

مستشفى الملك فيصل التخصصي ومركز الأبحاث King Faisal Specialist Hospital & Research Centre

Business Continuity - Emergency Preparedness, Operations and Recovery Manual

1444 (2022)



Business Continuity - Emergency Preparedness, Operations and Recovery Manual

Version No:

Version 1.0

Version Date:

10 / 11 / 2022

Last Reviewed:

Not Applicable

Next Review:

The next review will be within 1 month of 10 / 11 / 2024

Approved by:

Chairman, Corporate Hospital Safety Committee

Private & Confidential Page 2 of 37



CEO Endorsement Statement



King Faisal Specialist Hospital & Research Centre (KFSH&RC) is committed to providing a safe and operational environment for our patients, staff, and visitors. The threat on our safety significantly increases during a disaster, while our ability to continue with our operations may be compromised. The goal of the Business Continuity - Emergency Preparedness, Operations and Recovery Framework (BC-EPOR) is to provide a robust, straightforward process in the management of disaster incidents. By adopting our existing methodologies and using the unified emergency codes stipulated by the Saudi Health Council, the BC-EPOR framework is a clear, concise system, which is easy to communicate and disseminate at all levels in our Hospital. The BC-EPOR framework encompasses the methods, tools and processes that KFSH&RC uses to prepare respond and recover from emergency situations. The BC-EPOR framework details the roles, responsibilities and resources needed in a disaster event. This framework ensures consistency, guidance, and a clear emergency management approach in the event of a disaster.

Disaster management is an ever-evolving process based on lessons learned and real-life disaster/emergency experience. We must be ready for, and continually prepare our response methods for any event that may arise and can affect our Hospital. I encourage everyone to read this framework and understand his/her role in the event a disaster occurs.

Therefore, in recognition of our emergency management responsibilities at King Faisal Specialist Hospital & Research Centre, I endorse the Business Continuity – Emergency Preparedness, Operations and Recovery framework.

H.E. Majid Alfayyadh, MD, MMM

Chief Executive Officer

Private & Confidential Page 3 of 37



Message



Yassen Mallawi, MD
Chief Risk & Compliance Officer
Chairman, Corporate Hospital Safety Committee

As part of our continuous journey for excellence and key learnings acquired from our response to the Covid-19 pandemic, we are pleased to share an enhanced framework for disaster management in our Hospital.

Our new business continuity - emergency preparedness, operations and recovery framework (BC-EPOR) builds on, and complements the extensive disaster management program that has protected our Hospital so well. My heart felt appreciation and recognition goes out to everyone who contributed and implemented our disaster management program through the years and whose dedication has inspired us to develop our new BC-EPOR framework.

The BC-EPOR framework comprises of current practices and introduces new concepts to emergency management at our Hospital. The BC-EPOR is a dynamic framework and will evolve with time. Its implementation will require some enhancement of existing processes and the development of new business continuity methods. The framework is designed to provide a flexible and concise process that will be applied to our electronic governance, risk and compliance (eGRC) platform when it comes online.

The BC-EPOR framework is our response to ensuring we are prepared to deal with emergency situations. I am confident that with this framework we will meet and exceed the challenges faced by our Hospital in relation to disaster management. I look forwarding to working with you all in the development and implementation of this framework.

Private & Confidential Page 4 of 37



Table of Content

TABLE OF CONTENT	4
ABBREVIATIONS	7
DEFINITIONS	<u>c</u>
1. MANUAL ADMINISTRATION	11
1.1. Overview	11
1.2. PURPOSE OF THIS MANUAL	
1.3. Scope and Applicability	
1.4. Ownership and Custody	
1.5. APPROVAL AND REVISIONS	12
2. BUSINESS CONTINUITY - EMERGENCY PREPAREDNESS, OPERATIONS AND RECOVERY (EPOR)	
FRAMEWORK	13
2.1. Overview	13
2.2. KFSH&RC Business Continuity - Emergency Preparedness, Operations and Recovery Framework (EPC	OR)14
2.2.1.Overview	15
2.2.2.EPOR Components	15
2.3.EMERGENCY PREPAREDNESS, OPERATIONS AND RECOVERY GOVERNANCE	18
2.3.1.EPOR Governance Structure	18
2.3.2.Roles & Responsibilities	18
3. EMERGENCY PREPAREDNESS	20
3.1. Overview	20
3.2. EMERGENCY CODES	20
3.3. MISSION ESSENTIAL FUNCTIONS	21
3.4. Business Impact Analysis	22
3.5. HAZARD IDENTIFICATION AND RISK ASSESSMENT (HIRA)	22
3.6. ACTIVATION OF EMERGENCY OPERATIONS	23
3.6.1.Communications Systems	24
4. EMERGENCY OPERATIONS	25
4.1. Overview	25
4.2. Incident Response	25
4.2.1.Emergency Operations Centre	26
4.2.2.Incident Command Post	27
4.2.3.Departmental Sub-plans	27
4.2.4.Incident Stand-Down	28
5. EMERGENCY RECOVERY	29
5.1. Overview	29
5.2 RECOVERY OPERATIONS	20



Business Continuity - Emergency Preparedness, Operations and Recovery Manual

6. TES	TING, TRAINING AND EXERCISE	31
	OVERVIEW	
	BUSINESS CONTINUITY TESTING AND EXERCISE	
6.3.	BUSINESS CONTINUITY TRAINING	32
6.4.	RECORDS MANAGEMENT	33
7. MA	INTENANCE AND IMPROVEMENT	34
	Overview	
	MAINTENANCE AND IMPROVEMENT METHODOLOGIES.	





