incident Command Structure (ICS) differs from the Normal Command Structure
Logistics Section Chief	Directs maintenance operations, and ensures adequate levels of food, shelter and supplies during the EI
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Sanitation Systems Officer	Reporting to the Facility Unit Leader, the Sanitation Systems Officer (SSO) monitors the usage of existing sewage and sanitation systems and establishes alternate methods of sanitation if necessary
Senior Leadership Team	Those responsible for defining organization policies and for successfully running the organization during normal operations
Subsistence Unit Leader	Organize food and water stores for preparation and rationing during the EI, against forecasted periods of shortage
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SLT	Senior Leadership Team
SME	Subject Matter Experts
SSO	Sanitation Systems Officer

Emergency Incidents

- Liaison Officer
- Safety & Security Officer
- Logistics Section Chief
- Operations Chief

a. Liaison Officer
   i. Maintain contact with Emergency Support Services.
b. Logistics Section Chief
   i. Assign Transportation Unit Leader to assemble evacuation teams from Resource Pool
   ii. Notify Planning Section Chief
c. Transportation Unit Leader
   i. Assemble evacuation teams from Resource Pool
   ii. Ensure availability of Patient transportation
   iii. Assign specific number of persons to each floor to aid evacuation
   iv. Arrange transport equipment such as wheelchairs.
   v. Supervise evacuation
d. Chief Nurse
   i. Designate holding areas for critical, semi-critical, and ambulatory evacuated Patients
   ii. Organize efforts to meet medical care needs
   iii. Distribute Evacuation Plan to Charge Nurses
   iv. Verify Charge Nurses have initiated Evacuation Procedure
   v. Verify that Patient Transfer Orders are in place
e. Medical Director
   i. Notify doctors of need for Patient transfers
f. Charge Nurses
   i. Report Patient status to Chief Nurse
g. Safety & Security Officer
   i. Assign Security Personnel to each Emergency Operating Area
   ii. Close all windows and doors. If time permits and if possible, shut off oxygen, water, power, and gas
   iii. Check that everyone has evacuated as per the Evacuation Plan
   iv. Place sign at all entrances to buildings which have been evacuated featuring time and date of evacuation, along with contact telephone number of Incident Commander
h. Facility Unit Leader
   i. Check Job Card
i. Resource Pool Leader
   i. Check Job Card

Flood/Hurricane

When a Weather Warning is issued:

- Tune into local radio and television stations for updates regarding the Weather Warning and follow instructions from Emergency Support Services
- Move valuable possessions away from ground floors and into safe and secure places
- Prepare for evacuation
- When instructed to evacuate, do so as quickly and as safely as possible
- Avoid areas which will be subject to flooding such as basements.
- Close all windows and doors. If time permits and if possible, shut off oxygen, water, power, and gas
- Do not try to cross a stream where water is greater than 6 inches deep; even shallow streams may have currents strong enough to brush people off their feet
- Do not drive over a flooded road to limit the risk of becoming stranded. If the vehicle stalls, abandon it immediately and seek higher ground
- Avoid unnecessary trips (i.e. those which are not dependent on the safety of life or preservation of business critical/high value/irreplaceable assets)

- If travel cannot be avoided, then inform others of your whereabouts and maintain communications
- Move to higher ground and away from rivers, streams, and storm drains
- Do not move barricades or sandbags – these are safety critical items under the control of Emergency Support Services

Communications Outage

In the event of an outage of telephone or internet, alternative means of communication shall be made available. Reinstating communication lines and establishing back up communications shall be a matter of top priority.

Procedure:

- Incident Commander and Communications Officer shall be informed and kept updated on the status of communication lines
- The Public Announcement System (PA System), if available, shall be used to communicate announcements to all personnel within Entity buildings
- Means of communications by mobile telephone (such as: WhatsApp, or Emergency Preparedness Software {EPS} using 5G network) shall be instated
- Telephone and Internet Service Providers shall be made aware of the outage and shall return the Facility to service within timescales outlined in the Service Agreement

For outside lines, call _____.

Contact telephone details of Emergency Support Services and other stakeholders are as follows:

959 – Zain Mobile Customer Service Center
1100 – Mobily Mobile Customer Service Center
1789 – Virgin Mobile Customer Service Center
999 – Police (also 911)
998 – Civil Defense
997 – Ambulance
996 – Highway Traffic Police
995 – Anti-narcotics
994 – Border Patrol/Coast Guard
993 – Traffic Police
992 – Passport Control
990 – Security Center
989 – Public Security
985 – Intelligence Agency
966 – Natural Disaster Hotline
940 – Municipal Services
939 – Easter region Water and Sewerage Services
933 – Electricity Customer Services
909 – STC Telephone Enterprise Service Call Center
907 – STC Telephone Customer Service Call Center
906 – STC Internet Service Call Center
905 – Telephone Directory
904 – STC Subscribers Telephone Customer Service Center
902 – STC Mobile Customer Service Center

Snow/Sand Storm

During a storm, or upon issuance of a Weather Warning from Civil Defense:

- Incident Commander shall convene Emergency Management Committee as set out this EM Plan
  - Ascertain staffing levels and future needs
  - Determine services and levels of operation to be maintained
  - Determine level and availability of supplies
  - Monitor weather and road conditions

Safety & Security Officer:

- Monitor weather conditions and update Incident Commander

FM Department:

- Activate sand (or snow, if during a snow storm) clearing procedures for car parks, walkways, and entrances
- Lay grit salt (for snow storms and to prevent black ice)

Transportation Unit:

- Support in preparation and mobilization of vehicles for transporting staff and customers

Fire

Upon discovering a fire:

- Sound the alarm
  - Activate the nearest Fire Alarm Pull Box
  - Alert Fire Department and on-site Security
  - Alert Incident Commander.
- Rescue
  - Remove all Patients and visitors in immediate danger
- Contain
  - Isolate the fire by closing all doors and windows
  - Avoid opening doors and windows during a fire which are already closed
- Extinguish/evacuate
  - Use portable fire extinguishers, if trained and competent to do so, as a means of clearing a path for evacuation
  - If smoke and heat are preventing evacuation, then stay low to the ground, preferably close to an exterior window, and await instruction
  - Keep unauthorized people from entering the area
  - Civil Defense shall have complete authority during a fire. Until the building is safe to enter by other Emergency Support Services

On hearing a Fire Alarm:

- Evacuate the area. Close all windows and doors. If time permits and if possible, shut off oxygen, water, power, and gas
- Know the evacuation routes. Should evacuation be necessary, go to the nearest exit or stairwell and proceed out of the building toward the Assembly Point. Do not use elevators
- Leave the building, move away from fire exits
- Gather at Assembly Point.
- Remain at Assembly Point until instructed that it is safe to leave the Assembly Point
- Ensure name is recorded as having safely evacuated the building

Fire Fighting as a means of escape:

Fight the fire only if ALL of the following requirements are met:

- Fire Department has been notified of the fire
- There is a clear and safe path to safety with the nearest fire exit to your back whilst you are facing the fire to your front
- Fire extinguisher is in good working order
- You are trained and competent to use the fire extinguisher
- The fire is in its very early stages

If you cannot extinguish the fire or if the fire extinguisher becomes empty; get out and get everyone else out of the building immediately, closing all doors behind you as you go. Then ensure that Civil Defense has been contacted.

If there is any doubt regarding the above points, then do not do any of the steps and evacuate the building immediately.

Selecting the right fire extinguisher:

Select an extinguisher as per below table:

Code	Category	Examples
A	Ordinary Combustibles	Example; Paper, paint, wood
B	Flammable Liquids	Example: Gasoline, spirits. (not alcohol or cooking oil)
C	Energized Electrical Equipment	Wiring, switchgear
D	Combustible Metals	Example: Magnesium, titanium
K	Cooking Media	Example: Fat, grease, cooking oil.

Fire Extinguisher Categorization

Full guidance is provided within National Fire Protection Association (NFPA) 10:2018. If in doubt of making the appropriate selection during an Emergency, then read instructions on the fire extinguisher, if time permits. If time does not permit reading of the information contained on the fire extinguisher, then evacuate the building while still safe to do so.

Using the fire extinguisher:

Remove the extinguisher from the wall unit (if applicable)

- Pull the pin
- Aim the nozzle at the base of the fire
- Squeeze the handle
- Sweep side to side at the base of the fire until the fire is extinguished

O&M Department, in collaboration with the Safety & Security Officer, is responsible for ensuring replacement the fire extinguisher after use.

Chemical or Biological Incident

In the event of a Chemical or Biological Incident, the following steps shall be followed:

- Emergency Support Services shall be notified immediately
- The Incident Commander shall initiate a lock-down on the building if there is a risk to the health of building users. If there is no risk to health of building users given that the Incident has taken place outside of the Entity such as external EI), then all Patients who can be discharged shall be discharged as soon as possible to free capacity for incoming casualties

Lock down status shall be communicated via PA System and through use of the Emergency Preparedness Software (EPS), if applicable

- Safety & Security Officer shall deploy staff to secure all exits. Exits shall remain secure until the Incident Commander de-activates the Emergency Incident
- Staff shall all wear Personal Protective Equipment (PPE):
  - Dosimeter on collar (as required)
  - Surgical gown
  - Surgical bottoms
  - Waterproof shoe covers (tape to bottoms)
  - Surgical top
  - First pair of surgical gloves (tape to sleeves)
  - Second pair of surgical gloves (untapped and changed as required)
  - Surgical mask
- Emergency Operating Areas (including de-contamination showers, and tents as appropriate) shall be set up by those whom are qualified to do so
- Staffing needs shall be identified and reported to the Command Center

Radiation Incident

In the event of a Radiation Incident, the following steps shall be followed:

Notification:

- Contact Emergency Support Services

Information:

- Incident Commander to obtain information from the scene of the Incident and assess the need for activation of the Emergency Operating Manual (EOM):
  - Location of Incident in relation to each hospital within the district
  - Number and condition of victims (contaminate and uncontaminated)
  - Nature of Radiation Incident such as nuclear attack, nuclear power station incident, and type of radioactive isotopes involved such as 235U, 239Pu, AM-241, AM-243.