Abbreviations

Terms	Definition		
AAR	After Action Report		
BIA	Business Impact Analysis		
BoD	The Board of Directors of King Faisal Specialist Hospital & Research Centre		
СВАНІ	Central Board for accreditation of Healthcare Institutions		
CBRN	Chemical, Biological, Radiological and Nuclear response and decontamination team		
CCTV	Close Circuit Television		
CEO	The Chief Executive Officer of King Faisal Specialist Hospital and Research Centre		
CHSC	Corporate Hospital Safety Committee		
EMAP	Emergency Management Accreditation Program		
EOC	Emergency Operations Centre		
EPC	Emergency Preparedness Committee		
EPOR	Emergency Preparedness, Operations and Recovery		
ERT	Emergency Response Team		
GHO	General Hospital Orientation		
HIRA	Hazard Identification and Risk Assessment		
HSC	Hospital Safety Committee		
ICP	Incident Command Post		
JCI	Joint Commission International		
KFNCCC	King Fahad National Centre for Children's Cancer		

Private & Confidential Page 7 of 37



Business Continuity - Emergency Preparedness, Operations and Recovery Manual

Terms		Definition	
KFSH&RC Hospital	or	King Faisal Specialist Hospital & Research Centre	
MAO		Maximum Allowable Outage	
MEF		Mission Essential Function	
RPO		Recovery Point Objective	
RTO		Recovery Time Objective	
TT&E		Training, Testing & Exercise	

Private & Confidential Page 8 of 37



Business Continuity - Emergency Preparedness, Operations and Recovery Manual

Definitions

Terms	Definition	
Business Continuity	A process to ensure the availability of all critical services such as MEF's prior, during and post a disaster or outage scenario	
Business Impact Analysis	The process of determining the criticality of business activities and associated resource requirements to ensure business continuity of operations during and after a disaster or outage scenario.	
Departmental Emergency Sub- Plans	Predefined processes and procedures for departments to follow once activated by the Emergency Warden or the Emergency Command Centre	
Emergency Response Team	A multidisciplinary team that consists of Safety & Fire Section, the Guard Force (Security) section, EUMD, Nursing staff, Respiratory Care Services, and Ambulance Services. This team creates the primary response to any event that may occur.	
Emergency Warden	Designated leader of a patient care area oversees unit operations, including sub-plan activation and accountability in a disaster incident	
External Emergency	Any event occurring external of the Hospital campus, creating a sudden influx of incoming patients to the hospital, such events will have a direct or indirect impact on the health, safety, facilities, or operations of the Hospital.	
Executive Management	The KFSH&RC Chief Executive Officer, Chief Executive Officer – Healthcare Delivery, Chief Executive Officer – Research and Innovation, Chief Officers and the Executive Directors.	
Hot Wash	Immediate "after-action" discussions and evaluations following an exercise, training session, or major event, such as a Code Yellow.	
Internal Emergency	Any event occurring or affecting the Hospital within or near the perimeter, which disrupts services, isolation, and/or danger to patients, visitors, staff, housing residents, and/or contract workers.	
Maximum Allowable Outage	Duration after which an organization's viability will be irreparably if a service cannot be resumed	

Private & Confidential Page 9 of 37



Business Continuity - Emergency Preparedness, Operations and Recovery Manual

Terms	Definition	
Mission Essential Functions	Are the minimum required services and utilities that shall be maintained for the Hospital to continue effective patient care. These include but are not limited to manpower, electricity, water medical equipment, medical gas, etc.	
Recovery Point Objective	Timeframe within which data must be recovered as part of the overall recovery process	
Recovery Time Objective	Timeframe within which delivery of a service must be recovered to deliver sustainable capability	

Private & Confidential Page 10 of 37



1. Manual Administration

1.1. Overview

It is KFSH&RC responsibility to ensure the availability of all critical services prior, during and post disaster, emergency or outage scenario. This manual was formulated with a view to structure, define and guide activities and processes for Emergency Preparedness, Emergency Operations and Disaster Recovery in line with the Business Continuity - Emergency Preparedness, Operations and Recovery Framework (EPOR).

1.2. Purpose of this Manual

The purpose of this Manual is to:

- Document and outline the details of KFSH&RC Business Continuity Emergency Preparedness, Operations and Recovery Framework
- Provide and document key processes that govern and guide the business continuity emergency preparedness, operations and recovery activities and processes and ensure consistency and standardization in performing them
- Establish clarity on the overall roles and responsibilities of the key stakeholders in relation to EPOR across the organization

1.3. Scope and Applicability

This manual provides a comprehensive, risk based, all hazards approach for business continuity emergency preparedness, emergency operations and recovery. This manual applies to all sites of the Hospital.

1.4. Ownership and Custody

- The Corporate Hospital Safety Committee shall have custody over the master copy of this Manual.
- The contents of this Manual are intended for internal use only.

Private & Confidential Page 11 of 37



Business Continuity - Emergency Preparedness, Operations and Recovery Manual

• The information contained in this manual shall not be published, disclosed, or used for any other purpose in any manner without the written permission of the Chairman of the Corporate Safety Committee.

1.5. Approval and Revisions

- This manual shall be reviewed every two (2) years by the Emergency Preparedness Committees of all sites.
- Proposed amendments shall be submitted to the Hospital Safety Committees of all sites for review, consideration, and approval.
- Proposed amendments shall be submitted to the Corporate Hospital Safety Committee for approval.
- The revised manual shall be signed by the Chairmen of the Hospital Safety Committees, The Chairman of the Corporate Hospital Safety Committee and the Chief Executive Officer of the Hospital.

Private & Confidential Page 12 of 37



2. Business Continuity - Emergency Preparedness, Operations and Recovery (EPOR) Framework

2.1. Overview

Business Continuity - Emergency Preparedness, Operations and Recovery Framework (EPOR) is KFSH&RC's response to ensuring our Hospital is prepared to deal with emergency situations which are outside the scope of day-to-day operations. EPOR provides a mechanism that supports the Hospital during an emergency situation, maintains business continuity and aids recovery from the emergency situation. KFSH&RC recognizes that by defining Business Continuity as an all-encompassing approach in preparing for an emergency, continuing operations during an emergency and recovering from an emergency provides our patients, staff and assets with the best planned outcome in such challenging circumstances. This Business Continuity EPOR framework acts as a single overarching guidance that covers the elements responsible for smooth functioning of all critical services.

The aim of EPOR is to protect our patients, our staff and our assets in an emergency situation by ensuring continuity of care is provided to our patients prior, during and post the emergency situation.

Business Continuity - Emergency Preparedness, Operations and Recovery Framework is established by the Corporate Hospital Safety Committee to govern the emergency preparedness, emergency operations and emergency recovery process across the Hospital and ensure the following:

- Integrated and consistent approach to the management of EPOR.
- Defining clearly the roles and responsibilities in relation to EPOR to ensure proper allocation of accountability and effective oversight.

Private & Confidential Page 13 of 37



2.2. KFSH&RC Business Continuity - Emergency Preparedness, Operations and Recovery Framework (EPOR)

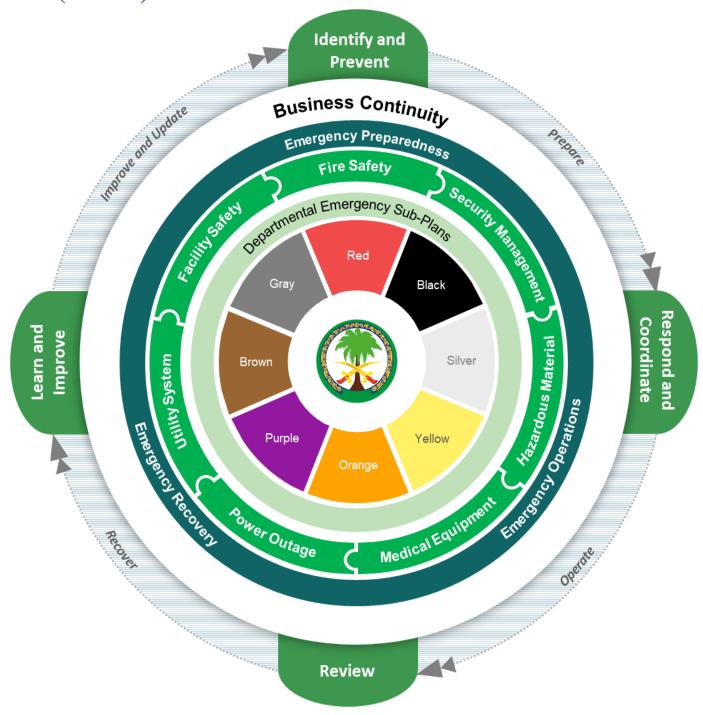


Fig 2.2 KFSH&RC Business Continuity Emergency Preparedness, Operations and Recovery Framework (EPOR)

Private & Confidential Page 14 of 37



2.2.1. Overview

KFSH&RC's Business Continuity - Emergency Preparedness, Operations and Recovery Framework is a Hospital-wide framework established by the Corporate Hospital Safety Committee. It is managed and operated by the Emergency Preparedness Committees, Hospital Safety Committees of each site and Corporate Hospital Safety Committee. It encompasses the methods, tools and processes that KFSH&RC uses to prepare, respond and recover from emergency situations which are outside of the day-today operational responsibilities of the Hospital.

Objectives

The objectives of the Business Continuity - Emergency Preparedness, Operations and Recovery Framework are to:

- Establish an integrated and consistent approach to the management of KFSH&RC's response to an emergency situation.
- o Support all departments of the Hospital in developing their emergency sub-plans
- o Provide KFSH&RC's BoD and Executive Management with assurance on the Hospital's capability to manage an emergency situation.

Design Principles

- Business Continuity Emergency Preparedness, Operations and Recovery Framework Management Framework (EPOR) is a component of the KFSH&RC Corporate Hospital Safety Committee.
- EPOR is a tailored, fit for purpose framework developed specifically for the needs of KFSH&RC, and based on the body of knowledge of the <u>2016 Emergency Management</u> <u>Standard</u> (EMAP) and the <u>Healthcare Business Continuity Planning Guide</u> from the Saudi Patient Safety Center.
- EPOR is a framework which has Hospital-wide applicability and its scope covers all departments.
- The Corporate Hospital Safety Committee is accountable for administering, operating, and revision of EPOR across KFSH&RC.