Preparation:

- Lay absorbent paper underneath the victim during transportation in an ambulance
- For Incidents featuring a high number of victims presenting with effects of radiation, or during transportation of a small number of victims within an ambulance who are present with effects of radiation; HVAC system shall be shut down to limit spread of contamination
- Cover floor areas at all entrances and Decontamination Area with absorbent paper topped with plastic sheets and secured with tapes
- Cover handles of doors and cupboards with absorbent paper topped with plastic sheets and secured with tape
- Mark off Decontamination Areas with radioactive tape and restrict traffic as far as possible
- Hazardous Materials Officer (Hazmat Officer) equipped with a survey meter shall monitor all personnel, equipment, and samples entering the Decontamination Area
- Safety & Security Officer shall remove all equipment from the Decontamination Area which is not required or cover with plastic
- Prepare plastic drums lined with plastic sheets in which contaminated clothing shall be placed for disposal

Decontamination Team:

- Doctor:
  - Direct medical care of Patient
  - Direct Decontamination Procedure
- Nurse:
  - Assist the Doctor
  - Collect samples as requested by the Doctor
  - Carry out observations
- Hazmat Officer:
  - Monitor and record exposure of Decontamination Team to radiation exposure
  - Monitor and record equipment entering and leaving Decontamination Area
  - Ensure safe dose limits are not exceeded
- Administration:
  - Process samples and facilitate the flow of information between Decontamination Area and other Emergency Operating Areas such as lab results.
- Security:
  - Secure all entrances and Decontamination Area

Patient Arrival and Triage:

- Triage Nurse and Hazmat Officer shall meet Patients on arrival
  - If Patient is critical then move directly to the Decontamination Area without removal of clothing, shower, or triage
  - If Patient is non-critical, then:
    - Remove clothing
    - Use decontamination shower
    - Wear hospital-issued surgical top and bottoms with rubber sandals
    - See Hazmat officer for contamination testing
    - Go to Triage Tent

Earthquake

When an earthquake strikes inside the building:

- Duck, Cover, and Hold – Get under a sturdy structure such as a desk and remain there until the earthquake subsides. If situated in a hallway: kneel down back against the wall, cover your head with your hands, and tuck your elbows down to your knees
- Stay calm – Inhale for 5 seconds, exhale for 10 seconds
- Keep away from windows or objects which are likely to fall
- Stay under cover until it appears that the earthquake is over. Be prepared for aftershocks
- Do not use elevators. If you are in an elevator when the earthquake strikes, exit as soon as possible. If the elevator does not move, and doors do not open, press the emergency button for help and wait for assistance. Do not attempt to prize open doors, lift panels, or climb out of the elevator
- Report damage and casualties to Line Manager
- Help injured and disabled people – keep personal safety in mind when helping others
- Follow instructions from Line Management and Emergency Support Services

When an earthquake strikes outside the building:

- Remain in open areas away from buildings, structures, power lines, or anything at risk of falling
- Move away from fire, smoke, and anything which is a source of ignition
- Proceed to the Emergency Assembly Point, if safe to do so
- Ensure name is registered as safe during roll call

Returning Home:

- Remain with colleagues unless dismissed by Line Management. Once cleared to leave the area, ensure that it is safe to do so
- Do not travel alone; particularly driving alone following an Emergency Incident is prohibited

RACI Matrix

The RACI (Responsible, Accountable, Consulted, Informed) Matrix is designed to be used during delivery of Emergency exercise and drills to track tasks assigned to each member of staff. The RACI shall also be used in conjunction with the Emergency Exercise & Drill Evaluation Form following completion of an Emergency Drill to check that each member of staff fulfilled their designated role.

Emergency Drills RACI Matrix

Equipment

Depending on the category and class of the EI determined as a result of HVA, the EM Plan shall be developed and shall include a list of envisaged equipment/medicine as per the following format:

Equipment/Medicine Identified	Quantity	Emergency Operating Area

Equipment/Medicine Requirements

Emergency Operating Area Maps

Depending on the category and class of the EI determined as a result of HVA, Operating Area Maps (OAMs) shall be developed.

The OAM shall show, as a minimum:

- EOAs overlaid on top of Normal Operating Areas (NOAs)
- Capacities of the NOAs should also be mentioned alongside capacities of EOAs on these maps
- Equipment installed within each EOA such as fire extinguishers and portable power transformers.

Evacuation Plans

By referring to a Plan schematic of each building through the HVA, Evacuation Plans shall be established. The Evacuation Plan shall feature, as a minimum:

- Nearest escape routes from the location at which the Evacuation Plan is located
- All fire exits
- Fire Alarm Control Panels and Pull Boxes
- Fire extinguishers
- Public Contact Points for Emergency Support Services (as applicable)

Monitoring and Reporting

Dependent on the category and class of the EI determined as a result of HVA, monitoring and reporting requirements shall be established as per the following format:

Report Name	Responsibility	Frequency of Reporting

Monitoring and Reporting Requirements

Appendices

Included within this section any supporting documents, or drawings.