2.2.2. **EPOR Components**

KFSH&RC Business Continuity - EPOR consists of the following four (4) components:

(1) Emergency Codes

Private & Confidential Page 15 of 37





- (2) Departmental Emergency Sub-Plans
- (3) Seven (7) Environment of Care Safety Plans
- (4) Emergency Preparedness, Operations and Recovery Plans

Emergency Codes

Emergency codes are the foundation of the EPOR Framework. These codes are based on the <u>Saudi Health Council Resolution Number 64570</u> and consist of a number of possible emergency situations which a health institution may experience. By focusing on these emergencies and taking proactive measures to manage them, will increase the resiliency of our Hospital. The EPOR focuses on the codes which are considered situations outside of normal operating conditions for the Hospital.



Fig 2.2.2 KFSH&RC Emergency Codes outside of normal operating conditions

Private & Confidential Page 16 of 37



Business Continuity - Emergency Preparedness, Operations and Recovery Manual

Departmental Emergency Sub-Plans

<u>Departmental Emergency Sub-plans</u> determine the functional roles and responsibilities for departments who have active roles in disasters such as those mentioned in the emergency codes. Departmental emergency sub-plans should be available to all staff in the area. Departmental emergency sub-plans consist of roles and responsibilities, actions cards for key positions, contact list and processes to be followed.

Seven (7) Environmental of Care Safety Plans

Environment of care safety plans aim to ensure a safe environment for our patients, staff, visitors and safeguard the Hospital against damage or loss. These plans are developed in compliance with Joint Commission International (JCI) accreditation standards, Saudi Central Board for accreditation of Healthcare Institutions (CBAHI) and Emergency Management Accreditation Program (EMAP). These plans include:

- Fire Safety Management Plan
- Security Management Plan
- <u>Hazardous Materials Management Plan</u>
- Medical Equipment Management Plan
- Facility Safety Management Plan
- Utility System Management Plan
- Power Outage Plan

Emergency Preparedness, Operations and Recovery Plans

This component of the framework details the roles and responsibilities of the Hospital and the resources that may be needed in an emergency incident. It outlines the structures, processes and systems which will be activated upon the occurrence of an emergency incident in order to protect our patients, our staff and our assets, maintain business continuity during the incident and recover quickly post the emergency situation. Elements within this component include:

- Mission Essential Functions
- Hazard Identification and Risk Assessment
- Activation of Emergency Operations Centre
- Continuity of Operations
- Recovery of Operations

Private & Confidential Page 17 of 37



2.3. Emergency Preparedness, Operations and Recovery Governance

2.3.1. EPOR Governance Structure

The below Governance structure reflects the oversight and accountability for the Business Continuity - Emergency Preparedness, Operations and Recovery Framework.

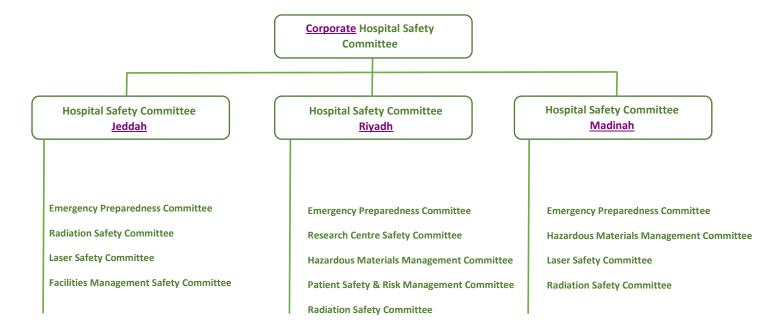


Fig 2.3.1 EPOR Governance Structure

2.3.2. Roles & Responsibilities

Corporate Hospital Safety Committee

The Corporate Hospital Safety Committee (CHSC) shall bear the overall responsibility for administering, operating, and revision of EPOR across KFSH&RC. The Committee shall periodically review the KFSH&RC's EPOR Framework to satisfy itself that it continues to be appropriate and effective.

Private & Confidential Page 18 of 37





Hospital Safety Committees

The Hospital Safety Committees (HSC) at each site shall be accountable for the revision and approval of the EPOR framework. They will focus on components of the framework which are specific to their site. They shall submit their proposed amendments to the Corporate Hospital Safety Committee for final approval. The Committee shall periodically review the KFSH&RC's EPOR Framework to satisfy itself that it continues to be appropriate and effective.

Emergency Preparedness Committees

The Emergency Preparedness Committees (EPC) at each site shall be accountable for the revision and approval of the EPOR framework every two (2) years. They will focus on components of the framework which are specific to their site while collaborating with the other EPC's. They shall submit their proposed amendments to their respective Hospital Safety Committee for approval. In addition, the EPC's shall:

- Ensure adequate policies and processes have been designed and implemented to manage the EPOR framework.
- o Conduct regular reviews to test the adequacy of the EPOR framework.
- o Ensure proper corrective actions are undertaken to enhance the framework.

Combined Assurance Committee

The Combined Assurance framework committee provides an overarching internal assurance framework for the different assurance functions within the 2nd line of defense in our Hospital. It brings together all the assurance functions to leverage risk and compliance processes, systems, and data effectively and efficiently. While the combined assurance committee does not have direct responsibility to the EPOR framework it will provide additional monitoring for enhanced effectiveness.

Crisis and Disaster Management Department

The Crisis and Disaster Management Department shall oversee the day-to-day operational activities of the EPOR framework. They shall collaborate with all relevant stakeholders including the CHSC, HSC and EPC. They shall coordinate the development, implementation and monitoring of business impact analysis, risk assessments and departmental emergency sub-plans.

KFSH&RC's CEO retains the ultimate responsibility for ensuring that KFSH&RC has an effective Emergency Preparedness, Operations and Recovery framework, meeting all requirements and comply with all applicable internal and external regulations and requirements. The Chief Executive Officer provides leadership and strategic direction to Emergency Preparedness, Operations and Recovery processes.

Private & Confidential Page 19 of 37



3. Emergency Preparedness

3.1. Overview

Disasters and emergencies can happen without warning to our Hospital. KFSH&RC have a number of processes in place which prepare our Hospital for such events. These proactive measures provide a systematic approach to preparing for a disaster which will limit their impact should they occur. By understanding the possible events which may occur, what affect they may have on our services and developing contingency plans will better position our Hospital to deal with these disasters and emergencies.

3.2. Emergency Codes

KFSH&RC has endorsed the emergency codes stipulated in the Saudi Health Council Resolution Number 64570 as the basis for the EPOR framework. As the EPOR provides a high-level structure on how emergencies are managed, it does not provide detailed instructions for each code. Comprehensive instructions for each emergency code are developed separately and are activated and applied in conjunction with the EPOR. Code Red (Fire) for example will have step-by-step instructions for all stakeholders who will understand their role in such a situation. It is noted that an emergency event may activate more than one code. A code Red activation in radiology for example may also activate code Orange as it might be considered an Internal Disaster. Code Yellow (External Disaster) may also activate code Orange (Internal Disaster) as the external incident may overwhelm our Hospital's capabilities. EPOR focuses on the codes which are situations considered outside of normal operating conditions for the Hospital. Emergency operations are initiated upon the activation of code Orange (internal disaster) or code yellow (external disaster). For further details on these codes click on the links provided.

• <u>Code Red</u> Fire

Code Black Bomb Threat

• <u>Code Gray</u> Severe Weather

Code Brown Utilities Shutdown

• <u>Code Silver</u> Active Shooter with weapon, hostage situation

• Code Purple Cybersecurity Attack

Code Orange Internal Disaster

• Code Yellow External Disaster

Private & Confidential Page 20 of 37



3.3. Mission Essential Functions

Mission Essential Functions (MEF's) are a limited set of Hospital functions that must be continued throughout or resumed rapidly after a disruption of normal activities. MEF's are critical functions that must always be available in our Hospital. KFSH&RC has identified the MEFs which must be available in order to ensure continuity of operations for our Hospital. These MEF's are divided into three (3) categories which support day-to-day, code related and pandemic related situations. The table below outlines these MEF's

Table 3.3 – Mission Essential Functions – MEF's

Operational (day to day)	<u>Code related</u>	Pandemic related
All functions within the Hospital that impact patient services are considered MEF's during normal operational (day-to-day) activity including: - Water Electricity Clinical Services (Radiology, Lab) Information Technology	People Utilities (water, electricity, medical Gas) Supplies Information Technology Medical Equipment Clinical Services (Rad, Lab, Phar) Support Services Finance Safety & Security	Surgeries, procedures and medical conditions that are life threatening emergencies. Patients on treatment that if delayed may cause harm or worsening outcome if interrupted (dialysis, chemotherapy) Cadaveric Organ Transplant Medication Dispensing Phone Call / Virtual Clinic
Link to Departmental Sub-plans	Link to EPOR Framework	Link to Pandemic MEF structure

Private & Confidential Page 21 of 37



3.4. Business Impact Analysis

Business Impact Analysis (BIA) helps in identifying and prioritizing all critical processes and services (such as MEFs) to be continued or recovered in times of a disaster or outage. A BIA will capture data such as manpower, utilities, information technology and supply requirements to maintain critical services and processes. It will also identify the dependencies of other areas within the Hospital that are required to maintain the critical services and processes. The BIA will determine what the Maximum Acceptable Outage (MAO) time will be so that the Hospital will know how long it can function without the service or process without incurring any irreversible impact. It will also identify what the Recovery Time Objective (RTO) is so that it will know how long it will take to recover the service and the Recovery Point Objective (RPO) to understand what maximum acceptable amount of data loss is tolerable. Obtaining and understanding this information will assist our Hospital in the development of business continuity plans which will help minimize the impact to the services and process in times of a disaster or outage.

3.5. Hazard Identification and Risk Assessment (HIRA)

The Hazard Identification and Risk Assessment (HIRA) helps in identifying and assessing risks that may impact the availability of services and processes. It is a structured approach that identifies, analyses and evaluates risks taking into consideration natural, manmade and technological hazards. KFSH&RC applies an Enterprise Risk Management methodology and all risks captured and categorized within the Hospitals risk universe. Risks and their respective mitigation plans (which may include large scale projects) that have been identified and influence emergency preparedness, operations and recovery are communicated to the Safety & Security division, the Emergency Preparedness Committees, the Hospital Safety Committees, the Corporate Hospital Safety Committees, the Chief Executive Officer, the Audit and Risk Committee and the Board of Directors. In addition to the above communications, the Risk Management division, Safety & Security division and Business Continuity are key stakeholders in the combined assurance framework committee whose main purpose is to provide adequate assurance to senior management, board committees and the BoD with respect to enterprise risks and business continuity capabilities.

Private & Confidential Page 22 of 37



3.6. Activation of Emergency Operations

Activation of emergency operations (code orange or code yellow) will be authorized by the following positions.

- Chief Executive Officer (CEO)
- Assistant CEO
- Chief of Staff
- Chief Executive Officer Healthcare Delivery (CEO-HD)
- Chief Medical Officer (CMO) and deputies
- General Manager Jeddah (GM-J)
- General Manager Madinah (GM-M)
- King Fahad National Center For Children's Cancer (KFNCCC) Administrator
- Chairman Department of Emergency Medicine (DEM)
- Administrator on Duty (AOD)
- Director of Safety & Security Services Division
- Head of Safety and Security Jeddah
- Head of Safety and Security Madinah
- Fire Marshall
- Disaster Management Coordinator

The activation of emergency operations is at the discretion of one or multiple positions above, however, if the emergency will inflict heavy damage to the Hospital and impact the ability to perform our MEF's then activation is recommended.

Activation will be done by one of the positions above by contacting the code dispatch extension.

Riyadh	Jeddah	Madinah
8888 (Non-Medical)	61111	19999
2222 (Medical)		

Private & Confidential Page 23 of 37





3.6.1. Communications Systems

KFSH&RC maintains primary and redundant communications systems which will be used in an emergency incident.

MCD

During an emergency incident the MCD system will be the primary communications system used. The MCD system is serviced by internal GSM coverage. Once a MCD is taken off campus it will also connect through outside cellular towers.

Landline

Hospital Landlines serve as the main communication link between employees and the Emergency Operations Center (EOC) during and after a disaster. This system is independent from the outside (municipal) network.

Red Phone

The <u>Hospital Red Phone system</u> is a standalone isolated network distributed in all mission critical areas including nursing stations. This system is designed to be utilized during a complete or partial network and/or communication failure of the primary system.

Fourn Radio

Certain departments and individuals have access to Fourn Radios to use during normal or disaster operations. Departments such as Ambulance Services, Safety and Security utilize this system on a regular basis. Additionally, the Emergency Operations Center (EOC), the Incident Command Post (ICP) and Emergency Management Personnel are also equipment with these devices. Fourn radios can be utilized for both voice and text messaging. The Bravo Radio system acts as a backup to the hospital MCD system which is also used for Emergency Codes.

The PBX dispatcher has the ability to announce messages over the Hospital overhead speaker system should it be necessary.

Private & Confidential Page 24 of 37



4. Emergency Operations

4.1. Overview

When a level three (3) emergency operation is activated (code orange or code yellow), KFSH&RC will respond to the incident through a series of predefined actions. The purpose of these actions are to protect our patients, our staff and our assets and to ensure continuity of care is provided. These actions follow a logical step-by-step approach in order to manage the incident including the continuation of critical services and recovery from the incident.

4.2. Incident Response

KFSH&RC categorizes emergency activation response into three (3) levels.

Level 1

Level 1 is an unplanned short-term localized incident brought under control quickly, within the control of hospital resources. Examples include but are not limited to; fire alarms, small fires, minor chemical spills, localized water pipe breaks affecting a portion of building, undetermined odors. Level 1 incidents are not Code Orange activation incidents, however, an incident management team may be activated.

Level 2

Level 2 is an unplanned incident with a predicted adverse impact or threatens life, health, or property. The incident involves a single area or site whereby partial short-term evacuation of the area may be required but our Hospital's resources can control the incident. Examples include small scale Hospital or residential fires or utility failure that presents the risk of interrupting the delivery of service. Level 2 incidents are not Code Orange activation incidents, however, an incident management team may be activated.

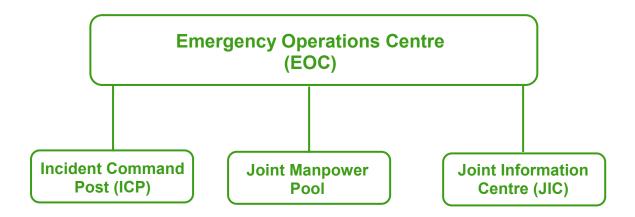
Level 3

Level 3 is an emergency incident of unpredictable long-term or severe short-term implications affecting or threatening life, health, facilities, and/or disruption to MEF's. Such events require a large scale response from one or more Hospital department(s) and/or outside agencies. Major evacuation of patient care areas or residential areas may be expected. Level 3 incidents are Code Orange activation incidents and will initiate the Emergency Operations Center (EOC) and Incident Command Post (ICP).

Private & Confidential Page 25 of 37



Upon receiving the activation authorization, the PBX dispatcher will activate the automatic oncall dispatch system. This system will send the activation message via public announcement system and MCD to the Emergency Operations Centre (EOC), predefined essential staff and Incident Command Post (ICP) members. This system contains the names, titles, personal and work phone numbers of all staff required for disaster operations. Upon receiving the activation message all EOC and ICP personal must report to their respective posts.



4.2.1. Emergency Operations Centre

The <u>Emergency Operations Centre</u> (EOC) is the primary command center during emergency operations. It controls all aspects of the incident, provides direction and coordination and supports the Incident Command Post (ICP). The EOC consists of senior executive management and leaders of the Hospital and operates from a dedicated and specially equipped control room. All EOC members assume a specific role with the EOC and are assigned a particular title during the incident. The EOC is led by the EOC commander/director who manages and oversees the Emergency Operations Centre.

Joint Manpower Pool

The <u>Joint Manpower Pool</u> is an assembly of essential Hospital staff who will be assigned specific duties during a disaster. The manpower pool may be activated by the EOC if deemed necessary. The manpower pool will gather in a specific physical location until they are assigned specific duties. The Manpower Chief in collaboration with the Planning Chief will coordinate with the Manpower Liaison personnel which may include Physician Manpower, Nursing Manpower and Allied Health Manpower. Each manpower liaison will provide additional physician, nursing and allied health support where necessary.

Private & Confidential Page 26 of 37



Joint Information Centre (JIC)

The Joint Information Centre supports the EOC by facilitating the distribution of information to staff, patients and family members and to the media in the event of an emergency situation. The JIC may be activated by the EOC if deemed necessary and will be located close to the EOC. The JIC through the Media Chief will be responsible for the processing and release of pre-scripted information to relevant stakeholders. Pre-written press releases for both code orange and code yellow disasters are maintained by Public & Media Affairs and copies are found in the EOC Directors disaster command binder. All information requests will be directed to the JIC for consideration.

4.2.2. Incident Command Post

The <u>Incident Command Post</u> (ICP) directs operations at or as near as possible to the site of the incident. The ICP is a field location at which the primary tactical level, on-scene incident command functions are performed. The ICP reports to the EOC with incident updates. The incident commander will determine the most suitable location for the Incident Command Post (ICP) & triage area that will be strategically located near the event taking into consideration all safety aspects and accessibility requirements to the ICP including ambulance access and other response vehicles.

Decontamination - CBRN

Decontamination is the process of neutralizing harmful contaminants and removing them from personnel and/or equipment. KFSH&RC maintains a level A Chemical, Biological, Radiological and Nuclear (CBRN) Response and Decontaminant team. Should an emergency involve Chemical, Biological, Radiological and/or Nuclear (CBRN) contaminates requiring decontamination outside the scope of level A, the Civil Defense CBRN Response Team will be requested immediately.

4.2.3. Departmental Emergency Sub-plans

<u>Departmental Emergency Sub-plans</u> determine the functional roles and responsibilities for departments who have been affected by the incident. Departmental sub-plans consist of roles and responsibilities, actions cards for key positions, contact list and processes to be followed. Departmental sub-plans are activated and controlled by the EOC and Emergency Warden. Each patient care area has a designated Emergency Warden who is in a leadership position and oversees unit operations, including sub-plan activation and accountability in a disaster event. The Emergency Warden is identified by a Green Vest and have the authority to order unit evacuation and will liaise with the arriving Emergency Response Team (ERT). The Emergency Warden will liaise with the

Private & Confidential Page 27 of 37



Business Continuity - Emergency Preparedness, Operations and Recovery Manual

ICP and where appropriate the EOC to provide information regarding the possibility of and support required in continuing operations should it be essential and possible.

4.2.4. Incident Stand-Down

Once the EOC determines that there is no longer a threat to patients, staff, any other persons or hospital services, a Stand Down (De-escalation) will be issued. The EOC will notify the PBX operators to communicate the "All Clear" message through the Hospital communications systems. Once the all clear is issued, the ICP will stand down and all non-essential staff will be de-activated. The EOC will stay active until excused by the EOC Commander / Director. The EOC may remain active after the "All Clear" message to commence the Emergency Recovery phase.

Private & Confidential Page 28 of 37



5. Emergency Recovery

5.1. Overview

The objective of the emergency recovery phase is to assess the condition of every aspect affected by the incident and to develop and implement recovery strategies to resume pre-incident operational activity as soon as possible.

5.2. Recovery Operations

When the incident stand-down is issued the EOC will commence with the emergency recovery phase. The emergency recovery phase will start when the EOC activates the Emergency Recovery Task force who will draft a Recovery Action Plan. The recovery phase will address any personal harm sustained as a result of the incident for our patients, the public and our staff. It will also assess any damage to Hospital facilities, equipment and all assets involved in the incident. The recovery phase will also address the requirements needed to resume operational activity as quickly as possible. Recovery Task Force will coordinate operations to salvage, restore, and recover the primary operating facility and/or critical supplies and manpower. The Recovery Task Force will be staffed with key/relevant stakeholders depending on the incident which has occurred and the expected resources needed to recover from the incident. The Recovery Task Force will assess the status by inspection through CCTV, visual inspection or assessment and inspection reports by the appropriate Hospital personnel. Upon obtaining the status of the facility, the task force will determine how much time is needed to repair the primary operating facility. Should repairs be needed for the facility the Recovery Task Force has the responsibility of supervising the repair process and should notify the CEO/Designee of the status of repairs including estimates of when the repairs will be completed. Once all repairs have been completed the Recovery Task Force will conduct appropriate safety, security and health assessments to determine facility suitability. It will verify that all systems, communications, and other required capabilities are available and operational and that the Hospital is fully capable of continuing all MEF's.

After Action Report - AAR

An After Action Report (ARR) is a detailed report which provides insight to the incident and the response effort of the Hospital. The ARR will detail all lessons learned which will aid future responses and address mitigations that can be initiated to prevent or lessen the impact of a similar incidents should they occur. The AAR will identify areas of improvement and will be utilized as part of the maintenance and improvements component of the EPOR framework. The ARR is

Private & Confidential Page 29 of 37



Business Continuity - Emergency Preparedness, Operations and Recovery Manual

completed by the Disaster Management Chief / Disaster Clinical Coordinator with support from all stakeholders involved in the incident including the EOC, ICP, EPP and HSC.

Private & Confidential Page 30 of 37



6. Testing, Training and Exercise

6.1. Overview

A comprehensive <u>Testing</u>, <u>Training and Exercise</u> (TT&E) program evaluates the effectiveness of all business continuity EPOR components and ensures they are fit-for-purpose for our Hospital. The TT&E program ensures the EPOR is understood by all stakeholders and that their role in an emergency incident is clearly known. The TT&E program is designed to exercise personnel, plans, procedures, equipment and facilities. The TT&E program is coordinated by the EPC.

6.2. Business Continuity Testing and Exercise

Full Scale Exercise

One Full-Scale Exercise (FSE) will be conducted annually. A FSE may be conducted in coordination with external authorities and will involve multiple departments and resources of our Hospital. The FSE will test the entire system capabilities and identify areas of improvement. Should a FSE not be possible within a 12-month period a minimum of two Functional Exercises (FE) will be performed.

Functional Exercise

A Functional Exercise (FE) involves a single or multi-departmental activity designed to evaluate capabilities/functions using a simulated response. FE's are used to exercise plans/policies on a given or multiple functions through an exercise scenario. Usually, this involves simulated deployment of resources/personnel and rapid problem solving.

Drills

Drills are a coordinated activity that tests a specific operation or function of a single department. Drills are utilized to test new equipment, plans and policies. They are also used to orient to new locations. Drills provide immediate feedback with regards to the effectiveness of the specific operation or function.

Emergency Codes

Emergency code plans are revised and updated on an annual basis by the respective owners.

Private & Confidential Page 31 of 37





Departmental Emergency Sub-Plans

Departmental sub-plans are tested annually as part of the an FSE or FE. Departmental emergency sub-plans are revised and updated by the respective departments and in coordination with the EPC.

Environment of Care Plans

Environment of Care plans are revised and updated annually by the respective owners.

During the business continuity exercises, assigned auditors and observers will record all observations. These observations will be discussed in "Hot Wash" debriefing sessions immediately after the exercise and will be used to compile the lessons learned component of an AAR. All exercises will be documented by an AAR and shared with relevant stakeholders including the CHSC, HSC, EPC, Combined Assurance Committee and Executive Management.

6.3. Business Continuity Training

EOC Training

Emergency Operation Centre (EOC) leaders are trained annually and as needed.

ICP Training

Incident Command Post (ICP) members are trained annually and as needed.

Department-Specific Orientation (Nursing & Ambulance Services)

Department leadership is responsible for conducting orientation training for new employees on department-specific emergency response. The department specific orientation addresses what the employee is required to do in an emergency, as well as, where the employee can find the departmental emergency sub-plan. Part of this training also includes department specific responsibilities and procedures, internal/external emergency sub-plans and reporting of emergency situations/codes.

Decontamination Team Training

Decontamination team members are trained annually and as needed.

Tabletops

Tabletops exercises (TTX) involves senior management and key personnel in an informal group discussion centered on a hypothetical scenario. TTX are coordinated by an experienced facilitator which allows for in-depth discussions and problem solving of the given scenario.

Private & Confidential Page 32 of 37





Workshops

Workshops are formal discussion-based exercises led by a facilitator or presenter, used to build, or achieve a product. Involves more participant discussion than a lecture-based seminar. Workshops often use break-out sessions to explore an issue with groups.

Seminars

Seminars are discussion/lecture-based exercise led by a presenter/facilitator, used to teach or orientate participants, provide a summary of plans, policies, procedures, etc. These are conducted with a casual atmosphere and minimal time constraints.

6.4. Records Management

All records associated with testing and exercises conducted including all training records for disaster/emergency related topics, not the responsibility of the safety department or the end user, shall be kept on file in the office of the Disaster Clinical Specialist for a period of 3 (three) years. The Business Continuity-EPOR program will maintain a 3 (three) year record of all pertinent training records including GHO, re-contracting, i-Learn Module, EOC/ICP training, ICS training, CBRN Response Team and AAR's.

Private & Confidential Page 33 of 37



7. Maintenance and Improvement

7.1. Overview

A comprehensive Maintenance and Improvement program monitors, reviews and evaluates the effectiveness of the Business Continuity EPOR framework. Information gathered during the testing, training and exercise program along with additional review methods provides a mechanism which allows for the maintenance of the EPOR framework and identifies improvement opportunities to ensure our Hospital is best positioned to deal with any emergency incident.

7.2. Maintenance and Improvement Methodologies

Performance Evaluation

The self-evaluation process focuses on the measurement of the EPOR implementation effectiveness based on pre-defined KPIs such as (annual review EPOR, documentation, meeting the RTO requirements during disruption and passing test criteria for various exercises. The performance evaluation process is also a component of an AAR.

Training and Awareness

Awareness of the Business Continuity EPOR framework will be conducted through an ongoing training and awareness program for all staff and establishing a process for evaluating its effectiveness of the same. <u>iLearn</u> modules complement the awareness training program.

Management Review

The CHSC, HSC and EPC at each site will review the EPOR framework every two (2) or whenever there are any major changes to the Hospital.

External and Internal Audit

External and Internal audits will be conducted on a periodic basis to determine whether the EPOR program is effectively implemented, maintained and adheres to the Business Continuity EPOR objectives.

Private & Confidential Page 34 of 37



Business Continuity - Emergency Preparedness, Operations and Recovery Manual

Observations and Non-conformities

To ensure key learnings are adapted and applied, any observations, findings and non-conformities will be tracked and mitigation/action plans will be implemented enabling continuous learning, maintenance and improvement.

Private & Confidential Page 35 of 37



Business Continuity - Emergency Preparedness, Operations and Recovery Manual

End of Manual

Private & Confidential Page 36 of 37

Private & Confidential Page 37 of 37